

Stock Market Simulation

An Interactive Qualifying Project Report:

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By

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Abstract

The goal of this project is to use an 8-week stock market simulation to gain knowledge and valuable trading experience to make educated stock investment decisions in the future. After 3-weeks of research, day trading and swing trading methods were selected. Each method began with an initial investment of \$50,000. The results from both of the strategies were impressive, with a 48% profit for the day trading method and a 41% profit for the swing trading method. Although day trading technique was more beneficial, both of the trading strategies were rewarding methods.

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1. INTRODUCTION

The objective of this IQP is to gain basic knowledge of the stock market and how to analyze it. During this simulation, I will be using the methods and strategies I have learned to increase my portfolio trade by trade. After studying the history of the market and its methods of trading, this IQP will be focused on two trading methods: day and swing trading, but I've gained interest to learn about stock options trading. Trading options is slightly different, but it is explained furthermore below (2.7). This simulation will be performed with the TD Ameritrade platform called ThinkOrSwim (TOS) with an initial investment of 100,000 dollars in total. During this 6-7 week simulation, I will be using different trading methods to profit and maximize my winnings. By the end of this simulation, I am hoping for some positive and knowledge gains, so I could become a better investor.

1.1 History of The Stock Market

The first real stock markets didn't occur until the 15th century, but there were several examples which date many years before that were similar to stock markets [1]. In France during the 1100s, banks had a system where they would exchange agricultural debts with each other. During the 13th century merchants in the city of Venice, Italy started exchanging government securities. Major banks in nearby cities took notice of such trades and they started adopting their system and spread it around Pisa, Verona, Genoa, and Florence.

The world's first publicly-traded company, the East India Company became the first publicly-traded company. The East Indies discovered when traveling to far distances to bring back "heaven of riches", made explorer companies send more ships to bring back a fortune. Later they discovered that not all the voyages were successful, this hurt their pockets, so the financiers came up with the idea of investors paying for a percentage of the voyage so if the trip is successful, investors get

their reward and so does the company. But if the trip turns out to be unsuccessful then the company has a smaller loss due to investors partially paying for the trip. In 1602, the Dutch East India Company officially became the first public trading company, stocks and bonds were issued to investors from Amsterdam with a fixed percentage of the company's profits.

During the 18th century, trading goes back to coffee shops, where traders would exchange form in the coffee shop and around the market. Back then there were no regulations, so stocks were being bought and sold without policies and rules to contain such a powerful and valuable system. In London business would open overnight to sell stocks and make thousands of pounds overnight and too much of this going around had to come to an end when companies failed to pay dividends to investors, "bursting the first market bubble". The government of England banned London Stock Exchange (LSE) to issue shares until 1825, during this period the creation of the New York Stock Exchange (NYSE) in 1817 was an important moment in history. It has been trading ever since and it's the most powerful stock exchange in the world. While the New York Stock Exchange-traded for America and the world, the London Stock Exchange-traded for Europe.

In the 1970s the New York Stock Exchange faced its first big challenger, two organizations; the National Association of Securities Dealers and Financial Industry Regulatory Authority created the NASDAQ stock exchange. Why was NASDAQ a challenge? Well, what gave them a major advantage was a network of computers where all trades were performed electronically, unlike traditional stock exchanges with physical locations. Electronic trading gave NASDAQ a plus over the competition because it reduced the bid-ask spread.

Most major stock markets have experienced a crash before. A stock market crash happens when the price of a stock is falling due to shareholders dumping their stock. A crash happens for many reasons, including bad economic news, bad news such as war or economy being overinflated.

There have been numerous crashes dating to the worst one; Black Thursday or Terrible Thursday of 1929, trailed by Stock Market Crash of 1973-1974, Black Monday of 1987, Dot-Com Bubble of 2000 and Stock Market Crash of 2008.

1.2 Stock Market Today

13 stock exchanges are operating in the United States, NYSE, NASDAQ, AMEX, BATS, OTC Markets, OTC Bulletin Board, Toronto Stock Exchange, London Stock Exchange, Tokyo Stock Exchange, Shanghai Stock Exchange, Hong Kong Stock Exchange, BM&F Bovespa, and Australian Securities Exchange [2]. The NYSE is the largest stock exchange in the world by market capitalization. For many years NYSE was done mainly face to face trading, but due to technological advances NYSE does half of its trading on the floor-based marketplace and the other half are managed electronically. Figure 1.2.1 shows the trading floor of the New York stock exchange today. There are over 3000 companies listed ready to trade on the NYSE like Walmart, Disney, Coca-Cola, McDonald's, etc.



Figure 1.2.1: The Trading Floor of the New York Stock Exchange today

NASDAQ is the second-largest stock exchange by market capitalization in the world, after the NYSE. All stocks are traded electronically, and NASDAQ is known for more

trading volume than any other electronic stock exchange worldwide. Shown in Figure 1.2.2, NASDAQ lists over 2700 companies, from small caps to large caps, including some tech giants like Apple, Microsoft, Dell, etc.



Figure 1.2.2: Yearly Chart of NASDAQ (1970-present)

Just months ago, Wall Street and investors were challenged by the coronavirus pandemic [3]. As shown in Figure 1.2.3, Covid-19 has caused a stock market crash similar to Black Monday in 1987, market collapse in 2000, and 2008. Coronavirus has a negative but short-term impact on the stock markets, studies show that the virus has not directly affected any market, but due to its economic impact of Covid-19, markets worldwide have been affected due to spill-over effect.

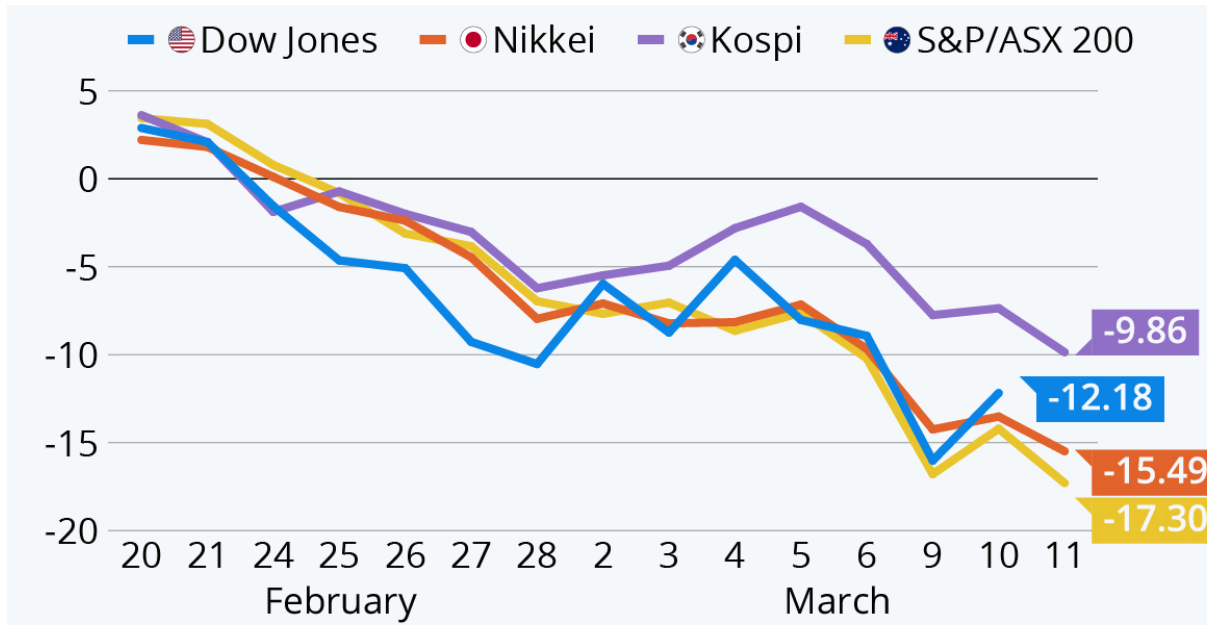


Figure 1.2.3: Chart of World Markets Crashing due to spill-over effect of Covid-19

The market had been going upward since the bottom of it in Dec. 26th, 2018. Even during events like Iran's attack on Saudi Arabia, near-miss war with Iran, and even early warnings of Coronavirus kept this trend up. But at the end of the day, this virus is going to impact a country economically, less traveling due to virus and restrictions which is bad for airlines, supply chains are blocked, people are more careful spending, such things can reduce a company's profit which can impact the stock price[4].



Figure 1.2.4: Chart of World Markets and Pandemic type events

Panics and bad news like we are experiencing during these past months are common throughout history [5]. This being very tragic, most of the events have barely put a dent on the long-term upward trend of the stock market. Above you can see Figure 1.2.4, and it shows that 2 of 14 are related with a downtrend dip during these events, for most of them the market did well afterward.

2. Strategies

2.1 Trend Following

Trend following is one of the most consistent and profitable strategies to begin your trading career with. Following the trend doesn't require much to execute, you're buying low and selling higher [6]. The amount of effort expected for trend following is so low, it can be managed to trade with the trend while having your day job and spending family time. Trend following is simple but difficult in many aspects. For example, emotional control is key to successfully trading any strategy but in this particular case when trading with the trend, your patience gets tested as some tend to remove their winning/losses too quickly due to their impatience of letting their stock run as shown in Figure 2.1.1. Another big factor that most trend followers fail to outplay, is their mindset of always wanting to be being RIGHT. What makes a successful trader, is his/her decision to cut losses quickly and let their runners run. This mentality is successful for all strategies, no matter how many bad calls you may have. Cutting your losses short because of money management and accepting that you were wrong is key to having a profitable portfolio.

Trend Following in Stocks

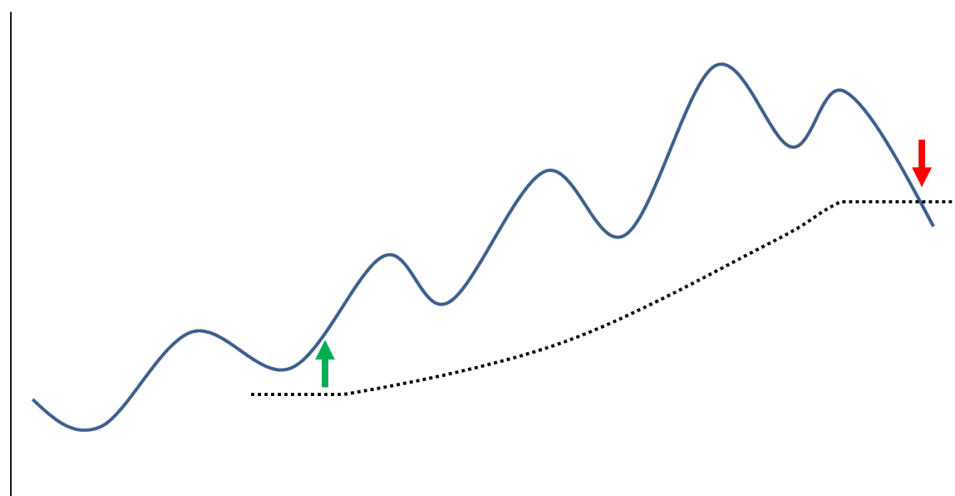


Figure 2.1.1: Trend Following Chart

2.2 Day Trading

Day trading is a risky trading style that begins when the market opens and finishes when the market closes. A day trade is buying stocks and selling them the same day. But do not forget, as beginner trader you could only have 3-day trades within 5-days because if one more happens, you are flagged as a Pattern Day Trader (PDT rule) and can no longer trade daily unless your account has more than 25,000 dollars [7]. To day trade successfully, you have to have practice and perfected a strategy that only works for you. Where most day traders learned their strategy was a simulator, this is since if you're not making money with the simulator, chances are you won't be making real money. Beginning with a simulator is the right choice because that is how you learn, by losing. Due to the money not being real, there was still a lesson learned and a promise to yourself to not repeat the mistake or losses will follow. There are tools needed to improve day trading: online broker, charting platform, and scanners. Some brokers like TD Ameritrade have a great charting platform (a.k.a. ThinkOrSwim), so it saves a lot of time when buying a stock. When day trading stock, you cannot afford to lose any time, due to the price of that stock changing. Mostly because the stocks you are trading are very volatile, this means the quicker the better. To find these volatile stocks, I've learned that having a personal scanner can be very beneficial because it points out the stocks that moved after hours and premarket.

Gappers: 11:59:59 - 12:04:58										
Symbol	Price	Flt (Shr)	Shrt Flt (%)	▼G... (%)	Vol Today (Shr)	Earn Date	Vol 5 Min (%)	Sto... Rel	Rel Vol	Company Name
SRTSW	1.50			258.5	621		0.0		0.17	SENSUS HEALTH CARE
AXON	3.69	32.1M	13.41	108.6	64.92M	4.25	4,435.6	13K	116.5	AXOVANT SCIENCES LTD COMMON SHARES
VBLT	2.60	23.8M	6.12	27.9	4,206,961	-13.75	1,339.6	7.3K	28.92	VASCULAR BIOGENICS LTD ORDINA
CLRB	1.07	16.4M	11.29	27.2	4,867,482	-17.75	475.8	1.6K	42.39	CELLECTAR BIOSCIENCES
LINDW	2.50			21.9	150		0.0		0.02	LINDBLAD EXPEDITIONS HOLDINGS INC WTS
SIG	52.66	58.7M	26.97	15.5	9,444,946	0.25	436.9	2.4K	17.79	SIGNET JEWELERS
NHLDW	1.15			15.0	100		0.0		0.05	NATIONAL HOLDINGS CORP WTS
IFON	3.60	1.64M	10.19	13.8	111,680	6.75	0.0	636.4	3.38	INFOSONICS
MEIP	4.99	36.9M	0.30	13.3	3,551,377	-19.75	321.8	1.3K	28.51	MEI PHARMA
CLDC	2.15	19.4M	0.01	11.3	15,557		0.0	1.2K	2.19	CHINA LENDING CORP ORDINARY SHARES
COCP	2.28	590K		10.3	74,524		0.0	0.0	13.22	COCRYSTAL PHARMA
NCS	21.40	65.3M	2.99	9.5	1,083,352	-0.25	447.7	1.1K	13.22	NCI BUILDING SYSTEMS
VRA	13.67	21.9M	28.04	9.3	1,082,046	0.25	656.5	2.6K	16.19	VERA BRADLEY
CVONW	1.32			9.1	100		0.0		0.01	CONVERGEONE HOLDINGS INC WTS
ATHN	157.17	39.4M	28.00	8.5	627,052		71.7	589.5	3.18	ATHENAHEALTH
IDT	6.08	24.6M	3.65	7.8	626,136	-0.25	293.5	2.1K	8.71	IDT
SNES	2.01	8.27M	5.62	7.6	7,866,126	-16.25	66.4	308.1	15.76	SENESTECH
MTW	27.36	35.1M	5.41	7.3	970,141	-21.25	273.1	757.6	6.83	MANITOWOC
UAVS	2.20	908K		6.8	31,195	-12.75	86.8	43.2	0.12	AGEAGLE AERIAL SYSTEMS INC COMMON
MBRX	1.82	14.2M	14.16	6.7	588,533	-15.75	44.1	856.2	1.38	MOLECULIN BIOTECH
DVN	41.67	522M	2.18	6.5	6,250,570		177.7	837.4	2.18	DEVON ENERGY
CVTI	31.44	10.7M	1.76	6.3	223,165		49.0	519.9	3.16	COVENANT TRANS
FND	51.83	33.3M	13.66	5.9	706,073		58.4	1.0K	1.82	FLOOR & DECOR HOLDINGS INC
LGCCY	11.30	53.6M		5.8	11,558		0.0		1.58	LEGACY RESERVES LP 8 SERIES A
MTSL	1.46	1.78M	0.01	5.5	6,985	6.25	14.1	44.6	0.32	MER TELEMANAGEMENT
MRNS	6.85	39.3M	17.35	5.2	674,801		39.7	803.5	2.97	MARINUS PHARMACEUTICALS

Figure 2.2.1: Stock Scanner for Day Trade

In Figure 2.2.1, shows on this particular day, the stocks that are volatile and possible upside or down are the stocks with the least float shares (the amount of share that can be publicly traded) and above 1 million shares of volume in the premarket. This strategy points out what stocks have the potential volatility to go up or down a lot, this way many professional day traders find their stocks to watch for their daily watchlist.

2.3 Swing Trading

Swing trading is different from day trading but similar to technical trading. Their difference is time, swing trading involves a trader to hold a position for short/long period, which could be days, weeks, or maybe even months [8]. Swing trading is mostly focused on technical analysis, and with the right educational courses, swing trading can be very successful if you get the hang of reading charts and being able to point out the support and resistance lines which determine where to enter and exit a trade. Figure 2.3.1 shows entry and exit points of a swing trade.



Figure 2.3.1: Swing Trade Technical Strategy Chart

Above is a clear example showing what resistance (C) and support lines(B), entry(A), and exit (C) points are. When determining when to enter, traders always pan out their risk to reward ratio, and it should never less than 1:1. By this I mean, when you enter a trade you have a goal of reaching

somewhere which can be 30 more cents than the price at the moment, but if this stock that you're planning to trade fails, you know your risk which will be 10 cents less than the price, this gives it a risk to reward ratio of 1:3. This is one of the most successful rules a trader has in their mindset at all time.

2.4 Short Term Trading

Short term trading can be very profitable, but it can also be dangerous. A short-term trade can last from minutes to days. To be successful in trading this strategy, you have to know what stocks will give you an opportunity to make money and the stocks you have to stay away to protect yourself. Sometimes just watching a stock you're unsure of is better than entering and failing miserably. Some tactics used to master this method of trading are, using Moving Average (MA) lines as shown in figure 2.4.1, understanding the overall pattern and trend.



Figure 2.4.1: Moving Averages Crossing

MA lines show the moving average price of a stock for a specific time (15, 20, 30 50, 100 days). The moving average lines trending in one direction indicates what type of trade you should be executing. For example, a good indicator would be in the MA lines slowly move upwards, which means the stock has the potential to grow, which means you should enter and trend with the flow [9]. If the opposite happens and the lines are flattening out or declining, then that is a sign to short (borrowing stocks to sell at a higher price and later on buying them back at a lower price and keeping the profit that came from the stock decreasing). Some other method short term traders use is cycle pattern, by this, I mean yearly calendar cycle. Since 1950, most popular stocks have market gains from November to April period, and from May to October, they tend to be static. This way these cycles can determine the good time when to enter into a short or long position.

2.5 Technical Trading

A technical trader uses past patterns of trading data to predict what might happen to the stock in the future. This method is very similar to what economists and meteorologists use, looking to the past for insight into the future. Doing technical analysis is a challenge due to a large number of technical indicators available. There isn't one that can be considered better than others, they all play a role indicating that particular stock [10]. These indicators don't predict the price of the stock, but they do give enough information to determine if a stock is worth doing deeper analysis such as detailed data known as Level 2. These technical indicators do not translate the exact picture of the future performance of a stock. Some known and common indicators shown below in figure 2.5.1 and 2.5.2 are MACD (Moving Average Convergence Divergence) and RSI (Relative Strength Index).

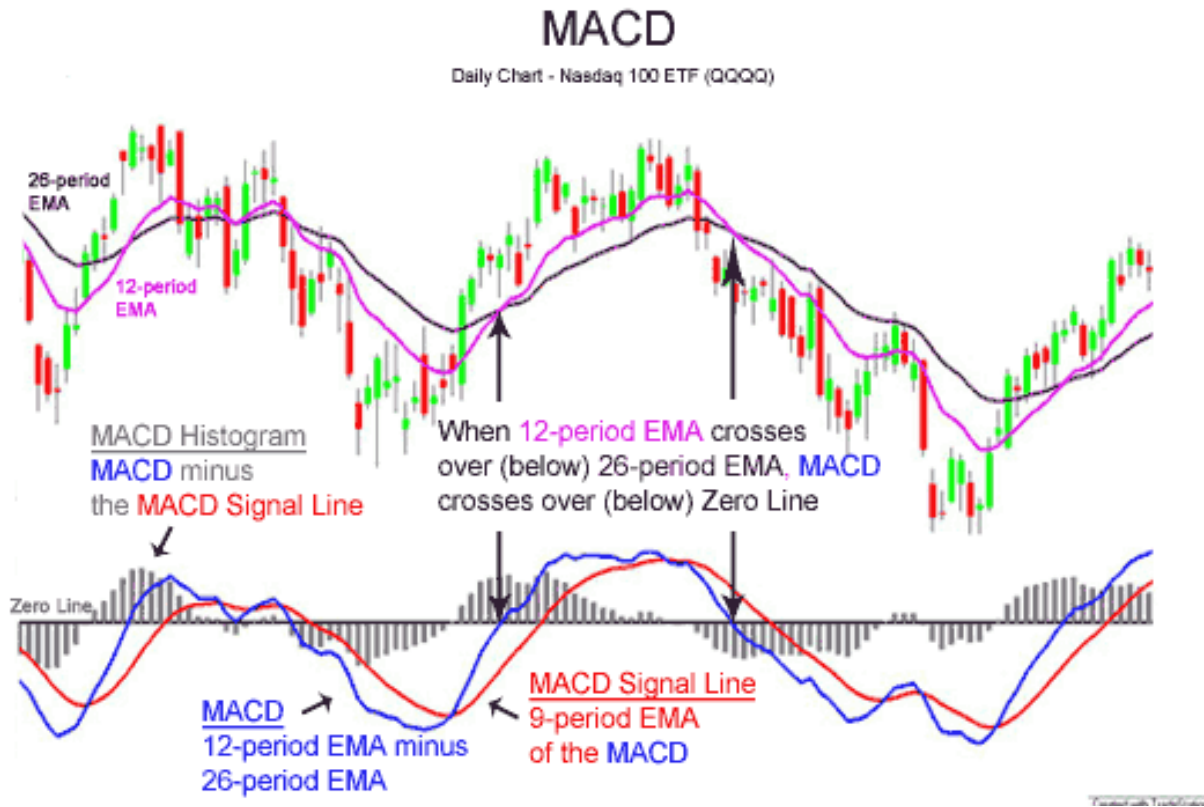


Figure 2.5.1: Moving Averages Convergence Divergence

While MACD is a trend-following momentum indicator that shows the relationship of Moving Averages of a security's price. It is calculated by subtracting the 26-period exponential moving average (EMA) from the 12-period EMA. MACD helps traders understand whether the upwards or downwards movement is getting stronger or weaker. What I've learned from this indicator is that MACD triggers technical signals when it crosses above (to buy) or below (to sell) its signal line.



Figure 2.5.2: Relative Strength Index (RSI)

And RSI measures a stock’s recent performance relative to its historical strength by comparing the number and magnitude of its historical ups and downs. If the RSI is above 80, it indicates that the stock is “overbought” which lets us know we should sell, if the stock RSI is below 20, it indicates the stock is “oversold” which is a signal to buy.

2.6 Mutual Funds

The idea of a mutual fund is based on an investment company that groups together funds from smaller investors and have one or a group of professional managers to invest all these funds in different types of assets. The reason why investors have an eye for mutual funds is that their big pile of funds is diversely invested [11]. Diversification is the key to investing; this is due to a smaller risk of assets. What falls under these assets are stocks, bonds, commodities, and real estate. To invest in a mutual fund, you would have to buy shares of that mutual fund company, holding

these shares represents partial ownership to the assets owned by the company invested by each of the investor's funds. To begin investing in mutual funds you have to have a minimum of 1,000\$-5,000\$ in the "pot". Unlike stocks and ETF's, mutual funds can be traded once a day and it happens after the market closes. Why once? Why after the market closes? Well, that is due to the investment company investing yours and many other funds during market hours and later in the day, you have the right to redeem your shares. Although mutual funds are not traded often due to buying and redeeming fees, investors plan on investing long term for a better outcome. When you enter a mutual fund, you are buying shares of that mutual fund that is in all different assets, if the company investing for you does well, your funds increase due to your mutual fund company doing well. The price for the shares in a mutual fund is determined by the net asset value (NAV) calculated after the market closes. The NAV is calculated by dividing the total value of all the assets in the portfolio, less any liabilities, by the number of outstanding shares. Table 2.6.1 compares trading properties between two different trading methods.

	Mutual Funds	ETFs
Buy/Sell	Through the MF company or broker, end-of-day NAV	On-exchange, intraday
Transparency of Holdings	Typically published quarterly, on a 30-day lag	Fund holdings published daily
Minimum Investments	May have high minimums	1 share
Transparency of Trading Costs	Costs of inflow/outflows are borne by all MF holders. Costs reduce NAV daily for all.	ETF buyer/seller bears trading costs. All other investors not impacted
Tax Efficiency	The PM must transact in the holdings, can generate capital gains	More tax efficient due to secondary trading and in-kind create/redeem process
Expense Ratio	Generally higher	Generally lower
Transparency of Extra Fees	Sales load, 12b-1 fees, trading fees of all in/outflows	Standard trade commissions + bid/ask Spread
Liquidity	Only underlying portfolio	Underlying basket + ADV + correlated trading vehicles

Table 2.6.1: Mutual funds vs ETF's

2.7 Options

Trading options may seem difficult at first, but it's easy to understand it when explained in another perspective. Options are contracts that speculate if the price of a stock is going up (call) or down (put). When buying options, you are buying what is called derivative. A derivative's price depends on the price of something else. If you buy an options contract, it gives you the right to sell or buy an asset at a set price on or before the expiration date. Trading options split between a call or a put, as said early it may seem difficult at first but once explained it will be clear [12]. A call option is just like a potential homeowner wanting to buy a nice home in a new neighborhood that is still in development. The homeowner is only willing to buy the \$500,000 home at any point if the whole neighborhood is built within the next two years. To ensure their potential home, the buyer pays a deposit or a down payment to lock in that right to buy that home within two years. Let's say the neighborhood is finished within two years, therefore the buyer now has a brand-new home in an ideal neighborhood increasing the price of the original home up to \$900,000. Now that is some good profit for the buyer, but in an alternate scenario where the neighborhood construction takes up to 3 years, the interested home buyer lost the right to buy the \$500,000 home because their contract had expired a year before. In either case, the developer keeps the original \$20,000 deposit. Now let's talk about puts, buying a put option is just like buying an insurance policy. You are paying a premium every month for two years for the insurance to protect your home. So, if the home is damaged, the insurance has to pay for the cost of it. And if the home is not damaged you have lost that premium and probably going to start a new contract for another two years. Instead of a home, your asset was a stock. Another important detail you need to know about trading options is that time is always against you. By this I mean time decays exponentially as it comes closer to the expiration date. Figure 2.7.1 explains how a contract works.

	May 1	May 21	Expiry Date
Stock Price	\$67	\$78	\$62
Option Price	\$3.15	\$8.25	worthless
Contract Value	\$315	\$825	\$0
Gain/Loss	\$0	\$510	-\$315

Table 2.7.1: Trading One Contract with Options

3. Day Trading

In this chapter I will be analyzing the outcome of my methods and strategies I've learned for the past weeks about day trading as a beginner. At first, I will be covering my daily routine/strategy to set up my daily stocks to put on my watch list. Second, I will cover the companies picked and the reason behind why I went with this stock. And lastly, I present you my profits from my daily stock trades.

3.1 Day Trading Strategy

To begin your day as a day trader, you always want to have a stock scanner which tells you your afterhours and premarket gap leaders. As we can see in Figure 3.1.1, we have IMRN, MTP, NBEV, LXX, MBRX as our gap leaders. Stocks that gap like this tend to have few float shares which can make a stock so volatile based on volume received at moment, the fewer shares and more volume are the stocks to keep on your watchlist and keep a close eye on them if one decided to run (trend upwards).

Gapping stocks: 8:53:43 - 8:54:12

Symbol	Price (\$)	Gap (%)	Flt (Shr)	Shrt Flt (%)	Dys to Crr (Dys)	Vol Today (Shr)	Avg Vol (100) (Shr / Day)	StockTwits Rel Actvty (%)	Co Name	Avg Num of Prints (Prints / Day)	Chg 8 Day SMA (%)	Chg 20 Day SMA (%)	Earn Date (Dys)
IMRN...	6.15	220.0				65,117	68,978		Immuron Ltd WTS	241	349.1	342.0	
IMRN	19.75	89.7	3,470,230		0.00	3,249,147	6,947,280	2,596.2	Immuron Ltd ADR	43,650	189.5	167.0	28.50
MTP	2.82	65.9	5,150,720		0.03	3,175,718	296,096	12,111.8	Midatech Pharma Plc American	916	101.1	101.3	
NBEV	2.78	59.8	88,654,704	11.71	3.49	2,473,033	2,983,088	3,004.3	New Age Beverages Corp	8,736	79.9	80.8	20.50
LXX	2.93	39.5	103.15M	36.14	15.68	4,584,517	663,025	13,533.3	Lexicon Pharmaceut Inc	3,307	47.4	47.8	6.50
MBRX	1.43	30.0	53,430,300	6.90	0.38	8,882,553	9,602,170	2,134.6	Moleculin Biotech, Inc	14,452	50.1	49.8	19.50
CTIC	1.97	23.1	66,353,400	0.58	0.19	458,979	1,711,485	4,476.2	CTI BioPharma Corp	3,922	43.8	51.7	7.50
IFRX	6.30	22.6	17,334,300	3.15	1.38	1,993,112	496,555	3,367.9	Inflix NV	2,095	25.3	27.7	16.50
VERB	1.48	22.3	25,726,000	1.46	0.80	214,066	473,018	6,766.6	Verb Technology Company, Inc.	1,134	17.8	23.4	16.50

Figure 3.1.1: Gap Leaders of July 21st

I wake up around 7 AM to check out the action that happened while I was asleep. I didn't enter any stock that day but if I was to enter, I would wait for one that keeps gapping up after the 9:30 AM bell. For example, we have MTP that started trending up from 3.10\$ at 9:30 AM to 7\$ by 11:10 AM, that would have been a perfect entrance even if entered late around 3.50\$. Out of 5 stocks, 1 of them needs to climb and keep the momentum for the day. What happens to most of the stocks that gap up like that overnight? Known as short traders, (to short a stock means you're borrowing money to sell at high price and later buy at lower price to neutralize the balance and keeping the profit. You're basically predicting for the price to go down.) they look to short a stock when it has past history of the stock gapping up high and immediately falling down within the day or the next.

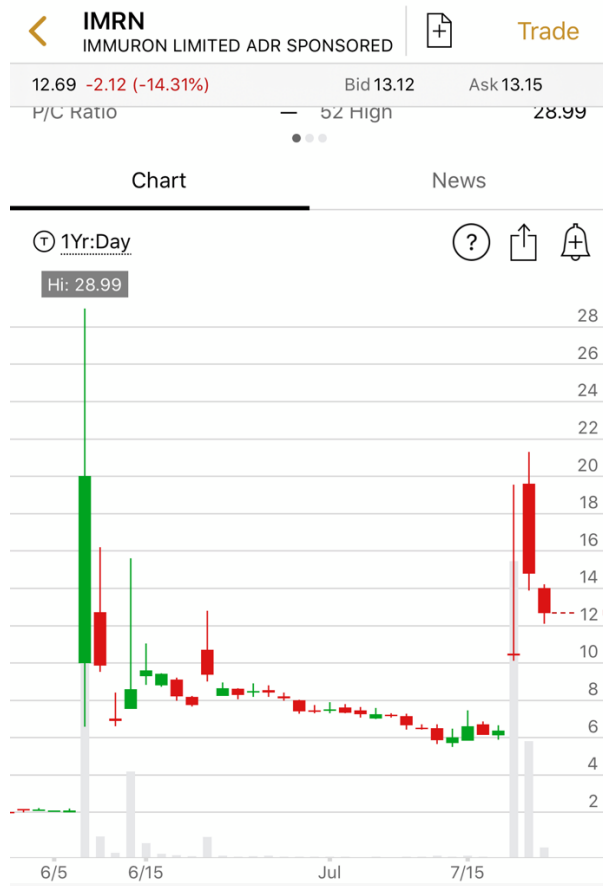


Figure 3.1.2: Gap Leader IMRN Daily Chart

A stock like IMRN, I'd stay away from due to its history of shorts taking advantage of that gap up. What I've learned about stocks is to always check for past history (Figure 3.1.2) for daily gappers giving me the chance to drop this stock from my watchlist and maybe consider shorting myself (for some reason I can't short a stock with ThinkOrSwim platform while running a simulation).

While some stocks are morning runners, there are also mid-day and late day runners, which mostly run due to news being released. Press release is very important to a stock with a low float share percentage and 1 million volume. News can be reached from Yahoo Finance, Twitter, and TOS platform has a news window which releases news immediately. To catch a stock based on news, you have to have a fast platform to trade and watch the news "like a hawk" due to its rapid and volatile movements.

3.2 Companies and Trades

Naked Brand Group Limited (NAKD)

To open up my trading career as a beginner, my style of trading stocks are ones with price range from 0.50\$ to 10\$ or more sometimes. As my first time, I traded **Naked Brand Group Limited (NAKD)**, a swimwear company that designs, manufactures and markets a portfolio of brands serving a broad cross-section of consumers and market segments. The company's product is part of multiple brands such as: Naked, Bendon, Bendon Man, Davenport, Evollove, Fayreform, Hickory, Lovable, Pleasure State, Heidi Klum Intimates, Heidi Klum Man, and Heidi Klum Swim. Located in New Zealand they have about 6,000 stores, independent boutiques and third-party e-commerce sites internationally [13].

NAKD did not release any news in the morning or after hours in particular, but they were hit by scanners in the morning.

Symbol	Price (\$)	Gap (\$)	Gap (%)	Vol Today (Shr)	Company Name	Earn Date (Dys)	Flt (Shr)	Qtrly Rev Grwth (%)
SQBG	0.4990	0.2659	114.1	8,598,671	Sequential Brands Group, Inc	-16.75	47.03M	-20.7
IZEA	2.58	1.32	104.8	13,855,279	IZEA Worldwide, Inc	-17.25	32.59M	-0.8
EYES	1.85	0.59	46.8	1,178,946	Second Sight Medical Products, Inc	40.75	5.09M	-71.9
NAKD	0.9700	0.2910	42.9	6,584,093	Naked Brand Group, Inc		6.95M	-13.0
IMRN	2.85	0.75	35.7	69,717	Immuron Ltd ADR		3.47M	59.7
INUV	0.8570	0.2130	33.1	2,268,469	Inuvo, Inc	-17.25	41.37M	-3.4
AQMS	1.14	0.24	27.0	157,540	Aqua Metals, Inc	36.75	58.50M	-95.9
SOLO	2.04	0.39	23.6	647,004	Electrameccanica Vehicles Corp Ltd		24.86M	15.2
JILL	0.8650	0.1292	17.6	438,496	J. Jill, Inc	10.25	41.63M	-1.7
MDLY	0.9800	0.1399	16.7	39,383	Medley Mgmt, Inc	-16.25	5.54M	-42.8
RNET	3.32	0.46	16.1	105,822	RigNet, Inc	39.75	19.18M	2.2
TRXC	0.9480	0.1279	15.6	523,468	TransEnterix, Inc	-17.75	46.40M	-72.9
DRAD	3.48	0.46	15.2	530,017	Digirad Corp	-16.75	1.95M	20.7
OPGN	2.26	0.27	13.6	2,988,203	OpGen, Inc	41.75	11.36M	-39.9
CLRB	1.34	0.16	13.6	216,249	Cellectar Biosciences, Inc		9.30M	
ENG	1.37	0.15	12.3	41,091	ENGlobal Corp		17.15M	58.3
SNDL	1.22	0.13	11.9	379,051	Sundial Growers Inc.	-16.75	76.95M	1,436.8
DXF	0.5600	0.0595	11.9	20,135	Dunxin Financial Holdings Ltd ADS		2.35M	112.8
CANF	2.28	0.23	11.2	1,313,921	CAN-Fite Biopharma Ltd ADR	-5.75	3.98M	-33.8
TLRD	1.86	0.18	10.7	481,371	Tailored Brands, Inc	10.75	48.57M	-5.3
VTGN	0.5700	0.0550	10.7	169,510	VistaGen Therapeutics, Inc	10.75	42.47M	
CREG	2.60	0.25	10.6	69,269	China Recycling Energy Corp	10.25	583,734	

Figure 3.2.1: Gap Leaders June 9th

While taking a look at this posted scanner from Figure 3.2.1 above, I see 5 stocks to put on my watch list: SQBG, IZEA, EYES, NAKD and INUV. I notice the number of short floats there is for NAKD and I confirm it with the right amount of volume (in the millions) checking off all my boxes ready to jump in this stock. While 3 out of 5 of those stocks ran incredibly high, to some of them being as much as 100% in profits, I decided to go with NAKD for a simple gain of 35% for about 3,000\$ in profits.

With an initial investment of 100,000\$, I decide to invest 10% of my portfolio in NAKD. When I entered the trade with 10,000 shares, I didn't have a price target, but I did have a stop loss. Which

was set at 5% loss of my initial entrance, I was only risking 500\$ for a gain of 1000\$ or above, giving this trade a 1:2 risk to reward ratio.

In Figure 3.2.2, I have highlighted my entries and exits with blue arrows, which shows my trade on NAKD.



Figure 3.2.2: NAKD June 9th Day Trade Chart

I entered NAKD with 10,000 shares at 1.11\$ around 10:20 AM. While climbing to 1.48\$, I thought it would be great time to take half of my shares out at price 1.31\$. I made 1000\$ profit by taking out half of the shares to take some profit. Without known the power behind this stock it kept climbing and climbing, I left the stock unattended at 1.70 and it rose to 2.62\$ around 2:45 pm, when I got back to it, it had already dipped down to 1.80 so that's when I sold the rest of my shares at 1.695. So, with the second $5000 \times (0.585) = \$2925$. If I had held my 10,000 shares of NAKD and sold them about 2.60\$, I would have made $10,000 \times (1.5) = \$15,000$

Date	Symbol	buy/Sell	Price	Shares	Net Cost/Proceeds	Profit/Loss	Total Cash	Total Profit
06/09/20							\$100,000	
06/09/20	NAKD	buy	\$1.11	10,000	\$11,100		\$88,900	
06/09/20	NAKD	sell	\$1.31	5,000	\$6,550	\$1,000	\$95,450	\$1,000
06/09/20	NAKD	sell	\$1.695	5,000	\$8,475	\$2,925	\$103,925	\$2,925
06/09/20							\$103,925	\$3,925

Table 3.2.1: NAKD June 9th Day Trade

PolyMet Mining Corp. (PLM)

PolyMet Mining Corp. studies and develops natural resource properties. Its biggest mineral property is the NorthMet project, a polymetallic project that includes copper, nickel, gold, silver and platinum group metal mineralization covering an area approximately 4,300 acres in northeastern Minnesota [14]. Before changing its name in 1981 to PolyMet, the company was known as Fleck Resources Ltd. In Toronto, Canada. PolyMet stock trades on both the Toronto and NYSE American exchanges as shown in Figure below 3.2.3 and 3.2.4.



Figure 3.2.3: PLM NYSE 3-months Chart



Figure 3.2.4: POM TSX 3-months Chart

Since PolyMet Mining Corp. is being traded in more than one stock exchange, we can see that their movements are the same, from Toronto Stock Exchange to New York Stock Exchange but their stock prices and listed names are different. About 11% of the company's shares are owned by shareholders in Minnesota numbering about 13,000 of them. While 72% of other shares are owned by a larger mining company in Canada called Glencore.

PLM shares increase by as much as 43% in one day after they announced some progress towards settling regulations that stopped PolyMet Mining from operating in the NorthMet mine in Minnesota. Back in March, PLM's appeal to get development-stage asset's air permit was shut down, but this week (June 16th) the Minnesota Supreme Court agreed to hear an appeal of the lower court's decision. This is not the first time; the Minnesota Supreme Court has heard an appeal from PLM about NorthMet mine. Back in January there were appeals to mine and dam-safety permits, but they were turned down. If PLM can successfully argue its case, they would be one

step closer to beginning operations in the NorthMet Mine in Minnesota. Figure 3.2.5, projects my trade plan for a quick profit.



Figure 3.2.5: PLM June 16th Day Trade Chart

PLM was a stock that started to run right before noon, at moment of entry I was looking for a 3 to 1 reward to risk ratio. I got in at 11:58 AM at price of 0.399\$ for 30,000 shares. I was looking for 0.08\$ profit target, but I decided to let my runner run. It seemed like PLM had a lot of fuel to keep going. Then I choose to exit at 12:28 PM at price 0.5335\$, for this intraday trade I was able to make 4,035\$ from an entry of 11,970\$ for a total of 16,005\$. That is about a 33% gain in about 30 mins.

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/16/20							\$118,275	
06/16/20	PLM	buy	\$0.399	30,000	\$11,970		\$106,305	
06/16/20	PLM	sell	\$0.5335	30,000	\$16,005	\$4,035	\$122,310	\$4,035
06/16/20							\$122,310	\$4,035

Table 3.2.2: PLM June 16th Day Trade

Urban One, Inc. (UONE)

UONE is the largest urban content distributor in the country. For almost 4 decades, Urban One has been the leading voice reaching to Black America. They are the largest African American owned television network and distributor of digital urban content. Their brands are unsurpassed, relevant content, and unparalleled reach to 82% of Black America, making it the only multi-media company to have very high numbers towards its customers.

Urban One owns a group of radio stations and other media properties focused on African Americans, has seen a surge on its stock during June 15th week on heavy volume, capturing investor's attention on companies owned and controlled by African Americans. Figure 3.2.6 shows my multiple entries and exits on UONE stock.



Figure 3.2.6: UONE June 16th Day Trade Chart

This stock in particular was very bullish since the bell with a little pullback around 11 AM. Then I saw my moment to buy 1000 shares of UONE with entry price of 11.75\$ at 11:12AM and quickly take profit 32 minutes later with an exit price of 12.47\$ giving me a 0.72\$ gain of 1000 shares, being about 720\$ profit. After giving it a break from 12-3 PM, I see the hype, volume and momentum keeping this stock bullish I decide to enter again for some profit. I enter with 1000 shares at 2:50 PM with price 24.15\$ while the 1-minute candles are falling. Out of fear because of the pullback I decided to take a loss 4 minutes later at price 21.71\$, giving me a 2,440\$ loss. At the moment I am -1,720\$ for mistakenly, selling out of fear. But then I decide it wasn't over the moment the stock starts to trend up. At 2:59 PM I enter with 1000 shares at price 23.08\$ and I let the stock run up until 40\$ price, without a price target I let the stock pull back and later decided that it would have been a good idea to take profits around 40\$, then I quickly sell at 3:51 PM at

price 34.58\$. Giving me profit of 11.50\$ per share per 1000 shares, leaving me with 11,500\$ profit. But my daily profit was 11,500\$ minus the mistake that took place minutes before entering this huge trade, leaving me with 9,780\$ in daily gains with 3 trades each 1000 shares. I consider this trade as my second-best trade so far.

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/16/20							\$122,310	
06/16/20	UONE	buy	\$11.75	1,000	\$11,750		\$110,560	
06/16/20	UONE	sell	\$12.47	1,000	\$12,470	\$720	\$123,030	\$720
06/16/20	UONE	buy	\$24.15	1,000	\$24,150		\$98,880	
06/16/20	UONE	sell	\$21.71	1,000	\$21,710	\$2,440	\$120,590	\$2,440
06/16/20	UONE	buy	\$23.08	1,000	\$23,080		\$97,510	
06/16/20	UONE	sell	\$34.58	1,000	\$34,580	\$11,500	\$132,090	\$11,500
06/16/20	UONE						\$132,090	\$9,780

Table 3.2.3: UONE June 16th Day Trade

SPDR S&P 500 ETF Trust (SPY)

SPY ETF is the most pupal fund that tracks the Standard & Poor's 500 Index, which is comprises 500 large and mid-cap U.S. stocks. These stocks are selected based on the market size, liquidity and industry by a committee. The SPY is well-differentiated between multiple sectors, such as (21.30%), information technology, (15.46%) health care, (14.08%) financial services, (10.74%) communication services, (8.92%) industrials, (8.13%) consumer defensive, (9.66%) consumer cyclical, (3.62%) utilities, and (3.25%) real estate [15].

The SPDR S&P 500 ETF Trust (SPY) has generated an average return of 11.04% during a period of the last 10 years and the last 3 years an average annual return of 6.23%. Since its creation the fund has achieved an average annual return of 8.93%. SPY offers investors a well-organized way to diversify and control their exposure to the U.S. equity market, without having to invest in multiple stocks. Since the SPDR S&P 500 ETF Trust tracks 500 large- and mid-cap stocks in the

United States, the risks are higher, such as interest rate risk, economic risk, currency risk, country risk, and market risk. SPY's performance is affected by both world and U.S. economic data. Figure 3.2.7 displays SPY profit over the last 3 decades.



Figure 3.2.7: SPDR S&P 500 ETF Trust (SPY) Return

SPY July 20th 324\$ Call



Figure 3.2.8: SPY Daily Chart on July 20th

The 1-minute chart shown in Figure 3.2.8, displays the first hour of the day SPY was very strong and it looked like it could keep going. Around 1:43 PM I bought 100 contracts of SPY calls at premium price of 0.4\$. What are contracts? 1 contract= 100 shares of premium price, so if $0.4 * 100 = 40\$$ per contract, so 100 of them is about \$4,000. I wanted to keep this as a day trade so I decided to sell 50 contracts around 3:43PM at the premium price of 0.81\$ ($0.81 * 100 = 81\$$ per contract) so that would be 4,050\$ for 50 contracts.

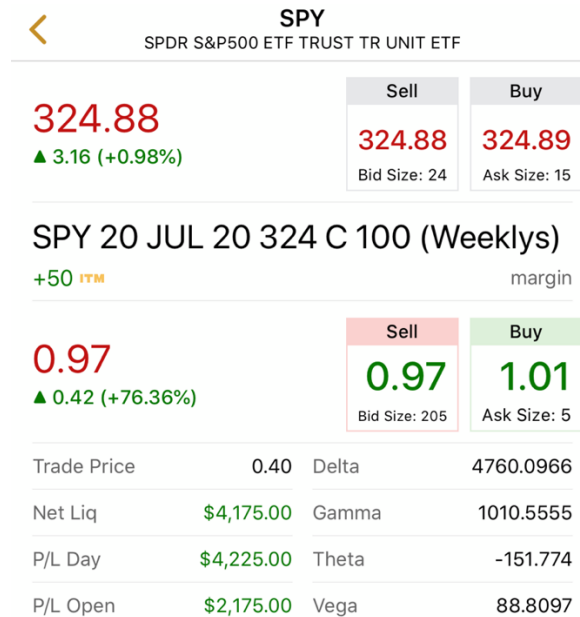


Figure 3.2.9: SPY Profit After Selling 50 Contracts

Then as SPY was going down, as shown in Figure 3.2.9 I took the other 50 contracts out with a premium price of 0.64\$ ($0.64 * 100 = 64\$$ per contract), that would be 3,200\$. For a total of 7,250\$ minus my 4,000\$ initial investment I made 3,250\$ in profit for my first ever SPY call. The reason the premium moved from 0.41 to 0.81 then down to 0.64, that is because a contract is like betting for the price to go to a certain price target. The more it rises to that price the more money my

contracts make, just like with stocks. What is risky about such day trade is that, if SPY was decided to be staying in one level or worse, it could go down, I had one day to fulfill my contract, if I let it go to the next day, my contract would expire and the initial investment of 4,000\$ on SPY calls would be worth 0\$. Day trading calls like this is known as a “lotto”, it received that name due to its high risk and reward.

Date	Symbol	buy / Sell	Premium Price	Contract	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/20							\$132,090	
07/20	SPY 324\$ Call Exp July 20 th	buy	\$0.4	100	\$4,000		\$128,090	
07/20	SPY 324\$ Call Exp July 20 th	sell	\$0.81	50	\$4,050	\$50	\$132,140	\$50
07/20	SPY 324\$ Call Exp July 20 th	sell	\$0.64	50	\$3,200	\$3,200	\$135,340	\$3,200
07/20							\$135,340	\$3,250

Table 3.2.4: SPY July 20^h Day Trade

SPY July 31st 323\$ Call

From the previous day on July 30th, the market gapped up starting with Facebook, Apple, Microsoft and more. With all this movement, I felt it was the right moment to enter a daily “lotto” with SPY. In Figure 3.2.10, I decided to buy 25 contracts for 323\$ Call for the same day around 10:27 AM when the price of SPY was 323.05\$.

Account: margin	
SPY 100 W 31 JUL 20 (0) 323 C -25 SOLD 2.3	FILLED 7/31/20, 3:51 PM
BLNK -1000 SOLD 11.03	FILLED 7/31/20, 10:28 AM
SPY 100 W 31 JUL 20 (0) 323 C +25 BOT 1.12	FILLED 7/31/20, 10:27 AM

Figure 3.2.10: SPY Transactions

Hoping the stock would go high any hour, my patience was wearing down as 2 PM came and I had lost almost 50% of my initial investment. Contemplating whether to sell my contracts for a loss, I decided to let it ride until the end of the day and hope for a better outcome other than a 50% loss. In Figure 3.2.11: Premium SPY Daily Chart, you can see that our premium fell from the morning until 1 PM, and since that moment SPY was only bullish. Around that time top companies were doing great, companies with positive outcome pumps up SPY, which then led to SPY increasing astronomically within next 2 hours, bringing me back to that 0% loss. Figure 3.2.11 shows the 1-minute chart of my SPY premium, this is the chart my contract is following based on the price of SPY and the contract’s delta.



Figure 3.2.11: Premium SPY Daily Chart

What followed was one of the best decisions I have made so far in my day trading career, I decide to hold my contracts until the market closed. In Figure 3.2.12, I decide to sell my 25 contracts at 3:51 PM for a premium price of 2.3\$, initially bought at 1.12\$. From being down almost 50% 1,400\$, I made 100% profit from learning from recent mistakes of pulling out too quickly.

324.93
▲ 0.97 (+0.30%)

Sell
324.92
Bid Size: 2

Buy
324.93
Ask Size: 2

Symbol	Mark	P/L Open	P/L Day
31 JUL 20 323 C 100 (Weeklys) 0	2.225	\$0.00	\$2,950.00

Figure 3.2.12: SPY Profit on July 31st

Date	Symbol	buy / Sell	Premium Price	Contract	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/31							\$139,102	
07/31	SPY 323\$ Call Exp July 31 th	buy	\$1.12	25	\$2,800		\$136,302	
07/31	SPY 323\$ Call Exp July 31 th	sell	\$2.3	25	\$5,750	\$2,950	\$142,052	\$2,950
07/31							\$142,052	

Table 3.2.5: SPY July 31st Day Trade

3.3 Results

After my simulation of day trading method in the stock market during June and July 2020, I was able to profit \$23,940 from my \$50,000 initial investment for day trading (the other \$50K was used for swing trading). As the beginning of my journey, I started day trading stocks, which was an experience worth learning from. But buying and selling options grabbed my attention towards the end of my simulation. I would say I am comfortable day trading both: stocks and options. As a result, I was to increase my investments up by almost 50% from my initial

Date	Symbol	Shares Bought and Sold	Total Cash	Total Profit
06/09/20	NAKD	10,000	\$53,925	\$3,925
06/16/20	PLM	30,000	\$57,960	\$4,035
06/16/20	UONE	3,000	\$67,740	\$9,780
07/20/20	SPY 324\$ Call Exp July 20 th	100 contracts	\$70,990	\$3,250
07/31/20	SPY 323\$ Call Exp July 31 st	25 contracts	\$73,940	\$2,950
				\$23,940

Table 3.2.6: Day Trading Profit



Figure 3.2.13: Day Trading Profit

Throughout my 5 weeks of day trading, I was able to profit a lot of gains as shown in Figure 3.2.13 above where each bar represents the amount of profit weekly.

\$53,925	Week 1
\$57,960	Week 2
\$67,740	Week 3
\$70,990	Week 4
\$73,940	Week 5

Table 3.2.7: Day Trading Profit

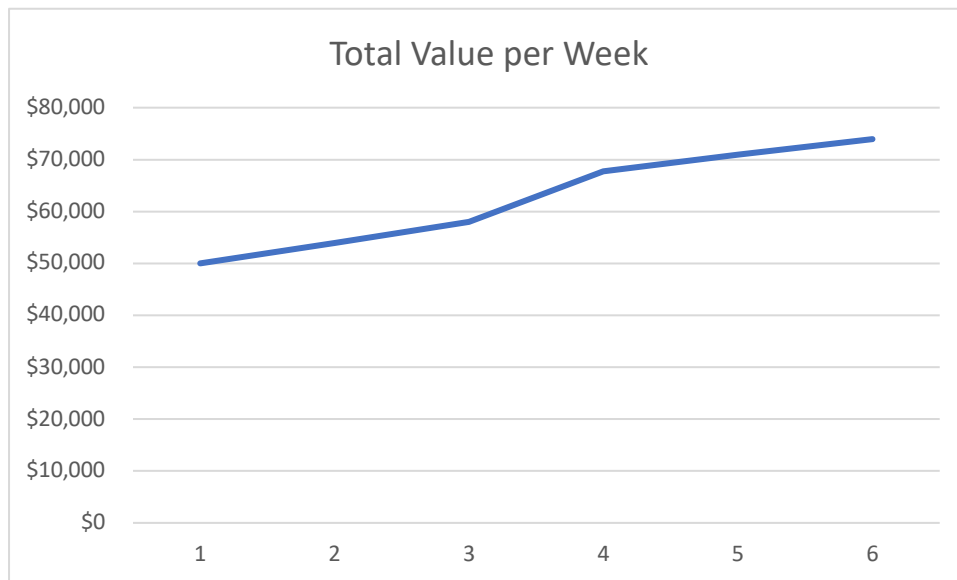


Figure 3.2.14: Day Trading Profit Graph

4. Swing Trading

In this chapter I will be discussing the results of my strategies used to swing trade. For each trade concluded I will be covering the companies, trade transactions and profit/loss for my swing trades. To begin my swing trading as a beginner, I had one strategy at first, then weeks after I adapted to another strategy which I was able to learn from the recent one.

4.1 Swing Trading Strategy

First off... what is swing trading? Swing trading is a style of trading that captures small to medium term gains in a stock over a period of few days to several weeks. Swing traders primarily use technical analysis to look for trading opportunities. These traders may utilize fundamental analysis in addition to analyzing price trends and patterns." So unlike day trading where we are out of positions within a day, swing trading we are holding positions overnight or for several days.

So, what is the first strategy? For starters it needs to be a first green day. Also the stock MUST have a catalyst! This sort of ties into the first green day. The stock having a first green day is caused by the news that comes out.

Have to be cautious of stocks moving with no news. Never hold them overnight. Next thing I want to see is not a lot of overhead resistance on the daily and weekly chart. Resistance is an area on a chart where price has had trouble moving higher in the past. Next step you want to see that it has a history for being a multi-day runner. Study the past and look to see if it has gone on multi days runs before. As we know history repeats itself. If it's went on multi day climbs before there is a good chance it can do it again if all the criteria I listed above is met. Now, I lets discuss the new swing trading strategy that I have been working on. First things first the stock needs to be making new 52-week highs. This is usually driven by news and positive outlook on the company. But then I want to see the rug get completely pulled from out underneath the stock.

What do I mean by that? I want to see a big multi day sell off from those fresh 52-week highs. The breakout buyers that were grabbing the stock up at the highs are now getting killed. The stock is dumping, and they can't take the pain anymore or their stop gets triggered, so they sell their shares to us for massive bargain. So, we have concluded that we want the stock to have been making new 52-week highs recently, then we want to see a massive selloff from those 52-week highs... now what's left? Where to buy and sell. So, you want to move up to your weekly or even monthly chart if you want an even higher probability of success. Weekly chart should do just fine though. Identify your support on the weekly chart, that's where you will buy. Identify where there is resistance and that is where you will sell. I'm going to pull up a few charts for you to look at so you can get a better idea of what I'm talking about. In Figure 4.1.1, BLDP is a good example. Look at February 18th 19th 2020. Hitting new 52-week highs everyone buying up here getting greedy is about to get smashed! This is around the time coronavirus was taking off and everyone was losing their shit.



Figure 4.1.1: BLDP Weekly Chart

Let's look at our weekly chart above so we can get a better idea of where we could see buyers flood in at. We can clearly see the weekly swing low was at 8.68. As shown in Figure 4.1.2,

swing lows serve as support. So, we have identified our level on the weekly chart, now let's move down to the daily chart for our entry.



Figure 4.1.2: BLDP Daily Chart

Look at the massive decline into weekly support without any pullback! 9/10 the stock needs to breath and pullback. When it doesn't that is when proper risk management comes into play.



Figure 4.1.3: BLDP Weekly Chart

Look at that beautiful uptrend! Also, I guarantee you that A'LOT of people had their stops at 8.68. People love to keep their stop under swing low support as shown in Figure 4.1.3. On February 27th, 2020 we came down hit a low of 8.34 triggering all those stops. A few days later we rallied up almost hitting 11.00!



Figure 4.1.4: BLDP Daily Chart

Who did they sell their shares to? US! You could have had your profit target at 10.00 whole number resistance, and you could have had your stop underneath 8.00 as shown in Figure 4.1.4. Or you could have just kept a 1/1 risk reward. To recap the rules one more time: recently hit new 52-week highs, multi day selloff from those highs, it's now oversold, identify weekly support, buy off that weekly support. (No pullback), identify next level of support to keep your stop under, identify next level of resistance to sell into. In conclusion, "The time to buy is when there is blood running in the streets" -Baron Rothschild. Most people get freaked out when the market tanks or a stock tanks, they prefer to stay on the sidelines and watch. But in a lot of cases it is simply giving you a chance to snag them at a bargain. That doesn't mean go all in! Or hold and hope. You still need to trade small, have a stop, and have a profit target. If the play meets the criteria above more times than not you will come out of the play profitable. It pays to buy fear and panic when it's done in the correct manner.

4.2 Companies and Trades

American Virtual Cloud Technologies Inc (AVCT: NASDAQ)

AVCT is an IT solutions provider that promises satisfied expectations for organizations by using IT and technology solutions to innovate and better outcomes. Its products include network communications, data storage, desktop and servers. AVCT offers licensing management and software solutions and services that help customers improve their software investments.

Before I enter any position of a stock, I always look at the daily chart and the minute chart, if I find anything that stands out, I look more into it. While checking out AVCT I was looking at the Daily/Year chart and noticed a reversal. I notice this “U” shape pattern June 7th, and if you look at Figure 4.2.1 you can notice after June 1st, we see the beginning of an uptrend of this stock.



Figure 4.2.1: AVCT Daily Chart

After the big dip down during the coronavirus panic period around March, the stock has started to consolidate with a slight downward trend. But after June 1st an upward trend begins. I've had my eye on this stock for two days now and I finally decide to enter June 9th as shown on Figure 4.2.2. I had entered right before the big uptrend move.



Figure 4.2.2: AVCT 5 Minutes Chart

I decided to buy 5000 shares of AVCT stock at strike price of \$2.25 for a total of \$11,250 (@June 9th 10:12 AM). Knowing this was a 1-3 day swing, I was expecting this stock to move up, but did not expect a rapid gap up on price during after-hours and premarket. With such “crazy” market % change overnight, many day traders look at this stock as an opportunity to jump on the train and ride it out. When the market opened again at 9:30 AM June 10th, a lot of volume came pouring in, while there so many buyers vs sellers the price drove through the roof. I ended up selling my 5000 shares at price of \$4.26 for a total of \$21,300 (@ June 10th 12:03 PM). As shown in Figure 4.2.3, I made a profit of \$10,050, which I believe could have been doubled if I had sold at HOD (high of day) or around \$6.8.

Symbol	Description	P/L Open	P/L %	P/L Day	P/L YTD
AVCT	AMER VIRTUAL CLOUD TECH INC COM	\$0.00	0.00%	\$0.00	\$10,050.00

Figure 4.2.3: AVCT Profit

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/09/20							\$103,925	
06/09/20	AVCT	buy	\$2.25	5,000	\$11,250		\$92,675	
06/10/20	AVCT	sell	\$4.26	5,000	\$21,300	\$10,050	\$113,975	\$10,050
06/10/20							\$113,975	\$10,050

Table 4.2.1: AVCT June 9-10th Swing Profit

NTN Buzztime Inc, NTN

NTN Buzztime, Inc delivers entertainment and dining technology to bars and restaurants in North America. The company provides all sorts of entertainment and marketing services platform for hospital venues that offers games, events and entertainment to their customers. Its network includes big entertainment restaurants like Buffalo Wild Wings, Old Chicago, Beef O'Bradey's, Aroogas, and many more. The entertainment attracts players and it raises a competition between venues, known as multiplayer gambling.

NTN was a pre-market gapper, meaning before 9:30 AM this particular stock had a gap up and I decided to put this stock on my watchlist and wait if certain action was going to pick up again, Figure 4.2.4.



Figure 4.2.4: NTN 1 Minute Chart

I acquired 10,000 stocks at June 15th at 11:49 AM for the price of \$1.47 per stock. As we can see this stock did end up falling for the day, but I wasn't looking for an intra-day trade. There you can see this stock had no after-hour (after 4PM) and no premarket (before 9:30) action, due to low shares for the public and float shares this stock can easily move up or down with just some volume. You can see June 16th the stock peaked twice before I took them out at 10:18 AM. This one-day swing made me \$4,300 from a \$14,700 entry.

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
06/15/20							\$113,975	
06/15/20	NTN	buy	\$1.47	10,000	\$14,700		\$99,274	
06/16/20	NTN	sell	\$1.90	10,000	\$19,000	\$4,300	\$118,275	\$4,300
06/16/20							\$118,275	\$4,300

Table 4.2.2: NTN June 15-16th Swing Trade

Advanced Micro Devices, Inc. (AMD)

AMD is an American multinational semiconductor company based in Santa Clara, California, that develops computer processors and related technologies for business and consumer markets. AMD main products are microprocessors, motherboard chipsets, embedded processors and graphic processors for server, workstations and personal computers [16].

What made this stock climb 8.4% was their new release of a new line of desktop processors. Since the coronavirus pandemic relocated most jobs from home and “locked people” inside their homes, increased the demand for more efficient gaming system and help people work better from home. AMD took this opportunity to develop new desktop processor to benefit from this high demand. Reading about the news made me realize that AMD is top company that was ready to respond to such demand, so then I decide to enter my second ever option: July 22, 2020 AMD August 21st 60\$ Call on July 9th . Shown on Figure 4.2.5, there is some of the profit 11 days after I had entered.

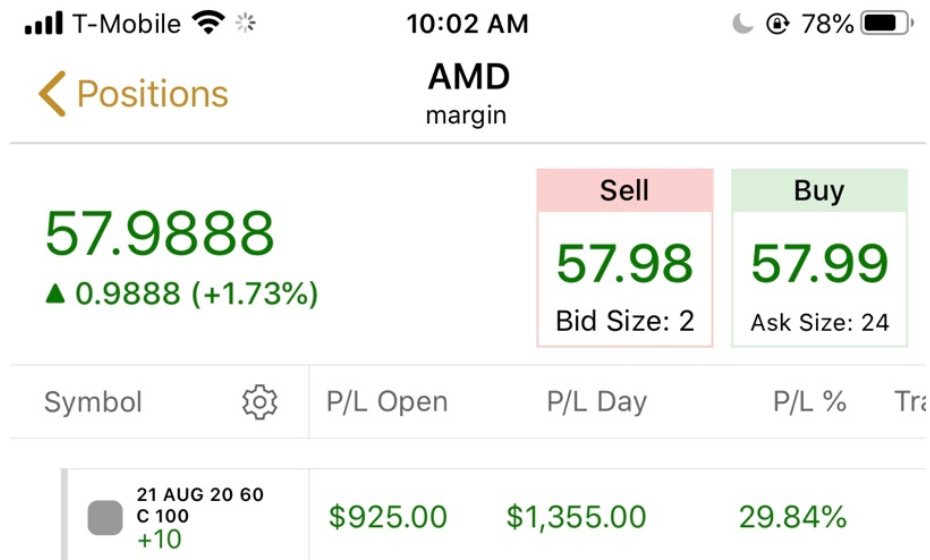


Figure 4.2.5: AMD Call Profit

Below in Figure 4.2.6, is a mobile view of my AMD Call option on my ThinkOrSwim platform on my phone. The delta of this option is very high, which means if it goes up little by little, my premium increases by a lot.

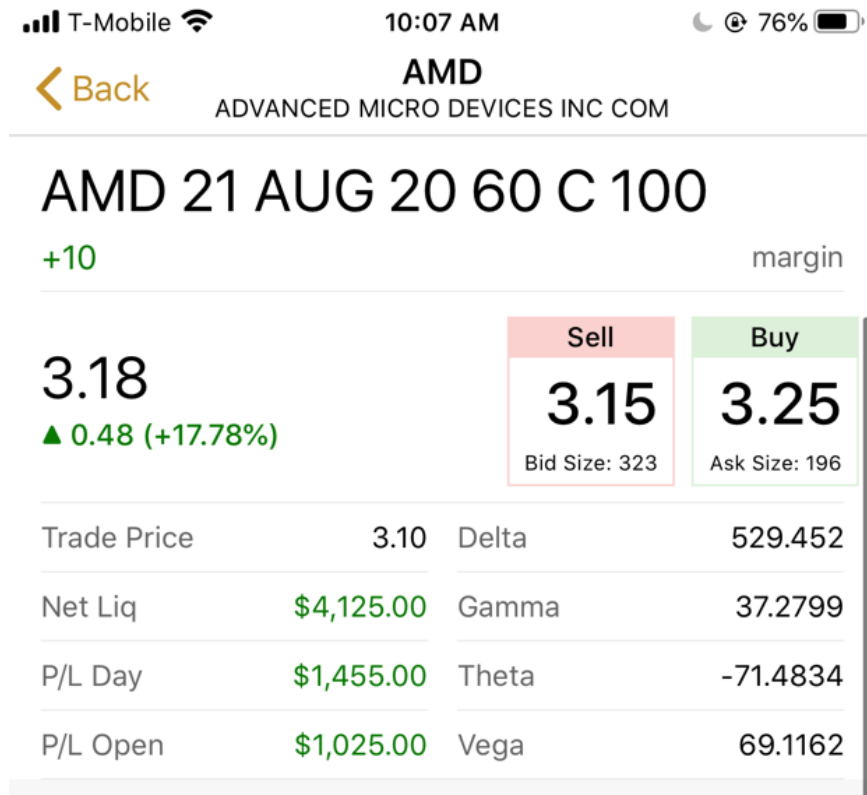


Figure 4.2.6: AMD Call Profit

In Figure 4.2.7, I entered AMD with 10 contracts for price to reach 60\$ calls at premium price of 3.10\$ (3,100\$ initial investment) on July 9th at 1:01 PM with expiration date of august 21st.



Figure 4.2.7: AMD Premium 1 Minute Chart

Almost two weeks after on July 22nd AMD started to rise exponentially, increasing the premium price making my contracts gain profit. Around 10:08 AM, I sold 10 of my contracts at premium price of 4.10\$, that’s about 4,100\$ minus my 3,100\$ initial investment, leaves me with a profit about 1,000\$. As I am writing this today on August 4, 2020, the current price of AMD is at 85\$, meaning if I had this contract to this day, the profit from this contract would have skied to the moon as the saying goes.

Date	Symbol	bu y/ Sel l	Premiu m Price	Contr act	Net Cost/ Proceed s	Profit/ Loss	Total Cash	Total Profit
07/22							\$135,340	
07/09	AMD 60\$ Call Exp Aug 21 st	buy	\$3.10	10	\$3,100		\$132,240	
07/22	AMD 60\$ Call Exp Aug 21 st	sell	\$4.10	10	\$4,100	\$1,000	\$136,340	\$1,000
07/22							\$136,340	\$1,000

Table 4.2.3: AMD Call July 9-22nd Swing Trade

Lululemon Athletica Inc. (LULU)

LULU is an athletic retailer located in Delaware and headquartered in Vancouver. Founded in 1998 as a store that sold yoga pant and other yoga wear. Since then it has expanded its products internationally over 460 stores as well as online. Since then, the company has expanded their athletic performance shirts, shorts and pants as well as lifestyle looks and yoga accessories [17].

Since the coronavirus pandemic brought down almost 50% of LULU's stock, the company bounced back up 76% since the drop compared to 28% of S&P 500. LULU stock has been a big winner in the retail sector in the past years. Known for its yoga wear, the company has history of big bounce back especially with all of the online ordering during pandemic and them announcing plans to build at-home workout Mirror for half a billion dollars. I enter my LULU 322.5\$ Call in July 7th hoping for small percentage profit while playing it safe. In Figure 4.2.8, is the LULU July 31st expiration entry at premium price of 8.5\$ with 5 contracts.



Figure 4.2.8: LULU Call Mobile View of Profit

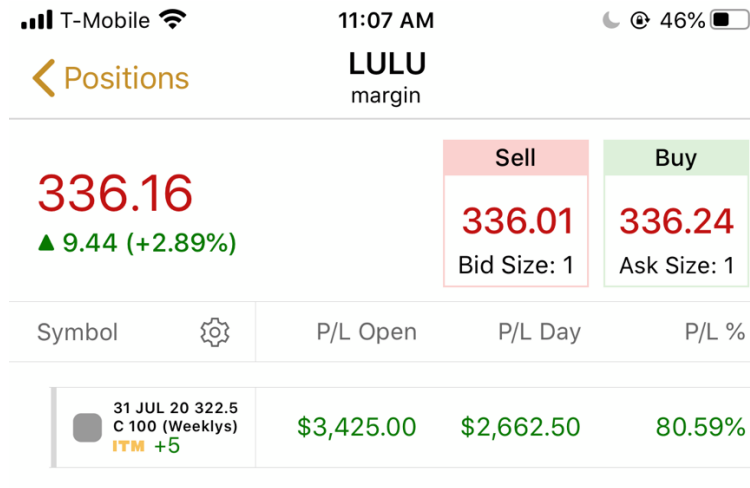


Figure 4.2.9: 80% Profit on LULU Calls

Lulu is way beyond my price target, expecting a very high profit from this gain. But what makes options so risky is that you are always fighting against time. To maximize your profit, you would want you contract to be executed as soon as possible for that premium to increase rapidly. As you can see in Figure 4.2.9 and 4.2.10, the price of LULU stock is at 336\$, about 14\$ above my price target. Since this stock, took almost the whole expiration to be executed, it slowly killed the delta (the factor by which the premium price decreased in correlation to LULU's real stock price). With low delta it is difficult for a contract to regain its losses and start profit. You would need a rapid increase of stock price to increase the delta. Since the LULU stock price rose slowly, it only increased my premium price to almost 80%.

Account: margin

LULU 100 W 31 JUL 20 (8) 322.5 C 8.53 -5 SOLD 15.25	FILLED 7/23/20, 11:08 AM
LULU 100 W 31 JUL 20 (8) 322.5 C 8.53 +5 BOT 8.5	FILLED 7/7/20, 11:01 AM

Figure 4.2.10: LULU Calls Premium Prices

I bought 5 contracts of LULU with premium price of 8.5\$, ($8.5 \times 100 = 850\$$ per contract). With an initial investment of 4,250\$ and an expiration date to July 31st. While LULU had a rough climb, it did reach my price target of 322.5\$, I would expect more than 100% on my profit but when buying a contract and leaving it for a long time, you are fighting against time. Although the stock may be not moving up or down, your premium price drops in value as time goes on, and when time reaches the expiration date, the contract is worth 0\$. With a premium price entry at 8.5\$ and exiting 19 days later at premium price 15.25\$, I made a profit of 2,612\$ (roughly about 80%).

Date	Symbol	buy/ Sell	Premium Price	Contract	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
07/23							\$136,340	
07/07	LULU 322.5\$ Call Exp July 31 st	buy	\$8.5	5	\$4,250		\$132,240	
07/23	LULU 322.5\$ Call Exp July 31 st	sell	\$15.25	5	\$6,862	\$2,612	\$139,102	\$2,612
07/23							\$139,102	\$2,612

Table 4.2.4: LULU Call July 7-23rd Swing Trade

AgEagle Aerial Systems, Inc. (UAVS)

AgEagle is a company created to advance and innovate aerial imaging data collection and analytics technologies. Their most focus field of work would be solving precision farming problems. AgEagle's powerful, aerial data collection and analytics solutions help farmers and agronomists to acquire high quality, actionable intelligence that results in higher equipment efficiency, reduced crop damage, improved yield, less time on foot in the field and increased profits [18] . As shown in Figure 4.2.11, the picture below shows what aerial data those farm drones collect and measure.

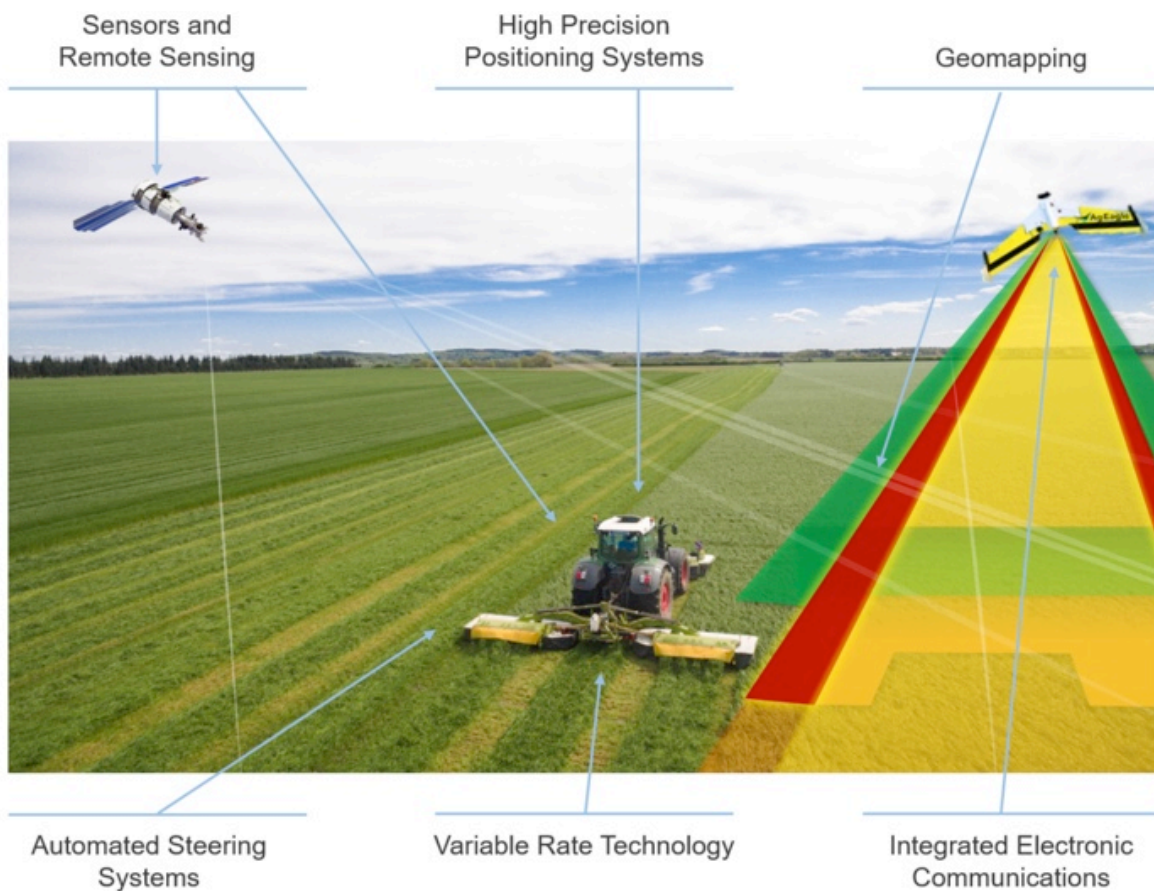


Figure 4.2.11: Precision Farming Done by UAVS Drones

As AgEagle has rebranded itself as a company that can do more than provide farming intelligence solutions. Not only is the company expanding its operations, but it's delving into a new market that could prove to be highly lucrative. UAVS's share price gapped up before the market opened on Wednesday on August 5th. The stock had previously closed at \$2.86 but opened at \$2.98. AgEagle Aerial Systems shares last traded at \$3.12, with a volume of 515,536 shares. Shown in Figure 4.2.12, I took a position of 5,000 shares of UAVS stock after I read about the news/rumor that UAVS might be working with Amazon to deliver packages with drones in the near future.

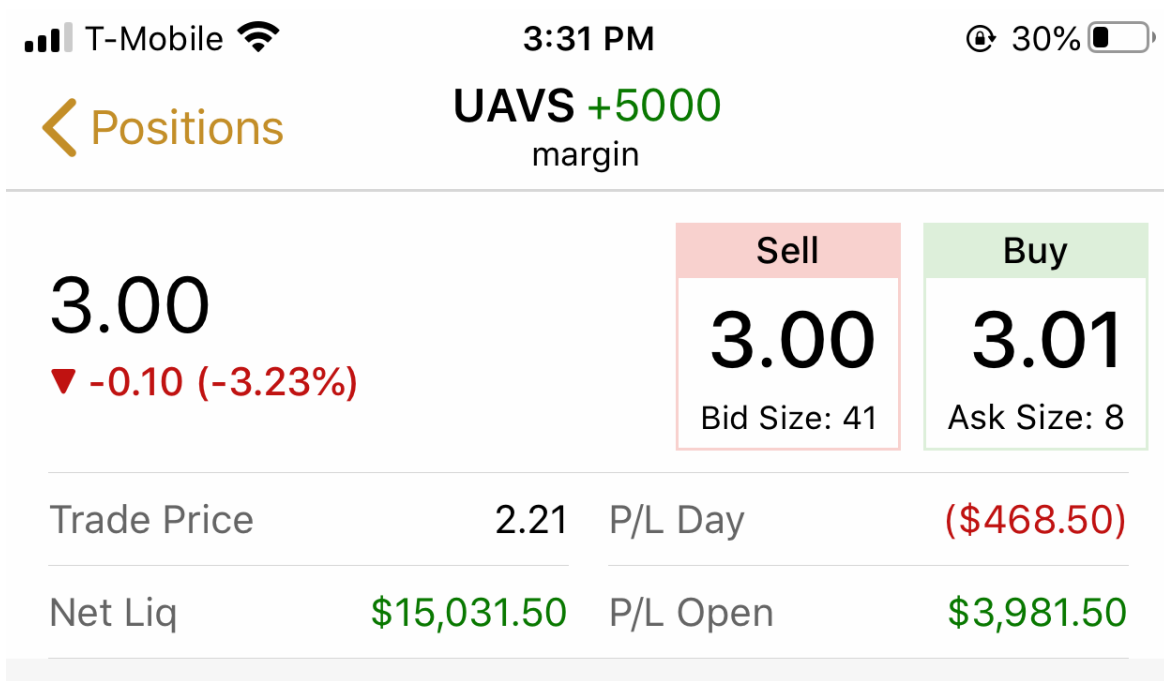


Figure 4.2.12: Profit of my UAVS Trade

Above in Figure 4.2.12, is my swing trade profit from UAVS stock. This swing trade in particular was very long-term for me because I was optimistic that when I entered this stock at first, I knew with a bunch of press releases covering the collaboration of Amazon and UAVS, the stock would automatically go up. As you can see in Figure 4.2.13, this swing trade took

almost a month, 24 days to be exact. I was comfortable putting away 10% of my portfolio to hold this stock in particular.

Account: margin

UAVS 2.99 -5000 SOLD 3	FILLED 8/6/20, 3:31 PM
UAVS 2.99 +5000 BOT 2.21	FILLED 7/13/20, 3:53 PM

Figure 4.2.13: Entry and Exit of UAVS Swing Trade

I entered this trade on July 13th at 3:53 pm, hoping to have an overnight gain. But that wasn't the case with this particular swing trade. I bought 5,000 shares at 2.21\$ and sold 24 days later at 3.00\$ per share. When I exited today at 3:31 pm, I had a net profit of 3,950\$. Which turns out to be a 35% gain over a 24-day period swing trade,

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
08/06/20							\$142,052	
07/13/20	UAVS	buy	\$2.21	5,000	\$11,050		\$131,002	
08/06/20	UAVS	sell	\$3.00	5,000	\$15,000	\$3,950	\$146,002	\$3,950
08/06/20							\$146,002	\$3,950

Table 4.2.5: UAVS Profit from Swing Trade

Landcadia Holdings II, Inc. (LCA)

LCA is a special purpose acquisition company — SPAC — controlled by Houston Rockets owner Tilman Fertitta. SPACs, the vehicle by which DraftKings (NASDAQ: DKNG) went public earlier this year, have been bullish all 2020, particularly in the gaming business. Landcadia already announced it is serving as a vehicle for Fertitta’s Golden Nugget Online Gaming to go public. That company, which is one of the dominant iGaming names in the fast-growing New Jersey market.

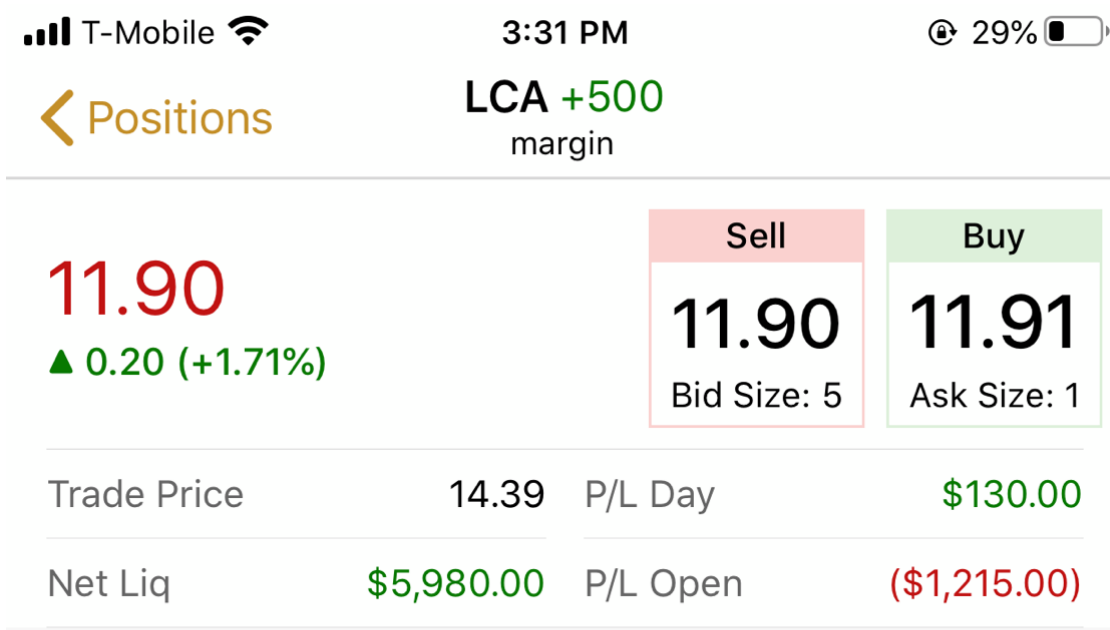


Figure 4.2.14: LCA Loss on Swing Trade

As shown in Figure 4.2.14, I bought 500 shares of LCA hoping its cooperation with Fertitta’s Golden Nugget Online Gaming would lead to a press release and hope for some good outcome. The press release did happen, but LCA price didn’t rise much since when I bought it. Hoping for a bounce, I might have realized I had jumped on the boat too late. Exiting a month later for a loss of 1,215\$, I was very disappointed that with the press release the stock didn’t rise up.

But if I had looked before, LCA had previous bounces from this news since its rumors at the beginning of the gap. It was today, I had realized until the next cooperation, LCA stock price was not moving anywhere up. In Figure 4.2.15, you can see my exit on August 6th at 3:32 pm at price of 11.96\$ resulted in a loss of 17% of my initial investment.

Account: margin	
LCA 11.85 -500 SOLD 11.96	FILLED 8/6/20, 3:32 PM
LCA 11.85 +500 BOT 14.39	FILLED 7/6/20, 1:41 PM

Figure 4.2.15: LCA Swing Trade Loss

Date	Symbol	buy/ Sell	Price	Shares	Net Cost/ Proceeds	Profit/ Loss	Total Cash	Total Profit
08/06/20							\$146,002	
07/06/20	LCA	buy	\$14.39	500	\$7,195		\$138,807	
08/06/20	LCA	sell	\$11.96	500	\$5,980	\$1,215	\$144,787	\$1,215
08/06/20							\$144,787	\$1,215

Table 4.2.6: LCA Profit from Swing Trade

4.3 Results

Throughout my simulation of swing trading in the stock market during June, July and August 2020, I was able to profit \$20,697 from my \$50,000 initial investment for swing trading (the other \$50K was used for day trading). Almost all of my trades were decisions based on upcoming news and expecting for a press release. To be successful at swing trading stocks, you have to research a company on your watchlist, find enough information to convince yourself that this stock is going up. Look for catalyst, press release, news and quarterly reports to decide if the stock is worth entering and risking a small percentage for a bigger profit. There was only one stock which I swing traded and it brought big gains. This particular stock was AVCT, this was a perfect fundamental set up, where we had the stock fall incredibly fast due to corona virus pandemic, consolidate for a very long time and slowly getting ready to blast up forming what is called a “reversal”, it happens when a stock is predicted to perform the shape of “U”. When I noticed this stock starting the uptrend on that reversal, I immediately entered being 75% sure there was going to be an increase in stock price. And it did.

Date	Symbol	Shares Bought and Sold	Total Cash	Total Profit
June 9 th -10 th	AVCT	5,000	\$60,050	\$10,050
June 15 th - 16 th	NTN	10,000	\$64,350	\$4,300
July 9 th - 22 nd	AMD 60\$ Call Expiring Aug 21 st	10 contracts	\$65,350	\$1,000
July 7 th - 23 rd	LULU 322.5\$ Call Exp July 31 st	5 contracts	\$67,962	\$2,612
July 13 th – Aug 6 th	UAVS	5,000	\$71,192	\$3,950
July 6 th – Aug 6 th	LCA	500	\$70,697	\$1,215
				\$20,697

Table 4.2.7: Swing Trading Profit

Below is a table showing all my weekly progress followed by a graph of my profits and total investment as for swing trading.

\$50,000	Week 0
\$60,050	Week 1
\$64,350	Week 2
\$65,350	Week 3
\$67,962	Week 4
\$71,192	Week 5
\$70,697	Week 6

Table 4.2.8: Swing Trade Weekly Progress

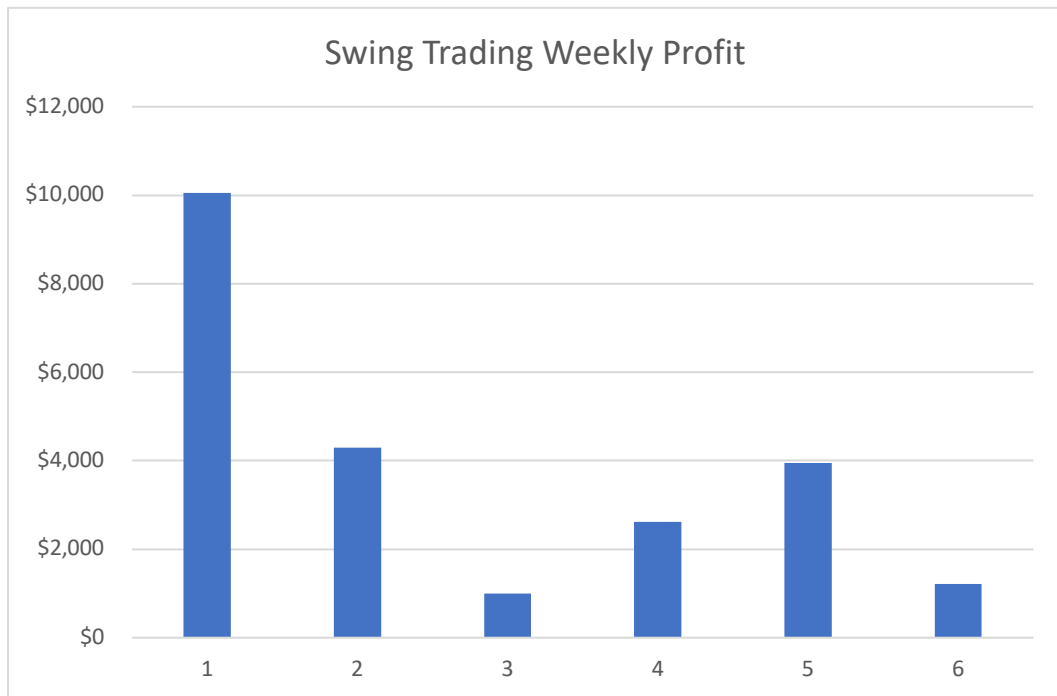


Figure 4.2.16: Swing Trading Profit

Above in Figure 4.2.16, I have a weekly bars chart showing the weekly profit I've made on the swing trades I chose based on my research and personal opinion on these stocks.

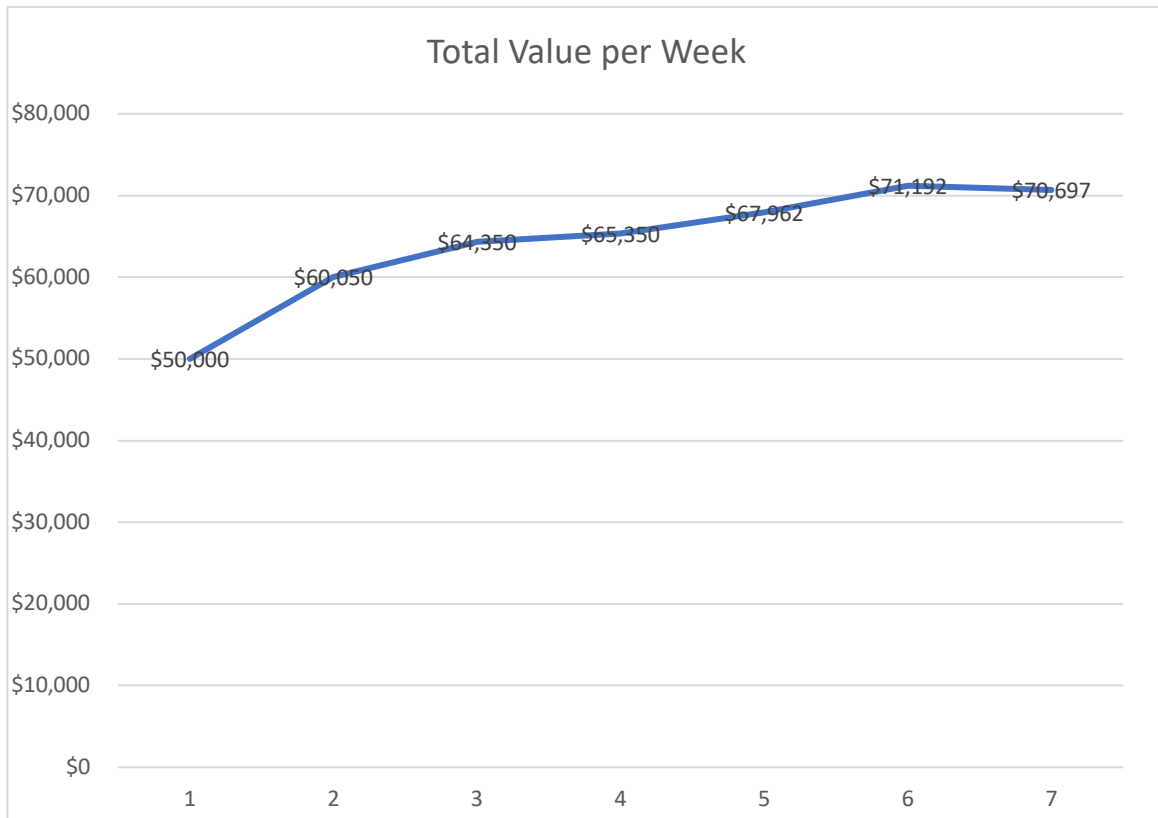


Figure 4.2.17: Swing Trade Profit

I am happy with my results from the Figure 4.2.17 above, after 6 weeks of swing trading, although I find it more difficult finding the right stock to swing, which with practice you can learn what stock is worth risking your money. Worst case scenario, we always have a stop loss which keeps us from having a large loss. But overall, I am satisfied with my performance as a beginner swing trader.

5. Comparison and Analysis

After a discontinuous 8-week stock market simulation using two strategies: swing trading and day trading, it has been a successful learning experience in the stock market during volatile times like this. With an initial investment of \$50,000 for each of the trading strategies, I am satisfied with my outcomes as day trading resulted in \$23,940 (+47.88%) and swing trading coming up to \$20,697 (+41.39%) in profits shown in Figure 5.1 and 5.2.



Figure 5.1: Swing Trading Profit



Figure 5.2: Day Trading Profit

The return from swing trading is slightly lower than the one from day trading. This simulation has an end balance of \$144,637 respectively, that is almost an average of 44% gain on my initial \$100,000 invested. As shown in Figure 5.3, there is the weekly profit combined with the initial investment

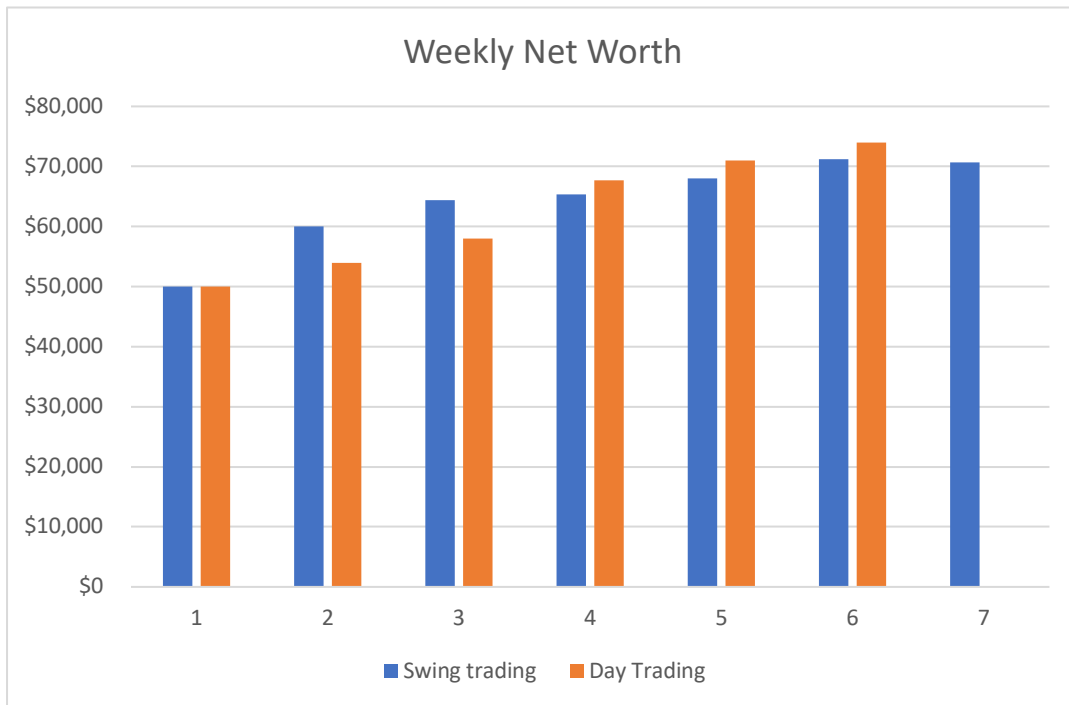


Figure 5.3: Weekly Total Net

As shown from the chapters above, day trading had a larger profit than swing trading although there was fewer trades involved. I could have maximized my profits in some of my trades, I still came out with large profits in each of them. However, working and studying both the strategies, I approached swing trading more different than day trading. This was due to swing trading including more fundamental, analytical and charting decisions, while day trading was mostly news based and observe the scanner daily for night and early morning gappers. Both of my strategies are not perfect, but I believe that once you have found your strategy, it is good to stick with it and perfect it to such level where all of your trades take large profit or little losses.

6. Conclusion

Based from the results of this simulation, I am pleased to state that I have achieved both of my initial set goals. One of them, being able to use this opportunity to learn and experience firsthand the life of a trader, giving me a better understanding of what really happens in the stock market. Although I am not a “blue suit”, sitting in an office and working for a brokerage company, I was able to slowly learn the basic knowledge every trader needs to know.

Being a successful trader occupies most of your time studying and learning about stocks on the daily. This being said to succeed as a trader, you have to be motivated and eager to learn about the information presented to you, there has to be dedication and patience towards this work field, as it can be very rewarding. Which brings up my second goal achieved from this experience, making some profit. I am satisfied with my profit as I was able to pocket 44% extra of my initial investment for the duration of 7-9 weeks. Using both of my trading strategies almost all of my trades were executed successfully with the exception of one trade. While there is so much more to learn about both of my strategies, I am glad to say that experimenting with different approaches of investment in the stock market gave me a better understanding of my performance as a trader in stock market during times of a pandemic going on. During this simulation, day trading approach was slightly more successful compared to swing trading. Given more time, I believe there could have been a better outcome for this project, not that I am not satisfied with this one.

This project was a very rewarding experience and extremely beneficial towards my future financial investment, because I believe after this project, I will be taking this information and use it in the future towards my plans of investing in the stock market.

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