Book Summary: Elon Musk

- Chapter 1:

- Mostly about Musk's companies, his desire to innovate and moonshot projects like getting people to Mars.
- This is unlike typical SV startups, many of which focus on internet products that enhance our lives in a small (sometimes unimportant) way.
- Musk focuses on important problems to solve
- When Musk was a kid, around 14-15 years old he spent a lot of time thinking and basically came to the conclusion that it's his duty/goal to improve the world in a meaningful way.
- SpaceX & Tesla employees kind of know that they're all contributing to a few huge goals, namely colonize Mars & revolutionize transportation.
- Early 2000s, SFO & tech industry was crazy, people making tons of money and partying, great new products getting released, etc. But then there was a crash and a huge lull between 2003 and 2006.
- Musk first founded X.com which became Paypal, and then dumped a hundred million dollars from it into SpaceX and Tesla.

- Chapter 2:

- Talks about Musk's childhood.

- Mother's side: Holdman family (or something), famous for being good chiropractors, opened up many medical practices.
- Even since a young age, Elon was interested in nerdier things, like math and science.
- As early as age 5, he had developed the ability to block out the world and focus on the task at hand.
- You would often see Elon just sitting there, reading voraciously. He was crazy about reading, he read literally all of the books in the library.
- Because of his habits/interests, Elon was often the odd one out and had a hard time making friends.
- Elon, when recounting his childhood, teared up while remembering how often he was bullied & beaten up by kids in middle & early high school. He says that those were formative years and still remembers them.
- Dad was harsh, Elon had a tough time living with him. Even so, when his mother and father split, Elon ended up staying with his father. But it was a very hard life, and Elon (and his siblings) are not close to their father.

- Chapter 3: Canada & College

- Elon wanted to leave South Africa, his eventual goal was to land up in the United States. First, he went to Canada at age 17 to stay with an uncle. But he ended up having nowhere to stay for a while, but then eventually found someone to stay

- with. He worked odd jobs and did random stuff for about a year before enrolling at Queen's University in Ontario.
- After 2 years, Elon transferred to UPenn to study Economics and Physics. He didn't go to class that much, but was still one of the brightest students.
- Justine Musk said that Elon was able to shine a lot better at Penn because there were geekier and nerdier kids. Basically Elon found his ground.
- He and one of his roommates rented out this really large ex-frat house near UPenn, and they threw a lot of parties there.
- Musk drank diet coke and vodka, but never really got drunk or lost his senses. He was usually the sober one.
- Elon's main "vice" seemed to be video-game binges, which isn't so bad. He seemed not to have any bad habits at all.
- During college, he didn't go to class that much but also worked on learning things on the side and developing his ideas and vision.

- Chapter 4: Zip2, Elon's First Company

- Came to Stanford to start a PhD in physics, but he decided to drop out in one or two days in order to create an internet startup.
- Elon and his brother, Kimbal, created this internet startup called Zip2. The main idea was that they'd market internet listings and directories to other industries, like restaurants, car dealerships, newspapers, etc.
- Elon worked incredibly hard, mostly doing coding and engineering work to develop the product, while Kimbal would do sales/marketing stuff.
- Elon usually worked through the night, and they'd sleep at the office. It was the
 typical startup grind. For Elon, it was do or die giving up isn't an option for it.
 When Elon has a goal, he will go to any extent to accomplish it, hence his
 capacity for hard work.
- The important thing is that he truly believed that what he and his company were doing was fundamentally needed in the world. Elon really believed in the capacity of the internet, and thought that it was a good idea to get maps, eateries, offices, etc on to a listing on the internet.
- At first, they struggled to get traction but then eventually pivoted to primarily making software for newspapers that they could use for their directories. Then, they got funding and hired a lot of talented engineers.
- Elon Musk's personality had somewhat changed. According to someone who
 hadn't seen him in years, Elon became more confident and less willing to take
 shit; before he was a nerdy and geeky boy who's temper would often explode,
 but now he was cool and controlled, yet still very smart and driven. This wasn't

- always true though, as Elon would never take no for an answer and would get super infuriated whenever one of the people he was working with did.
- Example once told an engineer "I don't really give a damn what you think"
 during a meeting when an engineer said that a technical change which had been
 requested was impossible.
- Even C-level execs and the board would get mad at him.
- There was going to be a merger with a competitor company, but it became known that the other company (CitySearch) had not been completely honest about their employees and financials. Elon, who was preivously in support of the deal, became against the deal. Some executives and employees felt that their jobs were at risk. The CEO, Rich Sorkin, still felt that the deal should go on. Eventually, it didn't and the press shat on both the companies.
- As a result of this, Elon tried to convice the board to oust Sorkin as CEO. The board didn't do it. Sorkin and the board apparently did not like Elon very much, and he got somewhat of a demotion.
- Around then, the company got acquired by someone else for 307 million dollars, only after 3 years of operating. Elon made 22 million and bailed to work on his next project.
- Reflecting back, Elon said that one important thing he learned which he had never been exposed to before was how to manage people. He said that you want to manage people who think and behave like you, but they don't. You don't understand many things about them how they work, what they lilke, what makes them motivated, etc so you assume it must be similar to you. Elon said this happened because he never really managed or led people before.

Chapter 5: X.com/Paypal

- From the money he made from his first startup, Zip2, Elon dumped most of it into funding his next venture, Paypal.
- But first, he showboated and enjoyed the life a little bit. He bought an expensive car (some car which had only 62 of its models in the world, all to billionaires/multi-millionaires) as well as a house, and showed off a little bit. He called CNN to his house to film the delivery of his new car.
- At one point on the way to a meeting with an investor, Elon actually crashed his car in a childish move to show off.
- So he's not perfect and completely free of bragging, he actually does/did have that side to him. However he did dump most of the money into X.com
- He basically conceptualized X.com as a kind of financial institution that lives completely online. He had big hopes for it to essentially replace the tediousness of what banking was back then.
- Specifically, he wanted to make financial transactions really easy, such as paying for stuff online or sending money to your family.
- Elon and the team of talented engineers that he had hired found that there was a lot of red tape associated with what he wanted to do.

- Eventually, the site launched the day before thanksgiving in 1999. Elon had worked basically 48 hours straight.
- Aside: Elon Musk was and is a workhorse, it is crazy. He basically works nonstop some Silicon Valley startup types bragged about coming home at 7 or 8 pm, but Musk would often come home at 11pm or even later, and then work more, his wife Justine said.
- Anyway, Paypal was doing well but there was a competitor called Confinity, who's main product was Paypal.
- Ironically, Paypal actually first started out leasing the same office space as Musk's X.com was, but then when they became hardcore competitors they went somewhere else. This was all in between 1999-2000.
- At this point, these two companies were battling really intensively, and were targetting eBay. eBay actually responded with their own pay product as well. Pay was all the hype.
- Eventually, the two companies merged (legend has it that Peter Thiel and Elon musk met at a coffee shop at a midpoint between the two offices to discuss the merger).
- Bill Harris became the CEO in March 2000, only to be ousted by Elon the next month.
- Elon served as CEO for a few more months until Peter Thiel took over in what some say was a hostile change of powers, but some say it was peaceful.
- Elon stayed on the board of directors and was still the largest shareholder. According to the book, he took it surprisingly well and with a good sense of maturity, realizing that the company is in good hands and as long as it's purpose and vision is being fulfilled, then he's okay with it. He didn't need to steal the show as he felt the need like before.
- This reflects that Musk was developing a bit more maturity.
- Some employees of X.com/Paypal say that Elon musk was a terrible CEO, always
 making bad decisions and getting into fights with people. If Thiel hadn't stepped in,
 Paypal/X.com might have gotten screwed over.
- It was around this time that the media turned on Elon Musk, and Elon stayed so mad at this that ha wrote a 2700+ word email to the media in 2007, several years after the fact, to explain his version of the truth.
- Paypal IPOd and was acquired by ebay for over a billion dollars (back in the day when a billion dollar acquisition was respectable), and elon netted a few hundred million.
- Main takeaways:
- Elon was by no means a god or a legendary perfect leader. He had his issues and pissed the hell out of a lot of people.
- Nevertheless, he had a clear, grandiose vision and didn't give a shit whether other people believed in it or not. He knew that he could create an online financial bank, and startups today like Square and Stripe can be seen as continuing the mission that Elon originally started.
- He actually got this idea several years ago while interning at the Nova Scotia bank in Canada, when he basically realized that bankers were idiots who would just copy what other people did and make money off of it (Elon's words: If there's a billion dollars just sitting there, bankers won't take it unless someone else goes for it, If everyone else jumps off a cliff then they will too).

Chapter 6: The Space Dream

- Elon had a childhood fascination of space, and as he grew older he began to get pissed off at the current situation of space exploration, he basically felt that Americans and society in general had given up on space altogether, and were just okay with mediocrity.
- He thought it was ridicoulsous that NASA did not have any plans for a mission to Mars on their webiste.
- Eventually, he became involved with the Mars Society, and became a generous donor. The initial plan was to send a plant or mice to Mars and have them live their, just to show that they can.
- Eventually, Elon began to get more and more into Space. After he sold Paypal/X, he moved down to the LA area for a variety of reasons.
- Luckly, LA was big on the aerospace industry. There, he met a few like minded people and space enthusiasts, only a few of which shared his crazy passion that would eventually lead him to build SpaceX.
- Eventually, in 2002, SpaceX was incorporated. Elon sold the idea very well to a bunch of engineers, and many talented people joined the team.
- Then, they made rockets for a while. Elon also spent some time hyping SpaceX up to the government and companies like that, but the engineers didn't like that very much.
 However, Elon said that marketing was important to develop relationships with important people.
- Essentially, Elon was indeed very invested in the technical aspect of SpaceX (for sure, there's no doubt about this), but also knew that it was important to show it to the right people and build the right relationships. He had great vision.
- SpaceX was a different rocket company: it operated as a startup, and didn't do a lot of the things that other aerospace companies like Boeing or Lockheed did, which was basically rely on massive government contracts to stay afloat. SpaceX was small and lean.
- Eventually, around 2006, it was time to launch the first rocket (a few years later than Musk's initially proposed, but crazy deadline). They chose a launchpad on the Marshall Islands, off the coast of CA.
- For various reasons, attempts to launch the Falcon 1 would fail three times between 2006 and 2008. On two of the occasions, it seemed like it would succeed for sure, only to get screwed in the last second, a few minutes before reaching orbit.
- These failures hurt Musk and he definitely felt a sense of failure, but he never backed down. He never let it get personal, or saw his failures as reflecting on his innate ability.
- Essentially, SpaceX took each failure calmly and learned from it, despite the failures themsleves being costly and distastrous.
- Eventually, the Falcon 1 launch succeeded in 2008, becomign the first completely privately funded liquid fuel rocket to go up into Space.
- Since then, SpaceX has had a numerous amount of other catastrophic failures, but a bunch of achievements too.

- This includes being the first private comapny to successfuly launch a craft into orbit, the first private company to recover a launched craft (the Dragon in 2010), water landings, and the first private company to send a craft to the ISS.
- "When something is important enough, you do it even if the odds are not in your favor" Musk

Chapter 7 & 8: Tesla and SpaceX

- "BMW would need to have a comfab between 3 or 4 companies that would all blame each other for the problem ... we just fixed it ourselves" Marc Tarpenning
- Tesla was actually founded by two super good engineers, some guy and another guy named Martin Eberhard. Elon was at first an investor and chairman of Tesla, he wasn't technically a founder but fought hard to be called a founder so I don't know if I should call him one or not.
- Tesla promised to deliver the roadster, a small electric car that looked like a luxury car, for 60k.
- At first, they got a lot of positive press but had a lot of issues in shipping the car. They were supposed to ship the car in around 2007, but never ended up shipping.
- Meanwhile, Elon was getting his ass handed to him repeatedly in SpaceX.
- Three successive launches in a row had failed, and he basically realized that there's only money for one last fourth launch. They had to nail this one, or shut down SpaceX, and with it the hundred million that Elon had himself invested in SpaceX would have gone to shit.
- Luckily, the 4th launch succeeded in September 2008, delivering a dummy payload to low orbit (no one trusted them anymore to put real payload on).
- So essentially, after failing for 2.5 years in launching the rocket, SpaceX finally succeeded. It was unbelieveable.
- During this time, there were a lot of financial issues with SpaceX and Tesla, they were both about to go under. The successful launch of SpaceX saved it from immediate death, though it still needed to get more money.
- Tesla was getting screwed over completely, and were literally on the verge of bankruptcy.
- Musk was going through an extremely stressful period of time at this point, with his (new) wife Riley saying he'd be in physical pain and screaming from the stress during the night. This wasy crazy.
- Musk pulled out all the stops to keep SpaceX and Tesla funded, he did whatever it took.
 He put up all of his personal money, and at the end only had a few hundred thousand dollars to his name.
- His family, like brother Kimbal helped funding during this disastrous time, and luckily the sale of one of his cousins companies gave him a few million to throw into the companies as well.
- This makes it seem like that even for super hardcore entrepreneur people like Elon, family help is still vital and essential never underestimate what those close to you can do for you, and be nice to them.

- Tesla was about to get funding from this one VC firm, but the firm ended up being shady and flaking.
- Several of Musk's close friends and even some Tesla employees cut checks of 25k, 50k, and 100k to Tesla just to keep it afloat, they thought they'd never see the money again.
- Nevertheless, Tesla got a round of funding on December 24, 2008, a lot of it from Musk's personal money, and were able to make payroll.
- Similarly, on December 23, 2008, SpaceX was paid 1.6 billion dollars for a long term contract with NASA.
- This was crazy, Musk had basically succeeded at literally the last second possible if this happened even a day later, Tesla may have gone bankrupt.
- This whole time, Musk was getting shafted by the bad press about both of his companies, his personal life shitted on by his ex-wife, losing a bunch of his own money, not having any kind of home/family life, and dealing with catastrophes at both of his companies.
- Musk's willingness to perservere, buckle down, and continue grinding even in the most stressful of situations is one of his key strengths.
- "he has the ability to work harder and endure more stress than anyone I've ever met"
- "that ability to stay focused in the midst of a crisis stands as one of Musk's main advantages"
- What he went through would have broken anyone else.
- Even under super crazy stress, Elon becomes hyper-rational and stays cool, calm and collected, making well thought out logical decisions. Other people react under the pressure and start doing stupid things, but Elon actually gets better. His capacity to endure pain and still make excellent decisions is what sets him apart.
- The rest of the book was about the growth of SpaceX and Tesla, and how they became successful. SpaceX managed to do some regular launches, carry cargo to the ISS and return the rocket.
- Their future goal is to get really good at rocket recovery and make access to space super affordable so that space travel can be regular.
- Tesla started doing pretty well too, except they kept getting shit on by automakers who
 were jealous of them. Also, Tesla had some issues with producing cars at scale and
 making their delivery deadlines. Nevertheless, they reinvented the electric vehicle.
- I'm more drawn to Tesla's success they were founded by people who didn't know anything about cars, but still managed to do really well. This is because they never saw themselves as a car company they saw themselves as a product company, and its main product happened to be a (very different) car.
- Also, Tesla made these electric charging stations that allow peope to supercharge their cars while travelling, so that they can make cross-country road trips in a Tesla.
- Elon Musk is a huge example of having large successes after a bunch of failures.
- No one thought that Tesla would work out, and a lot of times people were recommending Tesla to stop making their own cars because they couldn't solve their production probel.

- Then, they'd just sell batteries to GM. Elon Musk said screw that, and decied to go for the large impact. Because GM wouldn't really make a big impact.
- This relates back to the idea of thinking for yourself, having a belief system.