

Thesis Report 2020

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Trojan Chess

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Chapter 1

1.1 KEYWORDS –

Strategy, Psychology, Language, Game, Game Design, Board Games, Chance, Interaction, Opponent, Cards, Attack, Defend, Revive, Chess, Coin flip, Dice roll, Extra moves, Product, Product Design, Rules, Experience, Game play

1.2 ABSTRACT –

My thesis revolves around the well known game of chess. Chess is a procedure based game however it additionally requires a ton of ability and long periods of training where the players can prepare their brains so that understanding the strategies of

SIDE NOTES

their rival turns into their second nature. You deduct the component of chess from strategy, psychology and language these three things assume an essential job in our day by day life.

Keeping in mind the keywords, the comprehension of chess from all sides got basic. Throughout my journey in research I have learnt that chess should be looked at from the adversary's point of view, driving me to take a look at various narratives, games, with incredible focus. A person's mind can be dictated by considering the game, and the decisions they make in the game. As an all-encompassing subject, chess can be known as a round of decision, however is restricted to the decisions the adversary makes, much like the methodologies of war itself.

I need to take this task forward by focusing on the significance of system as chance which is new to chess. I am in progress to structuring a layered game itself, concentrating on the mind of the people in question, similarly as with a couple of rule changes from the first game, it gives the characters of the game to rather battle each other, alert on each move what so ever.

1.3 PASSION –

I have been playing chess since early on, this game requires a great deal of persistence it took me some time to comprehend the dynamic of this game since chess is an aptitude based game the more you play the better you get at it. A great many people who show inspired by this game are seniors and very few youngsters

are keen on learning this game, Are they acquainted with it's presence, Yes they know about it. However, they have no enthusiasm for the game, what stood out enough to be noticed while playing and learning it was that you get this opportunity to be in your adversary's head you can perceive what methodology are they utilizing and you get the opportunity to control it in case you're sufficiently talented to do it.

1.4 PROJECT SCOPE – The fundamental thought of this task was to look at chance in the viewpoint of technique and how it tends to be utilized as system

1.5 DESIGN STATEMENT - 5w's –

It is a proposition dependent on Speculative Design and versatile plan, since chess is a round of system which was made to depict the situation of war

What's more, how the lord's of that time could beat their adversaries in the front line. The game we play today finishes surprisingly fast or at times hours however thinking back in time this was and powerful approach to monitor your development and your foe too. Their technique could take a long time to design and execute, however this could be one of the motivation behind why today we can end our game rapidly on the grounds that nothing relies upon it when contrasted with war at that time, Over the years this game was adjusted in approaches to upgrade the trouble level of it by acquainting various methods of how with play it. However my version of this game makes everything fair regardless of whether you play against somebody who is more

experienced than you. This was the part where I adapted it and added my variation to it by giving a chance to someone who is new at this game.

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1.6 TARGET AUDIENCE –

This game will be played by individuals who definitely realize how to play chess since they can take it as a challenge and for somebody who is playing it for the first time will have this preferred advantage that the playing field is equivalent regardless of whether playing against a talented individual

Chapter 2

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2.1 RESEARCH QUESTIONS –

1. What is strategy?
2. How can I add more layers of strategy in a skilled based game?
3. Is chance really strategy?
4. Can the element of chance be introduced in a skilled base game?
5. How will the element of chance make this game more interesting?
6. How do you determine what is a good strategy?
7. What is the most effective strategy offence or defense?
8. What is chance and how can it effect this game?

9. Is there any relation between strategy, chance and probability?
10. Can strategy be connected to chance and probability in any way?
11. Can a specific pattern be called strategy?
12. Does the dynamic of the game changes when you introduce chance in a skilled based game?
13. What is the difference between war strategy and chess strategy? can chess strategy be used in real war?
14. What happens to a skill based game when you introduce chance in it?
15. How can I alter the dynamics of the game of chess by introducing the concept of chance in it?

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2.2 THEORETICAL FRAMEWORK-

On the off chance that we talk about what is technique and where is it coming from and why we need methodology, the appropriate response is extremely straightforward as a race we have to endure and nations all around the globe have a lot of rules wherein they restricted down their upsides and downsides and they move in this world, that specific thing is called system. Is it viable or a disappointment that comes later on yet while posing these inquiries there is something which makes you question these methodologies and that is the opportunity of it's prosperity or it's disappointment, We can take a gander at the world from numerous points of view

and we can give various names to same thing and have a distinction of assessment however at long last we will discuss something very similar.

Directly continuing ahead, we talk about the opportunity of achievement and frustration which can be called probability, regardless of what we do or how we do it chance is a noteworthy bit of it. We can't for the most part move in this world without the probability of anything, Interesting thing is whether or not we know the probability of our moves, we in spite of everything make that opportunity that is the spot the framework kicks in light of the fact that it wraps up.

2.3 CONCEPT/S –

The idea of my game returns to the period of gupta domain the game was made during their opportunity to comprehend and make systems of war and to keep a mind their military and the adversary as well,

Later on this game was conveyed into various regions and civilization and they added their component to it.

On the off chance that we glance around there are various sorts of chess and they all are played in various manners for instance Chinese chess has an alternate methodology in the event that you contrast with some other chess and vice versa

2.4 LITERATURE REVIEW –

Chess has been a part of my research from the start half of my research was about chess but majorly I was focusing on how the human brain is functioning and how we create an AI (artificial intelligence), my main focus at the time was how the AI learns and why it learns, most importantly why do we make it play chess and why is it so important for it to beat human beings at their own game. So there were many types of Ai working around us like for instance we have industrial Ai where robotic arms and specific software is being used to control the industry and reduce the man power and then we have physical operations and physical systems these consists of logistics, asset management, industrial robots, sensors and devices and so on.

Gobet, F. (2018). The Psychology of Chess. doi: 10.4324/9781315441887

While reading about all these Artificial Intelligence which was either in form of software or a machine part I came across two humanoid Ai's BINA48 and SOPHIA, their developers were teaching them our human ways. BINA48 was developed by Hanson robotics and it was officially shown to the world in 2010, BINA48 was a robot Ai modelled after Bina Aspen and it had recorded a lot of memories, feelings this was created so she can live on through her memories she had pre recorded questions and answers so she can engage with other humans and her own family to come in the future.

Sophia is a representation of the futuristic AI that we talk about, Sophia was also developed by Hanson Robotics and is most advanced human like robot. Sophia has appeared on TV and given interviews and her most famous interview was when she said she'll make mankind her slave, she has also spoken at hundreds of places worldwide.

Moving on in my research I came across movies in which we see the Artificial Intelligence coming to life and being more human than human themselves some of the examples are Artificial intelligence by Steven Spielberg, Tron Legacy and I,Robot. In these movies we see the birth of AI how they develop a conscious and what they do with it, While doing my research I came across this thought that Ai can never develop conscious because we don't program it like that all we teach them are the yes and no things so their programming is really precise. If an Ai was to lose control then it would be doing within the limits of it's coding it might change or evolve but that's not conscious that is it's prime objective yes it can do it faster than man hence it is a machine, but it won't be able to surpass that coding. Because in my opinion that is not possible because the motive is given to them by human beings we can't expect them to give a different answer for a simple equation and when they do we tell it that it is wrong.

When we talk about creativity it is the basic feature of our intelligence and it is difficult for an Ai to achieve that creativity. If we feed multiple ideas to an Ai it will

give us a smart way to look at it but it won't come up with an idea unless we give it a proper command.

Talking about commands let's move on with chess and Ai, now we know that Chess is based on math's and possibilities of moves which is fixed the number of moves maybe more than we can count on our fingers but it is not difficult for an Ai to remember them, in history there has been multiple times when famous chess players played against the Ai and lost and some of them won in the first try but not in the second attempt for example Deep blue and Kasparov.

The current Ai systems we have amongst us are Google's Ai-powered predictions it uses location data from our phones and analyses it, then we have uber and lyft which are ride applications and commercial flights using an auto pilot, these Ai are being used to make system more efficient and effective they are trying to reduce the human error from the system.

The same human error which makes the game of chess really interesting and gets you hooked on because when you play against an Ai the moves are very predictable and you have to play safe and always be on your guard you cannot lure the Ai into a trap the win and loss needs to be very logical but when you play against a human you can expect him to not pay attention he/she might not look at the hidden strategies because they cannot calculate it like an Ai does it.

So I asked myself a question that “ if chess was a human and he created me what would I be?”

The answer was “I would be Artificial Intelligence the only difference between me and AI is that AI cannot die, in my view when we play chess feelings are not involved it is totally the work of brain and brain is completely the part which is based upon logic”

In reality With AI the information is static, if the first two things in the world were Adam and AI the world would not progress.

So then instead of working on Ai and chess I focused my thesis around only chess and, how we human beings see it because in order to make a machine understand we need to understand it ourselves.

So now we know that chess is a skilled based game which was developed in the time of gupta empire to depict the war on board so they can plan their coming strategies and, see what options will they have on the battlefield and how will the enemy react to these things so they can step into the field prepared physically and mentally, The original name of this game was Chaturanga and later going through different areas and adapting rules and regulations now it is called Shataranj (chess).

What impact does chess have on you when you play it regularly, it teaches you how to overcome any goal in your life, it improves your ability to think. Why I play chess was a very important question for me I play it because It gives me a chance to look

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 doi:
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at things differently I can take my time and understand my opponent thoroughly, I can predict the next move he's going to make and this is done purely in silence we do not talk about anything it's just two people with a common interest, it helps me learn from my mistake. It's never about winning the game that's a rookie mistake I play chess because it allows me to understand the mindset and behavior of my opponent.

I also watched a considerable amount of shows and movies talking about chess and strategy like

- House of cards
- Wazir
- Shatranj kai khiladi
- 21
- Ocean series
- Interview with God
- Pawn sacrifice
- 300
- lord of the rings

*Benefits & Risks of
 Artificial Intelligence -
 Future of Life Institute by
 Max Tegmark*
 09/10/2019

I also watched multiple games of Bobby fishcer, Magnus, kasparov and Viswanathan Anand just to see how they start the game how they take over the board what sacrifices they make, what kind of mistakes they make and how they control or lose the game.

Initially my idea was to make a video game in which I can apply strategies of chess and make a different gameplay but doing my research and, one thing lead to the another I ended up adding the tricks and moves of video game in to the game of chess and introduce a new gameplay for it which will allow me to make a new variation of this game, These tips and tricks were falling under the category of chance for me. What was really interesting for me was that what makes the video games more interesting it's the character the gameplay the weapons and chances in the game and now I had the chance where I could implement these moves in my board game and give this game a new perspective.

The main idea was to make this game accessible and interesting for people who don't play chess, because like I said earlier chess is a skilled based game and it takes a lot of practice to master the game but with this variation you have an advantage where you can use your chance given to you according to the rules.

An AI Pioneer Wants His
Algorithms to Understand
the 'Why' | WIRED
Will Knight
09/10/2019

2.5 VISUAL REFERENCE –

For the visual reference of my work I got the opportunity to take a look at everything around me for the chess pieces I had looked at different anecdotal motion pictures and how they delineated their wild/anecdotal characters thus I began structuring my pieces from it, as far as games I glanced in to Dungeons and Dragons game playing cards, bundling its pieces and how it was done. I likewise took a gander at Pokemon as far as cards format in light of the fact that at first my card had

an alternate design so I viewed these games for how to put dominant part data on a card. I additionally took a gander at other board games and their packaging.

2.6 RESEARCH QUESTIONS EXPLAINED –

The initial research of my examination questions relies upon how we operate this game of chess which is strategy now there can be different ways to deal with the play of this game when I state different ways I mean same game with same rules with two or three minor changes, as it were, The basic thing about this game is to thought of a framework where you cause less damage to yourself and cause most outrageous damage to the opposite gathering, Looking back at the past we had chess players who may follow this case of moves where they would turn out slight enhancements to their ongoing interaction or their own strategy, Similarly when I was doing my research I started with a PC game in which I was endeavoring to execute the procedures of chess yet through the range of time we went entirely unexpected where I was making a board game and endeavoring to join the impact players get in PC games in to board games so this is the place we started seeing what chances would we have the option to introduce in this game or in what capacity may we use existing prospects and make it a bit of our technique envision a situation where we control those chances by what means will this game limit and in what limit

will it sway the instinct of this game with the players and moreover of the players with each other, It was critical for us to fathom the present approach and a short time later get our chance and see how well it fits in this condition, We expected to keep the encapsulation of the game alive which was how it is commonly played we basically made more options for the players more prominent insight in the game might be a test for the present player yet it will be a chance to level the ground for them.

2.7 RESEARCH METHODOLOGY –

My research methodology is mostly qualitative because on the grounds that it didn't require any factual research. Despite the fact that we are discussing a game which depends on math's, likelihood and all prospects when you move a piece and most up to date prospects of moves yet the greatest issue in this game is human mistake in light of the fact that the kind of hazard that a person can take while playing this game an AI could never take that risk since When a human is playing against a human he's additionally playing with his brain plausibility is that the two of them are not on a similar level anyway he can forfeit his sovereign and cause him to accept he can win or power him to make a move that he needs however at whatever point you play this game against an AI it won't plan it's system by giving up it's pieces it attempts to win by extends taking a glance at the potential moves and taking your pieces it won't play you all the while yet on the off chance that we contrast it with when a human plays against a human at times they will forfeit the queen which is the most grounded piece in this match and dominate the game. This is the place the

ability of this game comes in where you play the game as well as need to control the adversary as well. Correspondingly my exploration was completely founded on the reality how this game is played when you play around with the interactivity of chess.

Chapter 3

3.1 Execution –

My mode for execution of my thought was a physical item as a board game of chess with some additional embellishments, The primary explanation behind thinking of an item was so individuals would come and connect with it and satisfy the reason for my execution as a product

3.2 MEDIUM OF PRESENTATION –

My mode of presentation is a game of chess which was executed as an item which is a pre-packaged game, My game of chess had somewhat more things than a standard chess set first off we talk about the case of the game so my case was as a chamber shape made out of leather, it was a cylinder shape canvas to hold the whole game together. Inside the canvas you can see a moved up 8x8 leather chess board and a pouch made out of silk which conveys the chess pieces which are made out of metal and in a similar pouch you can likewise observe a dice and a coin, the dice and coin are made out of plastic. My cards which are the primary procedure of my

game which are printed on the standard size of a playing card with the logo in the back side of it otherwise called possibility cards/Chance cards.

3.3 PRE - PRODUCTION –

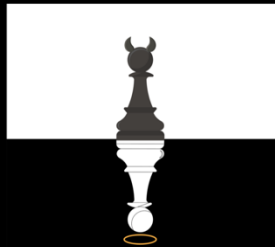
So my procedure began with where I needed to make my character outlines, at first I was taking a shot at a computer game thought so I needed to make a full type of the character and the scene however we proceeded onward to the possibility of a board game so I needed to make my chess pieces from scratch I did that multiple times, fourth time was the last form of my pieces then we needed to take a look at the entire usefulness of the item the material how I make these pieces so the underlying thought was resin yet then we limited it down to metal and the load up was made out of different materials and last form was a moved load up and the logo and the cards everything experienced a procedure of three to four varieties, we utilized the standard size for the playing a game of cards and standard size for the coin and dice. as far as pieces we needed to initially ensure the board after that we took its specific estimations and went on with all the last changes

*Chess and Project
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in
Requirements
Management
on 5/23/16
9:09 AM By
Ken Lubert*

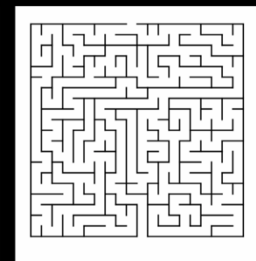
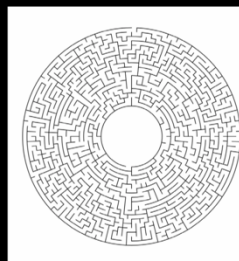
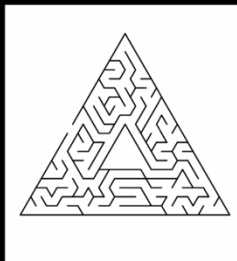
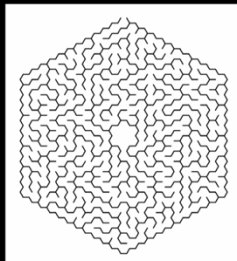
Chapter 4

4.1 PRODUCTION -

Initial Sketch



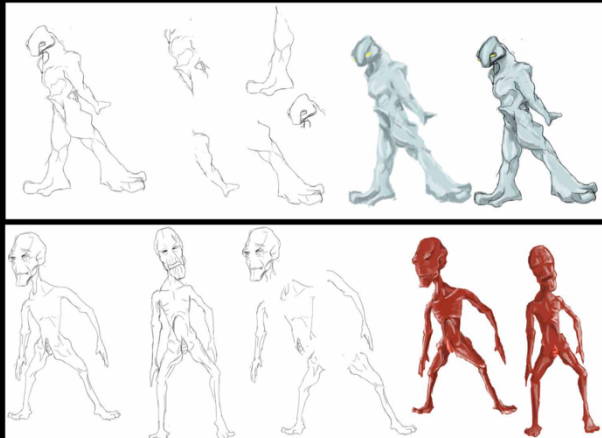
Initial Sketch



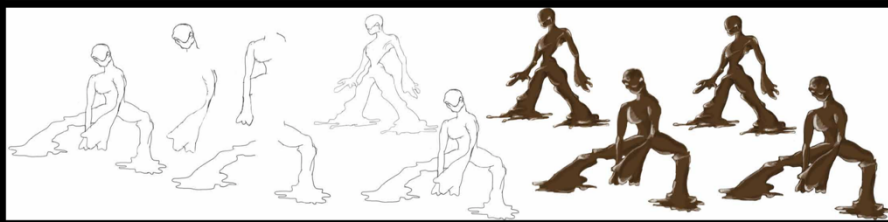
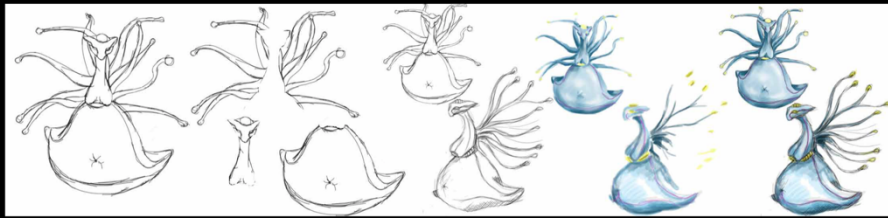
Initial Sketch



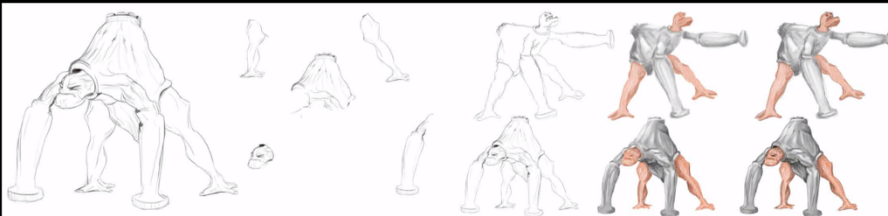
Character Sketches



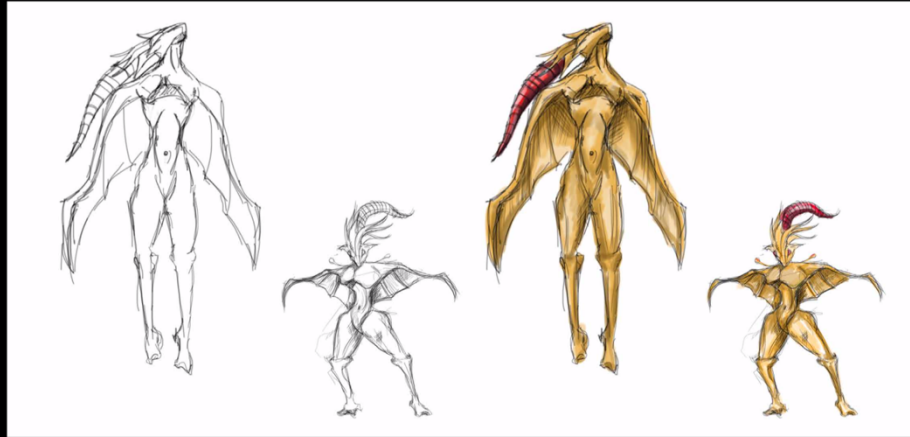
Character Sketches



Character Sketches



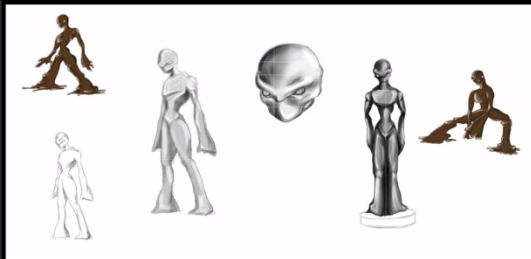
Character Sketches



Sculpting



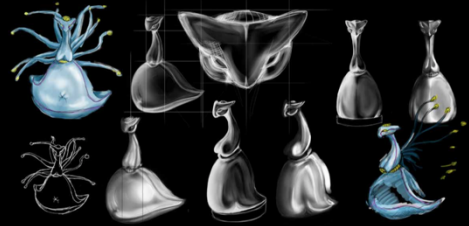
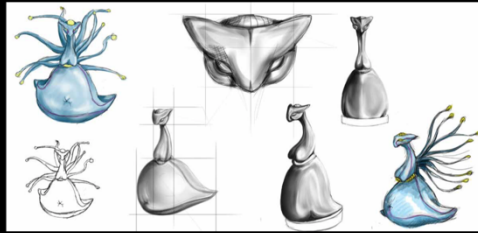
Character Sketches



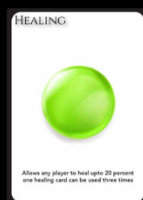
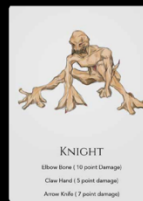
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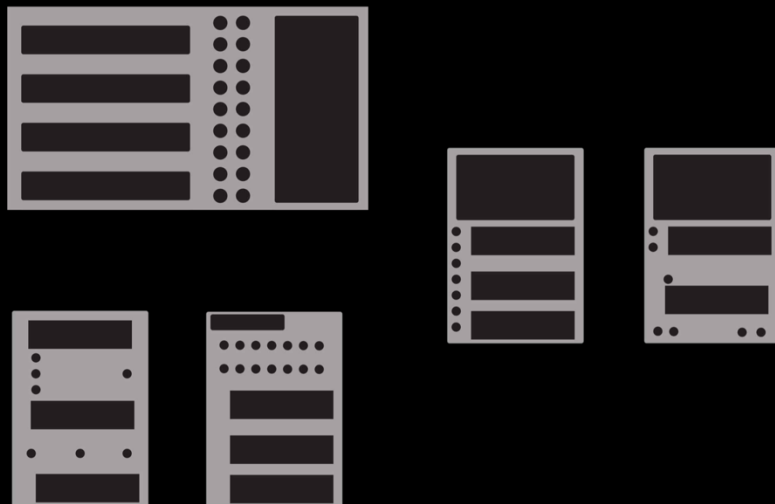
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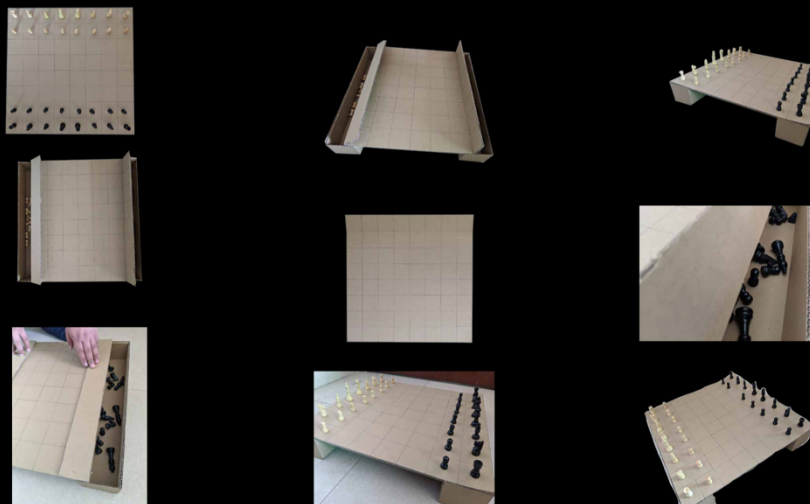
Cards



Cards



Chessboard



C h e s s b o a r d



Chapter 5

5.1 CONCLUSION –

while dealing with this venture I went over numerous things unexpectedly, Making an item and outline was not my space while examining structure so I took in a ton about that and furthermore how to frame the format of a book and furthermore its significant piece was investigate how we do it and why we do it

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