## Game Development Methodology

(2020/2021) Group 9

### **Tower Domination - Design Document**

### Overview

Tower Domination is a roguelike game with deck-building components, inspired by games like Slay the Spire. For acquiring the cards used for the deck building side of it we will be using a system more akin to that found in Dominion, in the hopes of giving a less random feel to this aspect of the game. However, will still have random events and items but not tied to the deckbuilding aspect itself or at least not directly and not in a very impactful way.

## Game Experience Goals

**High Replayability and Uniqueness** - One of the main goals with our game is to offer a high replay value for the player, meaning they can play the game multiple times, and still have fun without having their experience hindered. We can achieve this by having many different cards, which allow different combos and ways to strategize against the opponents. We will also add classes and artifacts, the former influencing the core stats of the player (hp, starting cards, starting mana) and the latter giving permanent bonuses to the player for the rest of that run. **Challenging Oneself** - Our objective is for the player to keep playing and trying to beat their previous score, while both improving and having fun.

**Difficulty Progression** - We want to make the player feel that they are climbing a tower, that increases difficulty with each floor. We will manage to do this by increasing both the difficulty level of the enemies and the strength of the cards on the shop and artifacts, as the levels go by.

**High Risk** - Each battle will have a high risk, since the player's death will mean the end of the game. The player will not keep anything from the previous game, so they will have to start the game all over again, trying to do a better job.

**Minimal Randomness** - Another main aspect of the game will be the lack of randomness, which we will mention in the "Competition" area. Being a card game, luck will always be a factor (deck shuffling and card drawing), but other than that we intend to minimize randomness. As such, the cards in shops will be randomly selected from a list of premade templates, and in terms of card effects, we aren't planning on having RNG mechanics.

## The first tweet

Tower Domination is a roguelike deck-builder where the player will use a deck of cards (skills) to face various challenges while continuously improving that very same deck.

# Competition and related references

In this current market, there are very popular card games, which are the direct competitors to our game. Among them, two of the most popular ones are Hearthstone and Magic: The Gathering, both of which we drew some inspiration from.



#### Slay the Spire (2017)

But the first game we looked at was Slay the Spire. Unlike the following three we will be mentioning, this one leans more towards the roguelike genre than the deckbuilding genre. In it, the cards play more of a visual role and act more as abilities, much like the skills you would receive / unlock in a traditional roguelike rpg. Slay the Spire is one of the main inspirations of our game, it from where the roguelike element in our game comes from as we believe this to be one of Slay the Spire's main strengths, on another hand we find that the method of card acquisition in slay the spire leans too heavily on luck, which together with it's roguelike elements leads to the game's great replayability potential. Since we decided that this is where we wanted to improve upon we looked towards other card games and how they handle deck building and card acquisition.



Hearthstone (2014)

In the case of Hearthstone, one of its most appealing features is how easy it is to understand the game and get into it. A player does not require any prior knowledge to play it, and as such, it makes it very easy for newcomers to get into the game. It also offers multiple classes, each having a different set of cards, enabling a different experience between each of the classes. On the other hand, Hearthstone is known for its RNG (random number generation) based mechanics, which for some is a good thing, but for most it ends up being plain annoying because of the lack of control that it creates on the player. Another factor that deters players from continuing playing the game is the fact that it is very hard to level up your account and cards, unless you either use micro-transactions or play an absurd amount of hours (very bad for casual players).



Magic: The Gathering (1993 physical / 2018 online)

As for Magic, we want to mention their newest online game Magic Arena. Like its tabletop counterpart it has a steep learning curve, due to the wide variety of cards and effects currently available for you to use in your decks. This game however very much like the previous

example has the player build the deck before the game starts not during, thus lacking the deck building element we are going with for our game. It can nonetheless be a source of inspiration for mechanics and other ideas. For its strengths it has a wide variety of cards, the world building behind the game itself and its strong design principles mainly seen in how almost every card in the game abides by the concepts depicted in its color wheel.

For its weakness we have the fact that it is a colectionable card game, meaning that in order to get the cards you need to build your decks you need to first get them trough packs or boosters, in real life this can be avoided through trading but in its online version it is mitigated by a crafting system much like Hearthstone, which does help but still leave a feeling of the game being pay to win.



Dominion (2008)

One other game we analyzed and was also one of the main inspirations for our game is Dominion. Not as well known as the previous two, but still having a large player base. In the case of Dominion, it acts very differently compared to other card games. You don't start with a deck, you build it while you play. This is the biggest selling point to dominion: the card shopping mechanic. It provides a balanced experience, since all players have access to the same cards, but still having a lot of depth, due to the amount of different combos you can create using different cards. However, Dominion has a discard mechanic in which at the end of your turn you discard your unused cards, and draw new ones. This promotes a specific strategy (card cycling) and discourages players from going all out with long combos, as well as sometimes frustrating them when they get bad hands (which happens a lot since you draw 5 new cards every turn).

In terms of real life inspirations, there aren't too many examples we could take ideas from, not counting the games we already mentioned. Both Dominion and Magic: The Gathering started off as physical playing card games, and to this day, still maintain a lot of their popularity through this medium. But there isn't any difference in terms of rules between the physical and digital versions of both games. Apart from these two, the most popular one is traditional playing cards (4 suits: spades, clubs, hearts, diamonds) and some variants that people use them in (go fish, bisca, sueca).

## Player personas

Since our game is a card game at its core, our audience can range from young children to old adults. That being said, our target demographic is specifically teens and young adults, with preferences on this type of games. Regarding the player types, we aimed for the conqueror, mastermind and achiever types of BrainHex, the ones correlated with strategy and card games. Here are a few examples of the type of people we expect to play our games:

Name: Diogo Oliveira

Gender: Male Age: 21

Background: born in Viseu, currently residing in Lisbon

Profession: Personal trainer

Favourite games: Half Life, Fallout, Metal Gear Solid

Currently playing: StarCraft 2

Player type: Conqueror, Mastermind Interests: Stealth games, music, football

Name: Ana Peras Gender: Female

Age: 29

Background: born in Braga, lives in Lisbon, plays on and off or on her phone

Profession: Accountant

Favourite games: Mario, Chess, Chrono Trigger

Currently playing: Final Fantasy Tactics Player type: Mastermind, Achiever Interests: Comics, stamp collecting Name: Daniel Gomes

Gender: Male Age: 16

Background: born and living in Leiria, plays games regularly

Profession: Student

Favourite games: Super Smash Bros, Monster Hunter, Pokémon

Currently playing: Legends of Runeterra

Player type: Achiever, Conqueror

Interests: Cinema, playing guitar, gambling

Name: Miguel Falcão

Gender: Male Age: 25

Background: born in Lisbon, lives in Almada, plays daily

Profession: Freelance web designer

Favourite games: World of Warcraft, Divinity Original Sin 2, Baldur's Gate

Currently playing: Guild Wars 2 Player type: Explorer, Achiever

Interests: Camping, role playing games

## Play scenarios

Below we show different scenarios of the different personas playing the game., from their first contact to a late game encounter. We tried to relate how they would feel playing the game and in what circumstances they play.

The first contact: While Diogo is waiting for his training session, he is getting bored so he takes out his laptop and looks at the games he has to play. He chooses to play Tower Domination, a game he downloaded the day before, since it is a single-player game with no restrictions to time. He starts the game and chooses the rogue class since he likes strategy games. He chooses a combat floor as his first floor and wins it. He feels excited to continue playing because rogue looks like the type of class he likes, but looks at his clock and sees that it's time for the training session and closes the game.

Combat: Miguel has been playing a run with the warrior class as usual, since he likes melee characters and fighting head-on on the RPG's he plays. He continues the game by choosing a combat room. The battle starts, he has 3 resource cards and 2 damage cards. He plays the 2 damage cards in the same turn, since they don't cost mana. He finishes his turn with the enemy at low health. With the 3 resource cards, he buys another damage card from the shop. His turn ends and the enemy attacks him doing a bit of damage. At the next turn, he draws 4 resource cards and 1 damage card from the deck and gets a bit frustrated since he needed the damage cards to finish the enemy. He uses the resource cards to buy a stronger resource card, counting for the late game and passes the turn. He gets another turn after the enemy and draws 2 damage cards, alongside 3 resource cards. He feels satisfied with the draw, plays the card and kills the enemy. For the rest of the floor, he keeps choosing combat levels whenever they appear in the maze.

**Defeat:** Daniel just lost playing with the warrior class on the first level. He doesn't feel that the warrior is the right class for him and decides to start a new game with the mage class, as he thinks that it might have the same gameplay style as the deck he has been playing in Legends of Runeterra. He gets to the first combat. He draws 2 spell damage cards that cost 2 mana each and 3 resource cards. He's happy as he feels that it is a good hand. On his first turn, he decides to play one of the spells to start dealing damage to the opponent. After that, he buys a 3 cost damage spell from the shop with his resource cards and passes his turn. The enemy attacks doing a good chunk of damage. He feels pressured to end the game soon. He draws a damage card, a 3 mana spell damage card and 3 resource cards. With this draw, he notices that he has enough damage to kill his enemy. He uses the 3 mana spell and the damage card and kills the opponent.

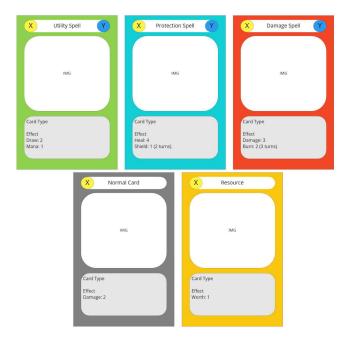
Boss Combat: Ana just finished dinner after a long day of work and is feeling a little bit tired. She is indecisive between playing a quick game or watching a movie. She decides to continue to play Tower Domination as she usually does around this time, as it is a good entertainment provider. She loads up her game where she was playing with the rogue class. She recalls that the next room was the floor boss. She gets thrilled and starts the combat. She draws a really good hand, with 2 drawing cards and 3 resource cards. She feels confident that she will win the fight. She plays one of the cards that makes her draw a card. It's another resource card, and she spends all 4 buying a really strong utility card that will help her draw 5 cards later in the battle. She keeps playing the battle, drawing a lot of cards, since it is her core strategy on the deck. She reaches the empty deck really fast and the discarded pile turns into the deck. The first card she draws is the strong one she bought during this battle. This makes her feel that she made the right decision earlier and uses it. She draws some damage cards and manages to kill the boss. The choice for the artifact comes up and chooses a more defensive artifact to balance out her deck. She keeps playing until sleep time.

**Mastering the game:** Diogo has managed to reach the 4th floor, but dies to the boss. Even though he feels a bit sad that his run ended, he thinks that he did a really good run and has progressed a lot since his first experience. He has been playing rogue since the start, so he decides to change his class to warrior, to see how far he can reach with other strategies. With the knowledge he has, he decides to do a hybrid build with defensive and deck manipulation spell cards. To do this, he tries to balance his shop buying both types. He is trying not to do a lot of combats early, as he loses a considerable amount of health at each one, balancing for campfires for healing as well.

**Making decisions:** Daniel just finished a combat and he is at half health. In front of him, there are 2 types of rooms that he has to choose from. There's a campfire room that he can use to restore all his HP, but takes him to a combat room next. On the other hand, he can choose a combat room that has a treasure room after it. He is normally a risk-taker so decides to go for the combat, aiming for the treasure after it. The enemies are stronger than he thought, but he still manages to win it in a close fight. He was feeling both anxious and thrilled during the fight, but getting the treasure left him really happy and excited to continue playing.

Core gameplay loop(s)

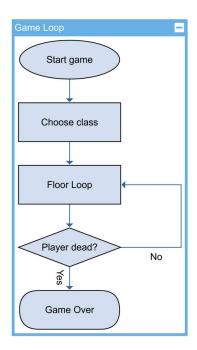
There will be three different types of cards, the spell cards that cost mana, the normal cards that have simple effects and resource cards, that will be used to buy from the shop. In the following image, there are simple sketches made to represent those card types.



Our game will be divided in three main gameplay loops: the game loop itself, the floor loop and the combat loop.

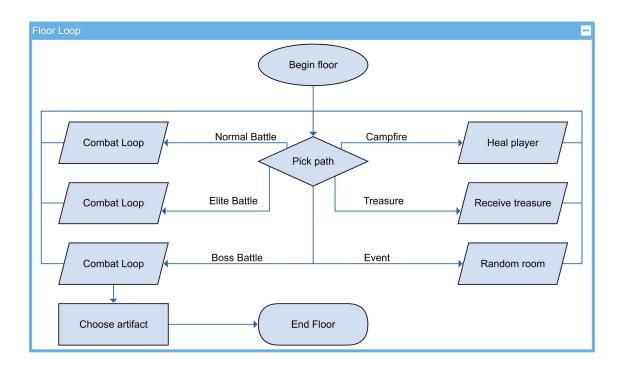
### Game Loop:

The game loop consists of an entire playthrough of the game, from picking a class to the battle where the player is defeated. At this point, the player loses all progress and the consequent playthrough starts from scratch, where he will try to reach a higher score.



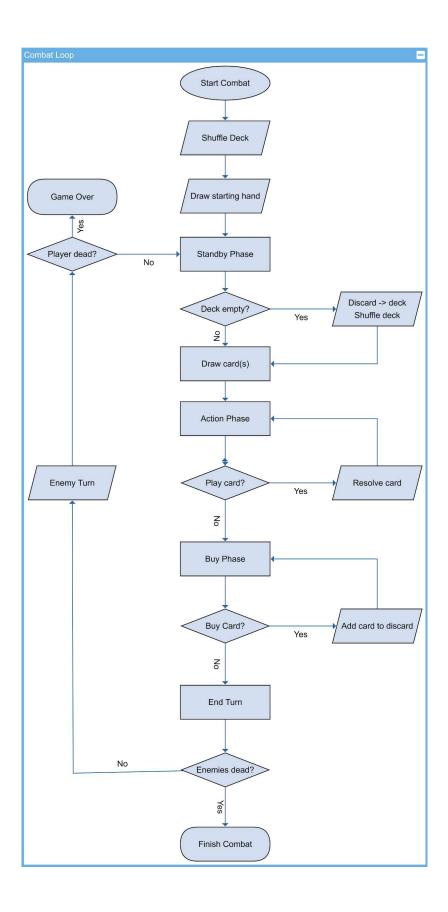
### Floor Loop:

At this stage of the game, the player will have to start making decisions regarding the path they want to make on each floor. This gameplay loop will last until the boss battle. After this combat, they end the floor by choosing one of the artifacts given. In each of these floors, there will be fights against enemies, treasures, random events and campfires where they can heal. After defeating the final boss, the player gets to the next floor.



### **Combat Loop:**

In each combat, the game starts with a deck shuffling and the drawing of the starting hand. After this moment, the player will start the combat by playing and buying cards, depending on the hand drawn. We can say that there is a sub-loop starting here, with the turn based experience. At the start of each turn, there will be the standby phase and the player will draw a card. The cards that are played and bought will go to the discard pile and if the deck runs out of cards, the discard pile will turn into the deck. If the player manages to kill their enemies, they will go back to the floor menu and choose another room to continue the game.



## Focus group

For our focus group, we've decided to invite people that fit within our target audience.

#### User 1:

I am a male, 22 years old. At the moment I am finishing my studies. My hobby is playing games, mainly on the computer or in some other consoles. There aren't any particular type of games I don't like, but if I had to choose one I like the least it would be shooters. Games have always been a part of my life and I aspire to be a Game Developer.

This user was partially the inspiration for the persona Daniel Gomes.

#### User 2:

I am a 21 years old male and I'm currently studying in university. I play games on a daily basis, from computer, to console and even tabletop games. I mainly like computer games due to the variety and accessibility, but namely the low prices. My favorite categories of games are RPG and MOBA.

This user was partially the inspiration for the persona Diogo Oliveira.

#### User 3:

I am male, 25 years old. Currently working as a web design freelancer. I play games on a daily basis. I like multiplayer games, and my favorite types are RPG, RTS and FPS. This user was partially the inspiration for the persona Ana Peras.

#### User 4:

I am female, 19 years old. I'm taking a design bachelor's degree. I like multiplayer games, my favorite genre being RPG and FPS, like Genshin Impact and Valorant respectively. This user was partially the inspiration for the persona Miguel Falcão.

### Control

Regarding the controls, we looked up the examples of other games referenced at the Competition and related references section and came to a consensus of using mainly the mouse as the primary control, as seen in every one of them. Nevertheless, we will also provide some keyboard shortcuts, all close to each other, which are preferable for some types of players.

To present the different controls, we created a list of the different control aspects that will be provided, as seen below:

- Right-click a card -> zoom in card
- Left-click card in hand -> use card
- Left-click card in shop -> buy card
- Right-click enemy icon -> bring up enemy statistics
- Click the corner icon (or press Escape) -> options menu
- Clicking the shop button (or press S) -> toggle shop open/close
- Clicking the next turn button (or press D) -> end turn
- Right-click the player icon (or press C) -> show player statistics
- Clicking on the Deck area -> show detailed deck information
- Clicking on the Discard area -> browse the discard pile

### Presentation

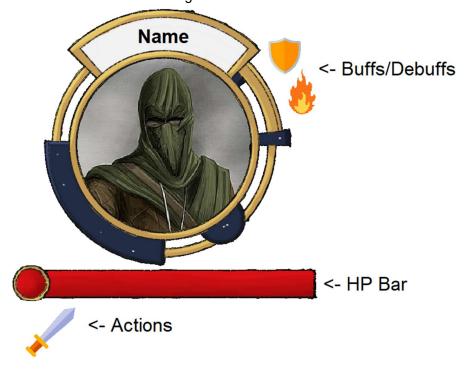
The cards will have the following components: a name, an image, a mana cost, a gold cost, a level, and a description. On the card's description, keywords will be **bold** and hovering them will show a tooltip explaining how they work in depth. When cards are being displayed on a bigger size the information of all its keywords will be on info boxes next to the card. When a card is played possible targets will be highlighted. As we mentioned before, each type of card will have a distinct color, to make it easy to distinguish between them at a glance.



The battles will be played in a table-like arena; these arenas will have varying styles and themes related to the level of the tower they represent. We took great inspiration from Hearthstone's different game boards, each with different styles.



The enemies will be portrayed as chips similar to the tokens used in tabletop RPGs with their information such as health, next actions and conditions on an area below them or visible when the mouse hovers over them. Each condition will have an icon symbolizing it, to make it easier for the player to understand the state of the game.



The player info will be displayed in a similar fashion as the enemy information. There will be a button near the player that allows them to see the artifacts they currently have. Hovering one of these artifact icons will show its details on a tooltip. Mousing over one of the buffs or debuffs in either the player or enemy stat area will show a tooltip explaining that condition. The hand area will display the cards in hand fanned in a way that both the mana and buy cost are easily visible at the same time.

The deck and discard zones will have a small numerical indicator indicating the number of cards currently on them. Right clicking on the deck zone will show you more detailed information about your deck such as the cards you have and how many. On another hand, right-clicking on the discard pile will allow you to browse through it.

Finally the shop will be part of a different tab that will be hidden on the left side of the screen and will be expanded when clicked on to reveal the cards available for purchase that combat. Each pile of cards in the shop will have a number next to them indicating the remaining amount in stock.

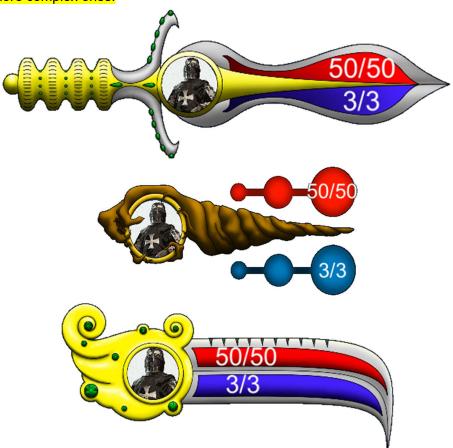


The level selection window will allow the player to scroll through the current level and see ahead all the paths that lead to the boss. The player will also be able to see more detailed information about the levels he can choose from if he previously cleared them.

# **Game Progression**

#### Planned User Journeys

In terms of game progression, it will be based on the learning curve of the game. With each subsequent run, the player is expected to learn from their mistakes and improve their strategy. As such, the objective of the player is to get as far as possible in the tower, but with the downside that if they die, they lose everything they have done until that moment. They will also have three different classes to choose from, which will change the starting deck and stats based on them. Players will be able to explore the different options and strategies that come from choosing each class, and from getting access to different cards in the shops. As the player goes to battle and buys cards, the deck will evolve, having a bigger number of cards as well as more complex ones.

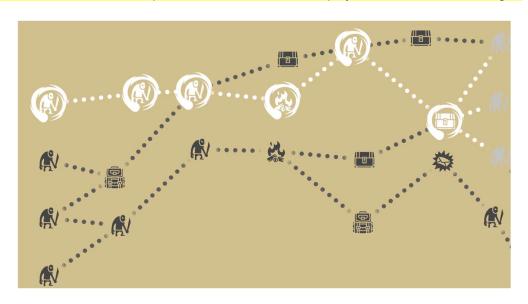


A beginning player will start by learning the different mechanics and, by trial and error, will start to strategize on the different options they have to play and decide which ones are the best. After getting good at a class, they can switch to another one and do the same, by experimenting with the new strategies. As the player plays the game, they will start to master each class and have no problem in the earlier levels of the game. Nevertheless, they will start to create other options to play the game, besides the ones they have already discovered, to find the best deck options in each floor.

**Progression Paths** 

The player will have to walk through the floor map, choosing a path between the various provided. Each level will provide a different outcome, so the player will have to carefully plan their journey throughout the floor, where one wrong choice might result in their death.

As the player goes up in floors, the enemies start getting stronger, presenting more units and with different and more powerful actions that they can do. The player will start having to make harder decisions during battle, choosing between more cautious or bold moves and if they manage to get to the floor boss and defeat them, they will be given a choice between three different artifacts, which will provide different stats to the player and make them stronger.



The shops will also evolve as the game progresses, providing better cards so that the player can evolve to be able to win against their enemies. Moreover, as the player evolves and buys cards for their deck, they will also have to start managing their deck better, trying to balance the various cards that there will be in the deck by destroying the ones they will not find convenient anymore or being more reserved in the buy phase.



## **Project Team**

### **Group 9**

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