

Introduction:

This project is a card game where a player battles against an enemy creature using different types of cards. The game is turn-based, meaning each side takes one action at a time. The player's goal is to defeat the enemy before running out of health or available cards and creatures.

The game features three distinct types of cards. Creature cards allow the player to summon allies that can fight alongside them. These summoned creatures attack the enemy once per turn and take damage in return. Up to four creatures can be summoned at any time. Attack cards allow the player to deal damage directly to the enemy creature. Finally, status cards apply special effects that can shift the balance of battle. These include cards that increase the damage of the player's creatures, cards that heal friendly creatures and the player, and cards that reduce the damage dealt by the enemy.

Each turn, the player selects a card to play from their hand of four cards. Once a card is played, its effect is applied immediately and the player's turn ends. Players may also choose to skip their turn. After the player's action, their creatures automatically attack the enemy. Then, the enemy attacks both the player and their creatures. The game checks for win or loss conditions at the end of each turn.

The game ends when either the player defeats the enemy or the player loses due to one of two conditions: their health reaches zero, or they have no creatures in play and no cards left to use. The game is built to create a strategic challenge, requiring the player to carefully manage their cards and creatures while anticipating enemy attacks.

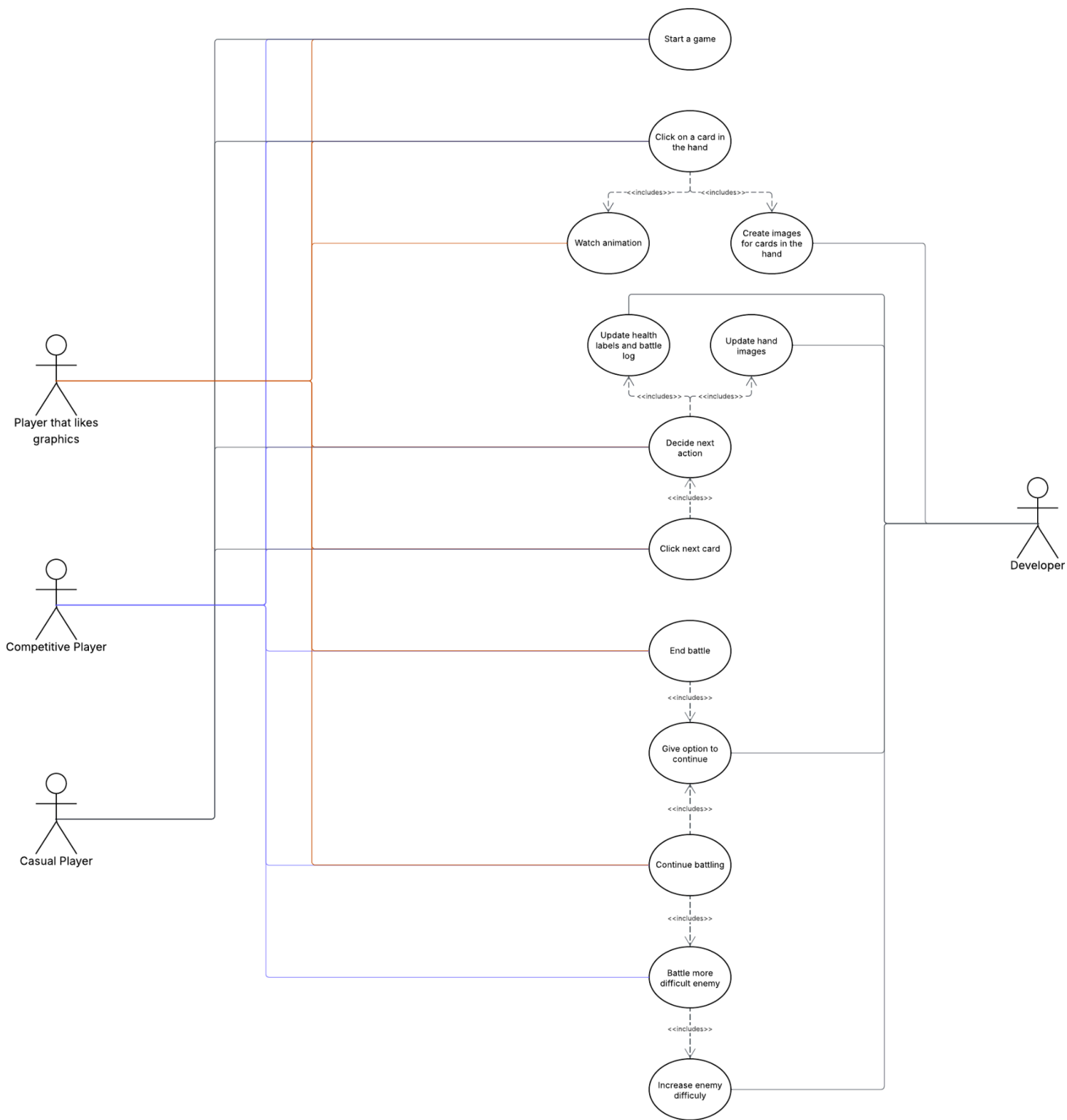
Background and Motivation

Turn-based card games have long been a popular genre for both casual and strategy-minded players. They combine planning, timing, and adaptability, offering a rewarding challenge without requiring fast reflexes. Many of these games rely on familiar mechanics: drawing from a deck, managing a hand, and choosing the right moment to play specific cards. This project builds on those ideas with a focus on simplicity, clarity, and tactical choice.

In this game, the player is placed in a one-on-one battle against a single enemy creature. The player has access to three core types of cards: creature cards, attack cards, and status cards. Each card type provides a different way to approach the battle. Creature cards let players build a team of allies, attack cards deliver direct damage, and status cards modify the strengths and weaknesses of units on both sides. This variety encourages players to plan ahead while staying flexible.

The game is designed to be simple to pick up, with clear visuals and one-click actions. At the same time, it offers layered decisions: Should you summon another creature or boost the ones already in play? Is now the right time to heal, or should you go all in with an attack? These decisions make each playthrough feel different and engaging.

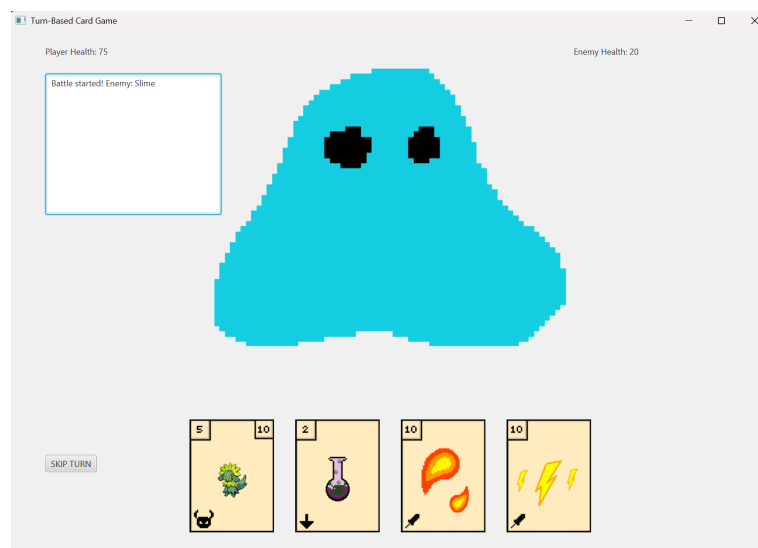
From a technical perspective, this project also serves as a structured application of object-oriented programming (OOP). Classes like Card, Creature, Player, and BattleManager are designed with clear responsibilities, supporting modular design and future extensibility. The team has completed user stories that cover the full game loop: drawing and playing cards, resolving combat, checking for win/lose conditions, and updating the visual state of the game.



User Stories:

The use case diagram above details what different players are looking for in our system, and we as developers respond to them. They correspond with our goal of creating a simple system that is also able to grow and become more strategic. The first group of players we have considered are more casual players; those who play just for the fun. They are here just for the experience, and do not seek a challenge. We considered this group to be our main audience, so we started with a simple system with very little variation. The next two players were outlets of expanding and growing the system to become more complex and presentable. These were the players interested in graphics, and competitive players. The former group represents the people who base the system off of its looks. The more presentable or interesting it looks, the more likely they are to use it. We used this group to consider what information users would like to see in a GUI. The latter group, the competitive players, are drivers behind the complexity of the system. They prefer games that get challenging over time, and have less repetition in their design. They are more long-term users of the system. To appeal to these types of users, we created a battle-looping system. Whenever a game ends, the player will get the chance to have another battle. Each battle randomly generates a new creature to fight, and all enemy creatures are different. Additionally, for every win the player gets, the player gets a new card and creatures get stronger.

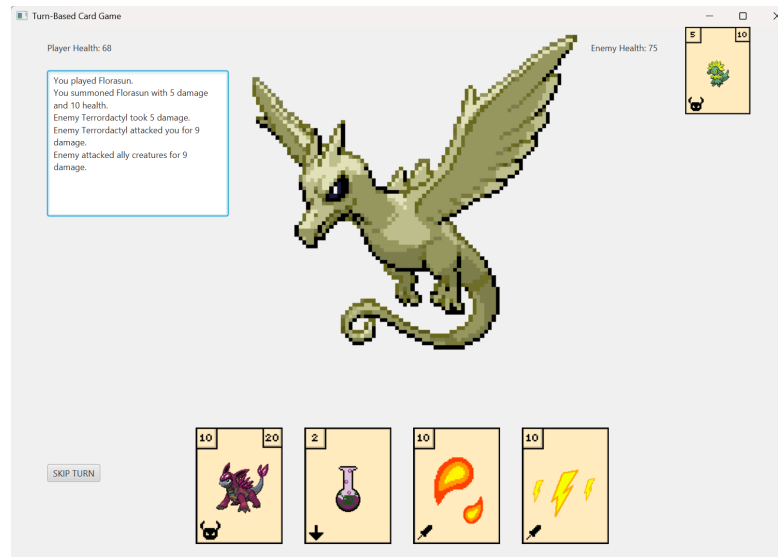
Playing the Game:



The starter screen when the player is fighting a Slime.

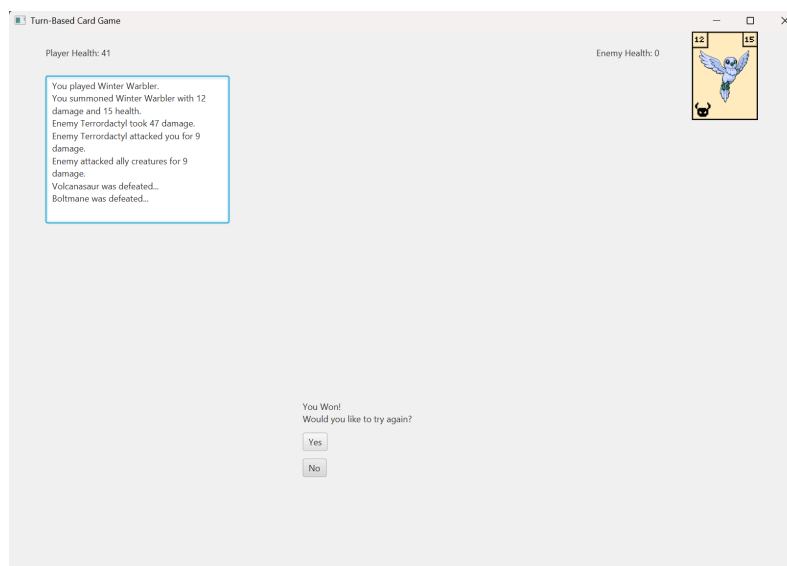
When the game is first started, the player will be presented with a screen resembling the one above. The image of the enemy creature is prominently displayed in the center of the screen, with the player's health displayed to the left and the creature's health on the right. The box under the player's health will display combat log information (damage dealt by player and friendly creatures against the enemy creature, damage dealt by enemy creature against player and friendly creatures, death messages, and more). The player's hand of four cards are on the bottom of the screen, with the skip turn button to the left.

To play a card, simply click on the card's icon. The effect will be applied immediately and the player's turn will end. If the player plays a creature card, the creature will be added to the board of in-play creatures on the right side of the screen, as shown below.

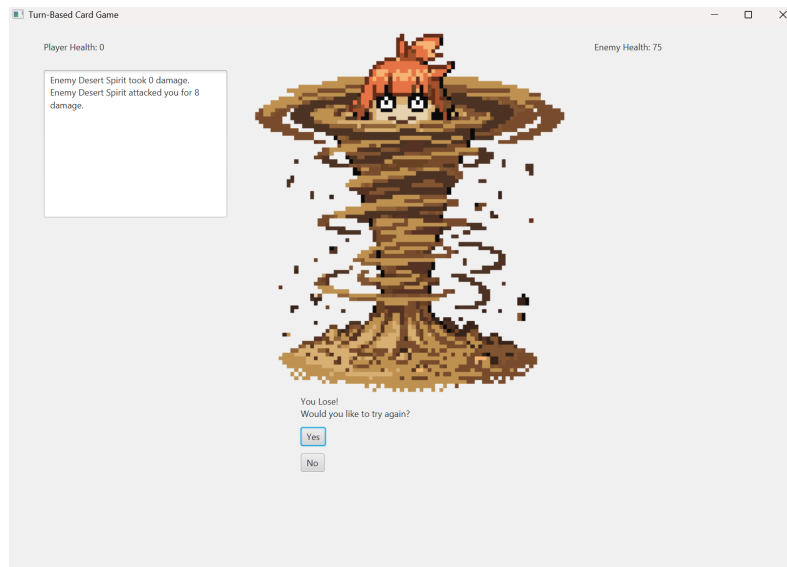


The screen with one creature, a Florasun, in play.

To win the game, the player must kill the enemy creature by fully depleting its health. On the other hand, there are two ways the player can lose. First, if the player's own health is fully depleted, the game will end in defeat. Additionally, if the player has used all their cards and all their creatures are killed, they lose as well. Victory or defeat do not mean the end of the game, however. You will be presented with a prompt allowing you to choose if you would like to play again.



Victory!



Defeat :(