

RPG Life

Documentation

Created by

EzA

Kamanun Maneesri 6532027021
Vijak Khajornritdacha 6532155621

2110215 Programming Methodology
Semester 2 Academic Year 2022
Chulalongkorn University

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Chapter 1 General Information

RPG Life is inspired by a turn-based strategy board game. In this game, 2 to 4 players can choose their choices of actions and face random events throughout 7-30 turns of game. Game ends when all players die, or only one player is left, or reaches the turn limit. In the case that the number of turns reaches the limit, the winner is calculated according to their stats.

1.1 Players

There are 2 to 4 players in this game each of which will be randomly assigned roles at the start of the game. In addition, each player has sword stats, magic stats, and money. Players die when their money reaches 0 or less. Initially, every player has 100 units of money and 10 units of sword and magic stats.

1. Stats

There are 3 stats in this game:

1. Sword stats
2. Magic stats
3. Money

1. Sword Stats

Used in calculating win rate when fighting with monsters.

2. Magic Stats

Used in calculating win rate when fighting with monsters.

3. Money

Act as health of players when players' money reach 0 or less they die.

2. Roles

There are 4 roles in this game:

1. Farmer
2. Sword Man
3. Mage
4. The Rich

1. Farmer

The most basic role in this game without any special abilities.

2. Sword Man

Players with this role gain sword stats faster than other classes and their win rate against monsters is heavily weighted by sword stats. (Sword Mans who have high sword stats but low magic stats still have high chance of winning against Monster with high sword stats)

3. Mage

Players with this role gain magic stats faster than other classes and their win rate against monsters is heavily weighted by magic stats. (Mage who have high magic stats but low sword stats still have high chance of winning against Monster with high magic stats)

4. The Rich

Players with this role gain and lose money faster than other classes.

1.2 Monsters

Monsters drop money when they are defeated and evolve every time they die. When players lose to monsters, they will drop money according to game mechanics([see 1.2.3](#))

1. Types

There are 4 types of monsters in this game:

1. Goblin
2. Skeleton
3. Wizard
4. Dragon

1. Goblin

The most basic monsters in this game.

2. Skeleton

Monster with high sword stats, requiring players to have high sword stats to win against. Sword stats increase tremendously when evolution.

3. Wizard

Monster with high magic stats, requiring players to have high magic stats to win against. Magic stats increase tremendously when evolves.

4. Dragon

A boss with high in both sword and magic stats, requiring players to have a high amount of both stats to win against. Sword and magic stats increase tremendously when evolves. In addition, fighting against the boss can call for help from other players.

2. Evolution

Every monster can evolve. Specifically, all of their stats will increase, including drop money. Conditions for monsters to evolve are

1. Every start of new turn
2. When monsters defeat players (except Goblin)
3. When monsters are defeated

3. Fighting mechanics

1. Fighting against normal monsters

Sword and magic stats are calculated to determine the probability of players winning against monsters with the following mechanics.

1. If both the sword and magic stats of the player are greater or equal to that of monsters, players win.
2. If both the sword and magic stats of the player are less than half of the stats of monsters, players lose and tremendously lose money.
3. Otherwise, the result of the fight is randomized based on the calculated win rate. If players lose, they lose money. If players win,

monsters drop money. The win rate is calculated according to the following rules.

- a. Sword Man win rates are heavily weighted by sword stats
- b. Mage win rates are heavily weighted by magic stats
- c. For other roles win rate, sword and magic stats are weighted equally.

2. Fighting against boss

Players can group together to fight against the boss, by pressing the “Send Help” button. Stats of all players joining the fight are summed together and use the same rule to calculate the win rate as fighting against normal monsters, but the weight of magic and sword stats are equal. If players win, they share drop money equally. If players lose, they lose the same amount of money. The Rich earns and loses money more than others. (They all share the same amount of money, and The Rich buff will be calculated based on that same amount of money.)

1.3 Turns and Actions

There are 3 phrases for each player in each turn respectively, including random an action, choose 1st action, and choose 2nd action. In addition, turns also affect the amount of stats gained from actions in which the stats increase significantly faster as the turns pass. After players finish their turn, next players will start their turn and after all players finish their turn, the number of game turns is increased by 1.

1. Random Action

Players are obliged to random one random action from the total of 6 which are Find Sword Master, Find Mage Master, Is Robbed, Win Lottery, Fight Monster, and Fight Boss.

1.1 Find Sword Master

Enormously increase player sword stats.

1.2 Find Mage Master

Enormously increase player magic stats.

1.3 Is Robbed

Randomly deduct either player's magic stats, sword stats, or money.

1.4 Win Lottery

Earn money

1.5 Fight Monster

Force a player to fight with a random monster.

1.6 Fight Boss

Force a player to fight with a boss.

2. Choose Action

1st and 2nd choose actions are exactly the same. It is just that players can choose 2 things to do in each turn and the 2nd action can be the same as the 1st one. There are 4 choices: Learn Sword, Learn Magic, Scrub Floor, and Fight Monster.

2.1 Learn Sword

Increase player's sword stats

2.2 Magic Sword

Increase player's magic stats

2.3 Scrub Floor

Increase player's money

2.4 Fight Monster

There are 3 normal monsters(Goblin, Skeleton, Wizard) and 1 boss(Dragon) player can choose to fight.

Chapter 2 Game Play

2.1 Main Menu

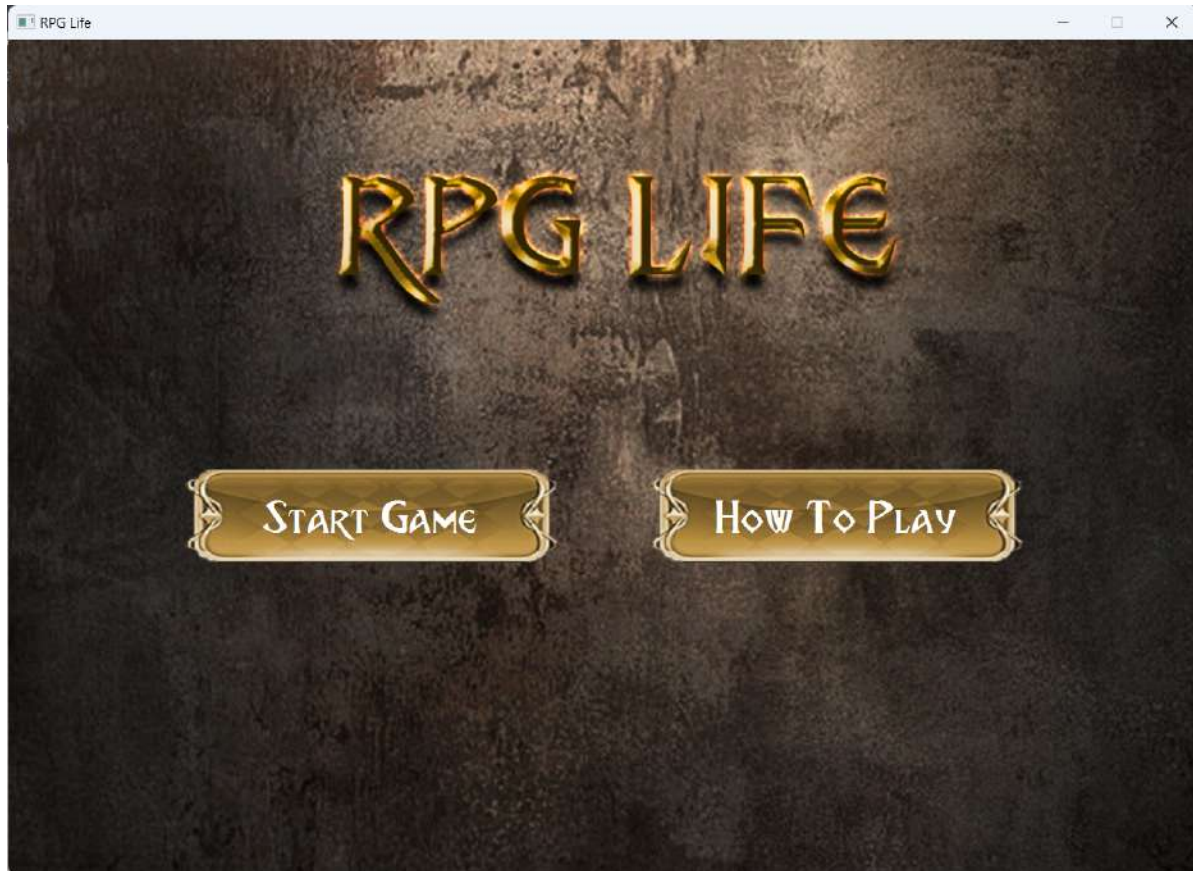


Figure 2.1 Main Menu

Main menu is the start page of the game and contain 2 buttons

- “Start Game” button to navigate the player to this game.
- “How To Play” button to navigate the player to the tutorial of this game.

1. How to play scene

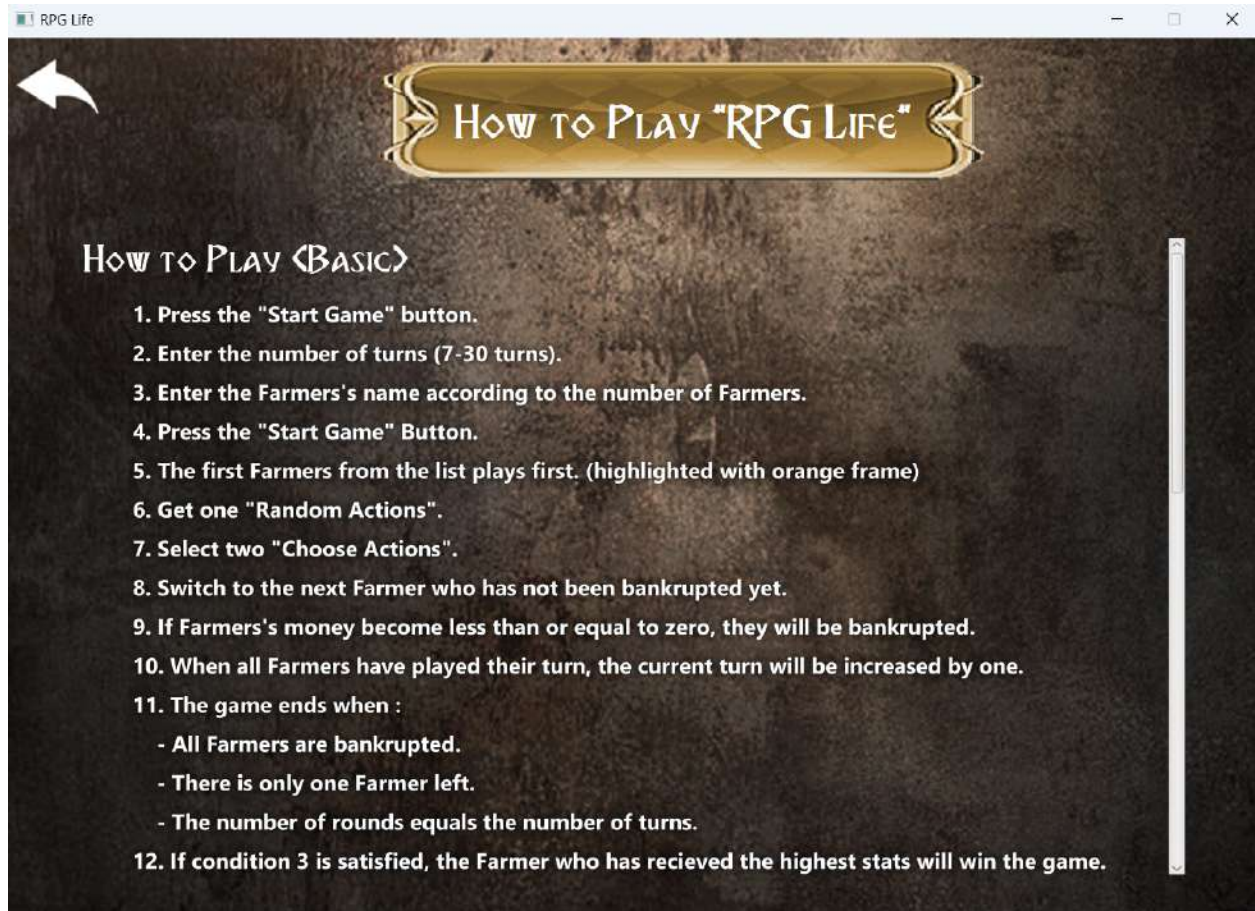


Figure 2.2 How To Play scene

After clicking the “How To Play” button, How to play scene is displayed and it contains all details about this game including basics of the game, game mechanics, and player roles. Also, clicking the top-left arrow icon will navigate back to the Main Menu scene.

2. Select Turn Scene

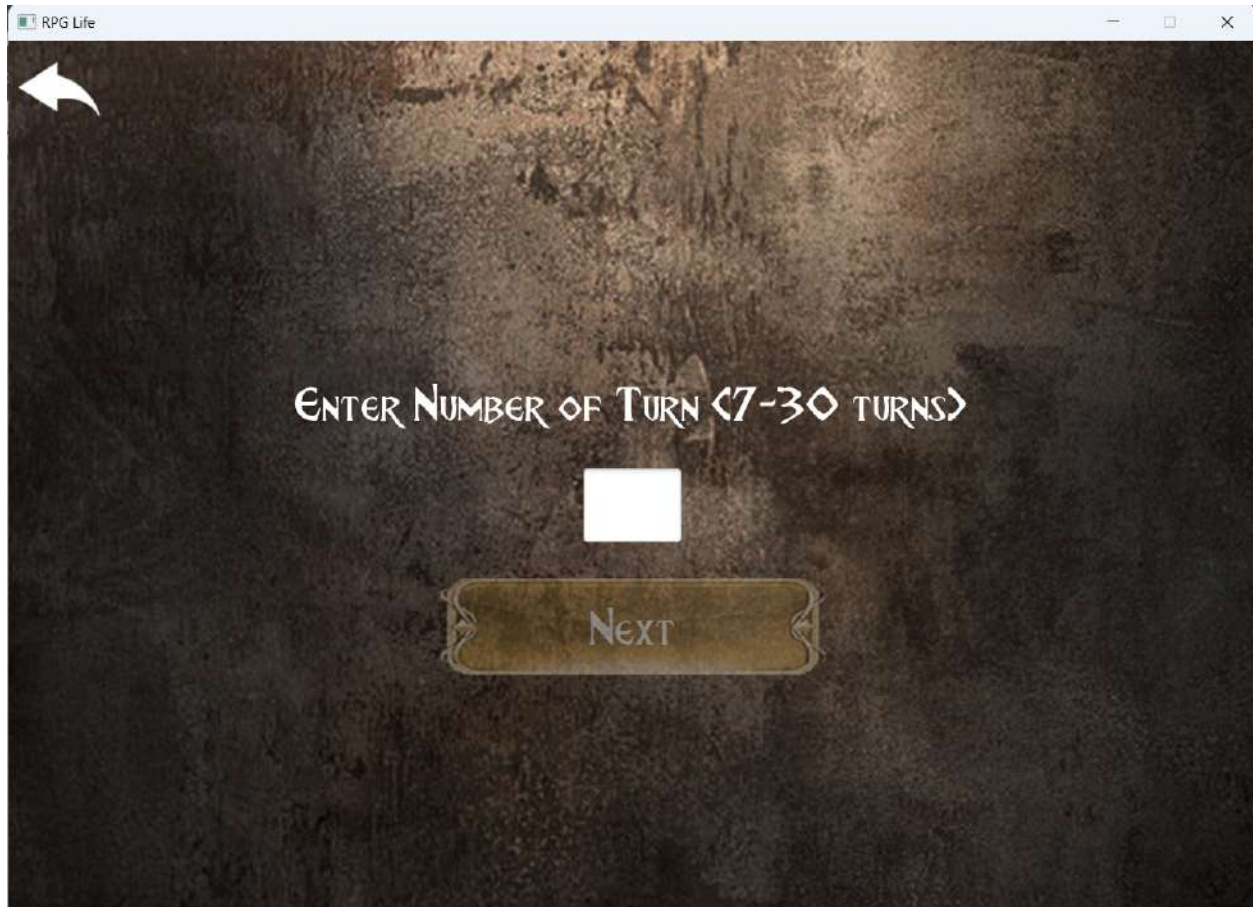


Figure 2.3 Select Turn Scene

After pressing the “**Start Game**” button, players will be navigated to this scene. Players are allowed to enter only a number in range 7-30 (as shown in the picture) and the “**Next**” button is enabled only if the input number is valid. In addition, clicking the top-left arrow icon will navigate back to the Main Menu scene.

3. Input Player Names scene



Figure 2.4.1 Enter Player Names (a)



Figure 2.4.2 Enter Player Names (b)

After clicking the “Next” button in the “Select turn scene”, players are navigated to this scene where they will enter their names (no more than 10 characters). In the figure 2.4.1, the “Start Game” button is disabled until at least 2 players' names are provided. In the figure 2.4.2, players can be removed after added and the “Add Player” button is disabled when the player's name is invalid or there are 4 players, reaching max player limit.

2.2 Game Play

1. Game Play Scene



Figure 2.2.1 Initial Game Play Scene

After clicking the “Start Game” button in the “Enter Player names scene”, players will be navigated to this scene where the actual game plays. In this scene, there are 5 clickable buttons including RandomAction button(Under turn number), Show random action, show choose action, show monsters, and exit game. And below is the player container where the status of players are shown.



Figure 2.2.2 Game Play Scene after clicking random action button



Figure 2.2.3 Choose 1st action button

The game processes by clicking the random action button, and an action is randomized to the player. Then, the button will change text into “Choose 1st action” and “Choose 2nd action” respectively to choose choice actions.



Figure 2.2.4 After clicking “Show Random Actions”



Figure 2.2.5 After clicking “Show Choose Actions”



Figure 2.2.6 After clicking “Show Monsters”

2. End Game Scene



Figure 2.2.7 Game Ending Scene

When game ends, winner will be shown in the middle of the screen (or show “No one wins” if no one wins) as in the figure 2.2.7 and the top-left button’s text will be “Play again”

3.2 Java Docs

<https://khajornritdacha.github.io/progmeth-eza-docs/>