

CS102**Spring 2021/22**

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Group**3F**

Criteria	TA/Grade r	Instructo r
Presentation		
Overall		

Till the Last Drop

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UI Design Report

(UI Final Report)**6 April 2022**

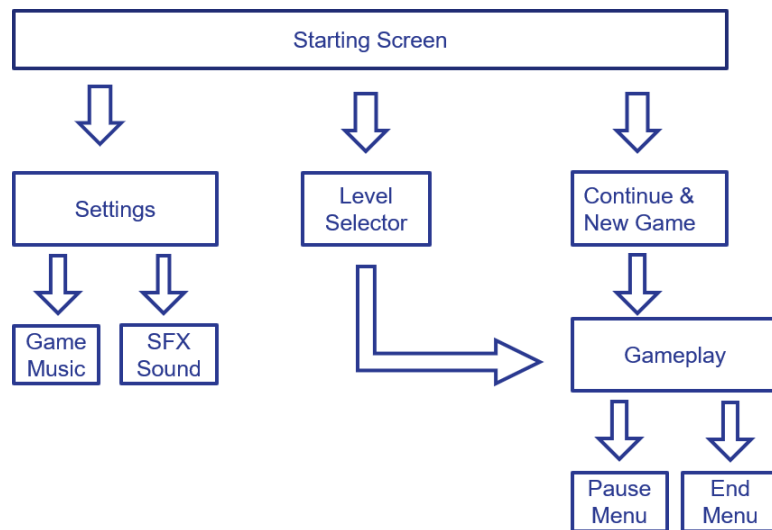
1. Introduction

Our game will be a tower defense strategy game with the aim to prevent enemies from damaging our central core. We will have multiple towers with different attacking features allowing users to protect the center from the enemies. Players will try to keep enemy characters out of their territory as much as possible.

2. Details

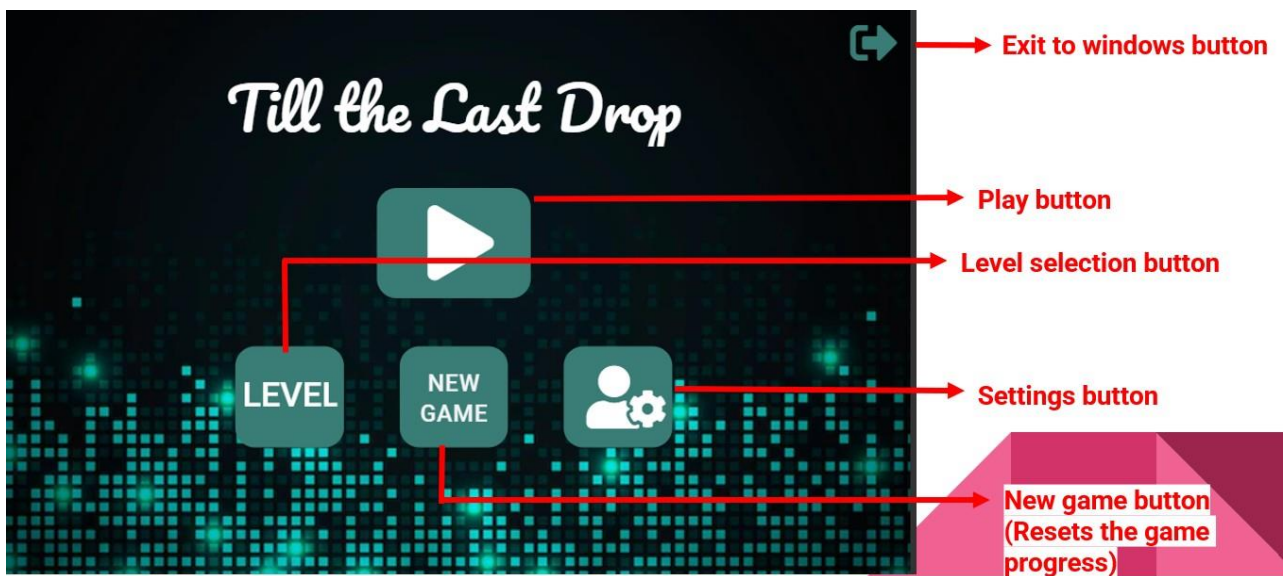
2.1 Flow Chart

The flowchart of our game is shown below.



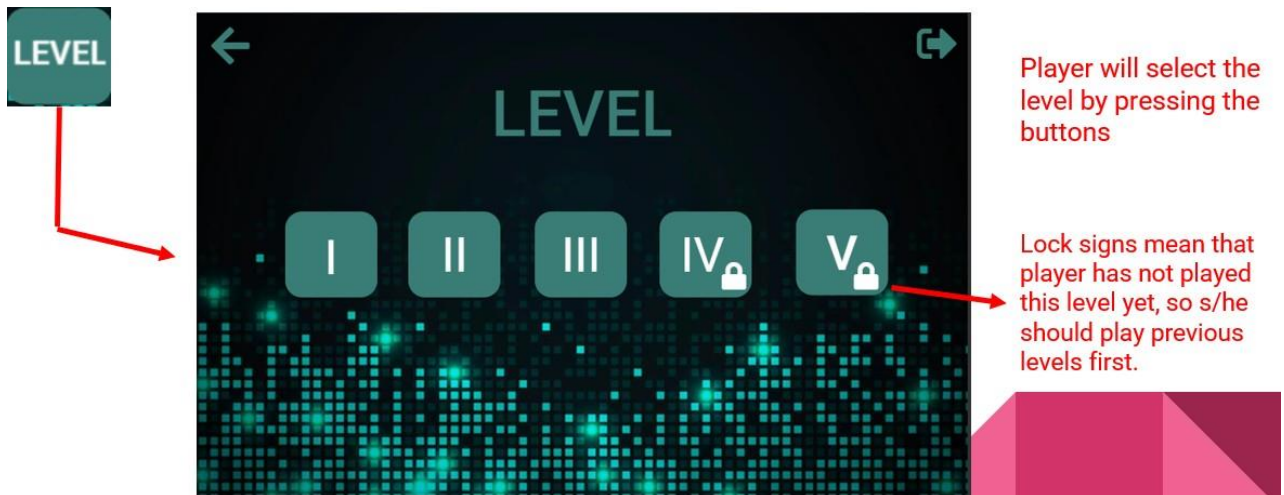
2.2 UI Interactions

Main Menu

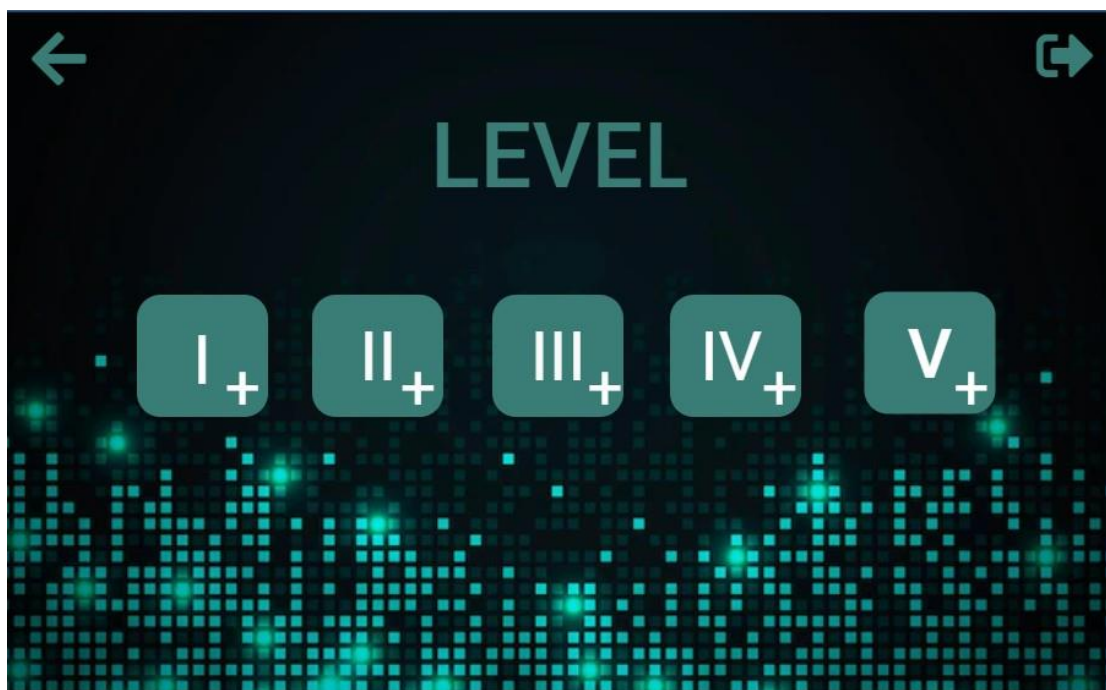


Players will be greeted with this graphical interface when the software is launched. Through this, interface users will be able to continue their previous game, start a new game, reach level selector and configure settings. The next step will be determined by the choice of the users.

Level Selector



If the players wish to reach the level selector. The display above will greet them. By selecting their desired option, users will be directed to the corresponding level. Levels except the first one will remain locked unless the users complete the preceding level.



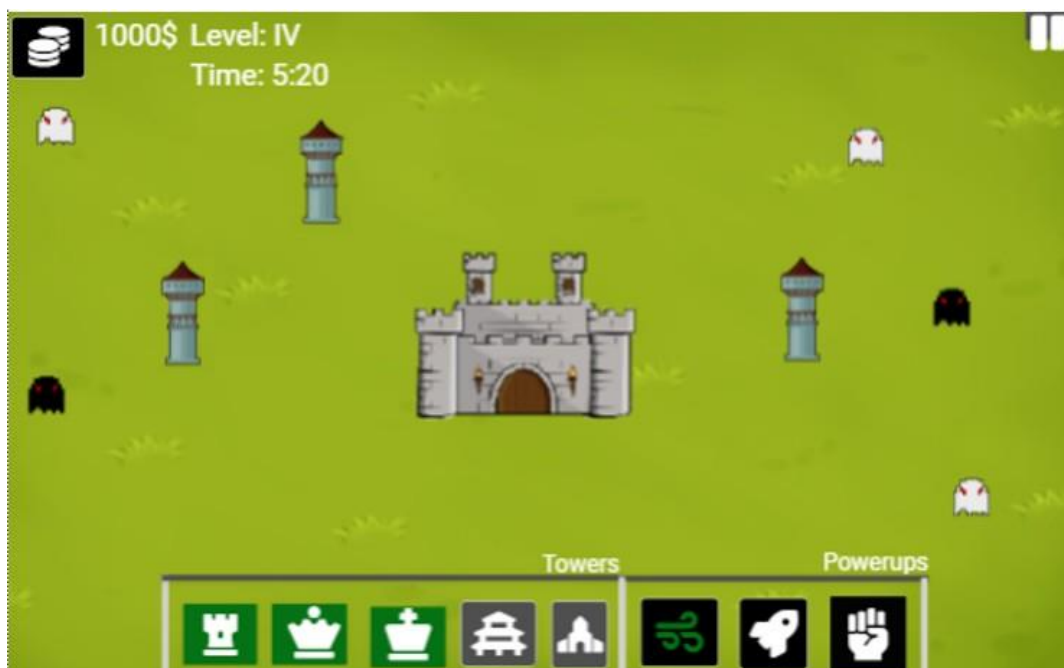
If all the levels are completed, “level plus” system will be activated. In these additional levels, the enemy npcs will be stronger and the player will be able to utilize new towers and power ups that are only available after all the levels are completed at least once.

Settings Screen



In the main menu, players will be able to adjust the game sound as they wish. The sound effects of the game and the game music can be separately adjusted by sliders.

Game Screen



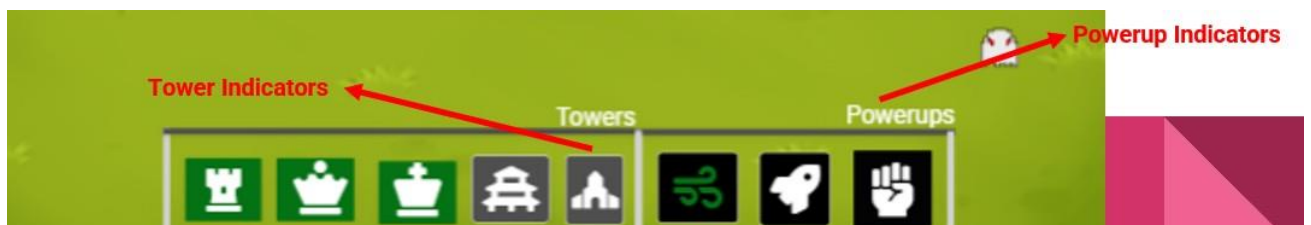
A demonstration of our game, assets are taken from [1], [2] and [3] (The art design of the game is kept simple as the aim is to show the main idea. Art design can be changed in the future).



The top of the screen includes a currency indicator, which is necessary to buy towers and use power ups, level and time indicator which shows the current level and how long the player has been playing the game, and pause button.



In the game screen, there will be a base which players need to protect, towers which attack the enemy NPCs, and enemies. Since in the game enemies will attack from random directions, the base needs to be protected from all sides.



In the bottom of the game screen, towers and power ups will be represented. The icons of towers and power ups will have a green background when the users' in-game funds are sufficient enough to buy them.

End Menu - 1



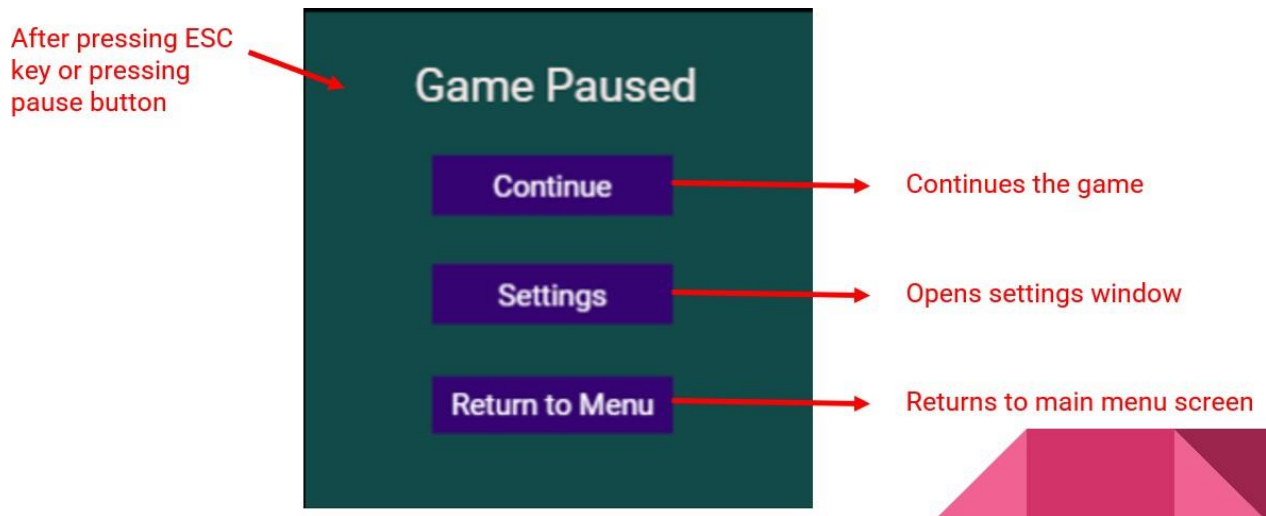
When players fail to defend their base, the game over screen will appear. In this screen, they will be able to see their playtime and current level. Also, they can replay the current level by restart button or they can return to the main menu.

End Menu - 2



If players successfully manage to defend their base, the screen above will be displayed. In this screen they can see their playtime and current level. Also, they can continue with the next level by its button or return to the main menu.

Pause Menu



During the game, if the player wants to stop for any reason, they can pause the game by the stop button on the right top corner or simply pressing the esc key. When they want to continue playing the game, they can do it by pressing the continue button. If they wish to change the settings, it is possible to do so by pressing the settings button or they want to quit and return to the main menu by its own button.

3. Summary & Conclusions

Our software is going to have six screens including: Starting screen, settings screen, level selector screen, game screen, pause screen and end-game screen. Starting screen will have a simple design that prevents the player from getting overwhelmed right from the start. Settings will include slide bars that will allow the player to adjust sound settings. Level selector will allow the player to choose a level that he/she has unlocked. If all the levels are completed, “level plus” system will be activated. Once the player reaches the game screen, they will be able to interact with the tower and powerup bar. An in-game currency will be visible on the top left part of the screen and as time passes and the enemies are killed the player will earn in-game currency. On the top right of the game screen, the player can pause the game and return to the main menu (starting screen) or adjust settings and continue. If the player fails the level or completes it, the end game screen will be summoned. Our game will have a simple and easy to understand design. In each screen, we aimed to implement an efficient and easy to use design. Especially in the game screen, simplicity of the UI elements is paramount because a hectic design would distract the player, limit the player's field of view and overwhelm a beginner. Our simple design will provide an efficient gameplay experience.

References:

- [1] *Castle Drawing Cliparts - Castle Clipart*. (n.d.). PinClipart.Com.
https://www.pinclipart.com/pindetail/ibbxoxm_castle-drawing-cliparts-castle-clipart-png-download/
- [2] HappyPictures. (n.d.). *high stone towers castellation walls windows Stock Vector*. Shutterstock.

<https://www.shutterstock.com/image-vector/high-stone-towers-castellation-walls-windows-1715269087>

- [3] Hassekf. (2015, August 4). *Tower Defense - Grass Background*. OpenGameArt.Org.
<https://opengameart.org/content/tower-defense-grass-background>