Plants vs Zombies
(AP PROJECT)
https://github.com/vibhu18116/PlantsVsZombies/tree/addingFeatures

Plants vs Zombies is a single player game where player takes the position of a homeowner and has to defend his home with his house amidst the arriving zombies towards it.The game is user interactive and consists of various levels for increasing the difficulty for the user.

We have implemented five levels as of now which are fully functional and player has to start from Level 1 and winning each level would lead to the unlocking of the next level.In each level the player also unlocks a special plant to increase its health and for better defence.

Design and Implementation

We have used JavaFX for the implementation of the game. There are 16 fxml files with their respective controllers and additional classes including Plant which all plants type extends, Zombie classes, Common Features classes and GameLayout Classes. There is an efficient use of custom exceptions as well with exceptions such as, HomeInvadedException, CellOcupiedException, InsufficientCoinsException, LawnMowerUsedException.

In addition to the plants the player also gets respective Lawnmowers for each game which can save him by killing the zombies of entire row. Interesting animations have been used to make the game more appealing and interactive.

Quick Tip

Plant as number of plants as sun plants as possible, because they generate their own suns as well!

Team Work

Since, the project is a team project, therefore with the understanding and compatibility of the members, the project is rather a team effort only and each member gave her best to enhance the game with their skills and creative ideas.

Therefore, each segment of the implementation is a team effort and both the team members equally enjoyed working on the project as they learnt a lot with this project thus enhancing their skills and talents.

Team Members:

Himanshi Mathur(2018037)
Vibhu Agrawal(2018116)

We have used flying Zombies in level 5 which drop suddenly and randomly at any cell location in th screen to increase the difficulty of the game.

We have also included interesting sound effects which are make the game more addictive and fascinating, such as interesting zombie sounds and pea shooting sounds with a soothing background music.

Highlighting Cell - We have included the feature of highlighting the particular cell of the lawn while placing a plant which gives user the clarity of where he is planting.

Ensuring that only a Valid Player Name can unlock the game and without any mentioned player name you cannot play further.

A proper git repository has been maintained (Private currently).

Bonus Implementation

Team Members:

Himanshi Mathur(2018037)
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