













🧽 IMPLEMENTATION 🧢



CLASSES USED

- Driver class GamePlay
- Game, which contains objects of
 - User Class
 - Lawn Class
 - Tile Class
 - Sun Class
 - LawnMover Class
 - 1 class for each level
- Utility classes like
 - Almanac Class
 - Pea class
 - Coin class

CLASSES USED

- Character Class
 - Zombie class
 - 6 classes for each zombie
 - Plant class
 - 4 classes for each type of plant
 - 1 class each for each plant, extending one type each
- Other classes to introduce various GUI components.

INTERFACES

- Serializable To serialize all components of the Game Class
- Cloneable For cloning the dancing zombie
- Runnable To simultaneously implement various tasks at each level







IMPLEMENTATION

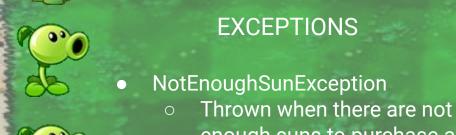




- enough suns to purchase a plant during the game.
- GameWinnerException
 - Thrown when a player Wins a Level
- GameLostException
 - Thrown when the zombies cross your lawn and eat your brain

DESIGN PATTERNS

- Factory Design Pattern
 - While Producing Zombies at each level
- Singleton Design Pattern
 - Strictly a single instance of the game class can be generated
- Decorator
 - Used in Serializing and Deserializing
- **FlyWeight**













CONTRIBUTION



SNIGDHA





- GUI Functionalities like
 - Drag and Drop
 - Timeline
 - Transitions
 - Scene Building
 - Event Handling
- Back End
 - Basic classImplementation andException Handling
 - Design Patterns

- GUI Functionalities like
 - Event Handling
 - Design of Game Flow
 - FXML Linking and Loading
 - Sun tokens binding
- Back End
 - Basic Class
 Implementation and
 Exception Handling
 - Serialization and Deserialization













BONUS



SUPER POWER





Not everyone knows how dangerous these zombies can be and a user must be equipped with a User Manual which guides them through their Evil powers and their flaws.

This is a guide for user about Various Plants and Zombies showing their strengths and weaknesses.

It's rough for plants to exist at times when it's cold, suns are a rare occurrence and zombies are on the edge to eat your brain.

The Special Power is a Life Saviour Button provided on Screen which when clicked forces all the zombies to Retreat for few seconds.





