

# AP PROJECT

# WILL HERO

Group -35

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## Game Components

- Falling Platform
- Randomised platform , orcs , chests
- 3 types of orc- red orc , green orc , boss orc
- Multiple Weapons- Throwing Knife , Shuriken
- Weapons can be upgraded
- Save and Load game
- Display Coins collected , Score during game
- Resurrect
- Pause menu
- All exceptions handled using try-catch
- Easy to use menu

# How to Play

- Press D for will to dash forward , hero jumps by itself periodically
- Press 1 to shoot weapon1
- Press 2 to shoot weapon2
- Click on pause button to access pause menu
- Save , resume , main menu buttons are available in pause menu
- Resurrection available if  $\geq 10$  stars are available
- You can load previously saved games in Main Menu
- Collide with chest to get either weapon or coins
- Weapon can be upgraded by getting same weapon from a weapon chest

## Problem and Solution / Implementation

- Collision Detection: We solved this problem by using Animation Timer which runs the mandatory handle method every few milliseconds.
- Saving and Loading: We encountered this problem during serialisation. This was a problem because Imageview class is not serialisable in javafx and Imageview objects are used a lot in our code.

# Individual Effort

## Abhinn

- UML
- Serialisation
- Linear Animation
- Collision
- PPT
- Making the world
- Testing

## Utkarsh

- Use Case Diagram
- Death Animations
- Dash / Jumping Animation
- Deserialisation
- Improving the UI and in-game physics
- Placing chests, weapons
- Resurrection
- Game Flow management
- JavaFX Handling