

Group 10: EECS 448 Project 3 Engineering Design Artifacts

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Game Features and Details:

The game we are looking to create for this project is a vertical platformer similar to an existing game called "Jump King". We are looking to create this platformer through working with a game engine and editor called "Unity", and while we are looking to "Jump King" for inspiration, we are also looking to add our own twists to the game to make it different and fun. In the list below are some of the features we look to add, and for the prototype we are first looking to create an initial platformer that we know will have all the basic functionality of a platformer. After having all of the basics down (such as being able to jump from platform to platform, having checkpoints, and knowing when the player has reached the end of the game), we will be able to add features such as enemies increasing difficulty as the game progresses into project 4.

Game Features:

Project 3 -

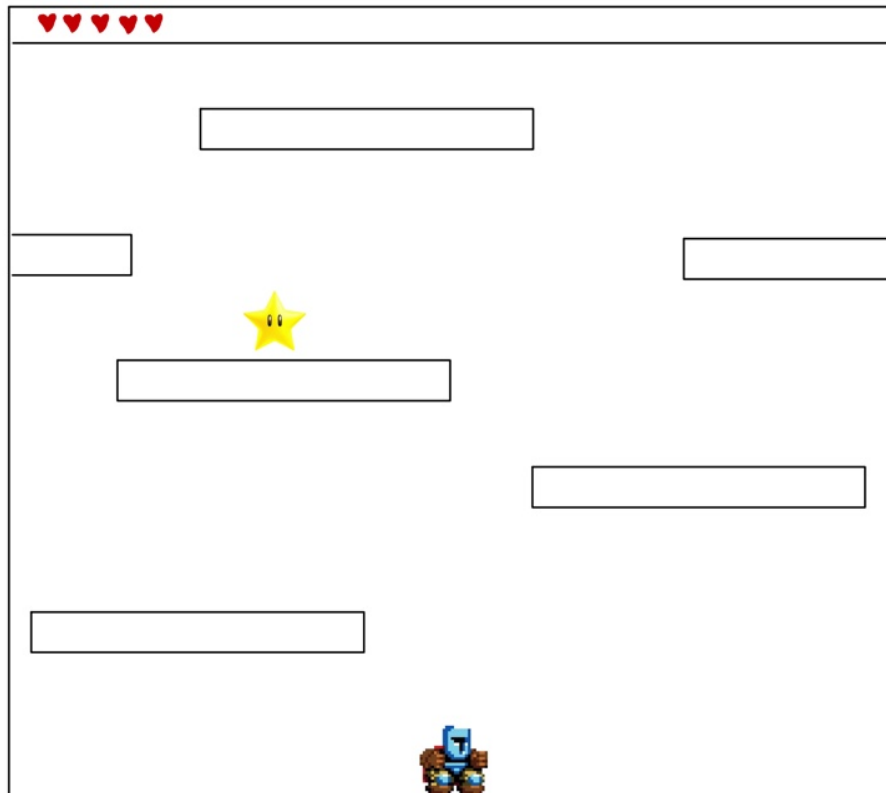
- Jump with varying height from platform to platform
- Receive a checkpoint after every screen
- Enemies that players must avoid
- If the player runs out of lives they lose a checkpoint
- Difficulty increases along with altitude
- Timer displaying how long the player has been playing
- Game completion after reaching the top

Project 4 -

- “Best Times” leaderboard
- Implement the one up functionality
- Update the player, background, and menu graphics
- Make new difficulties to play (Easy, Medium, Hard)
- Update the game design to make it more unique for every room
- Add background music to game

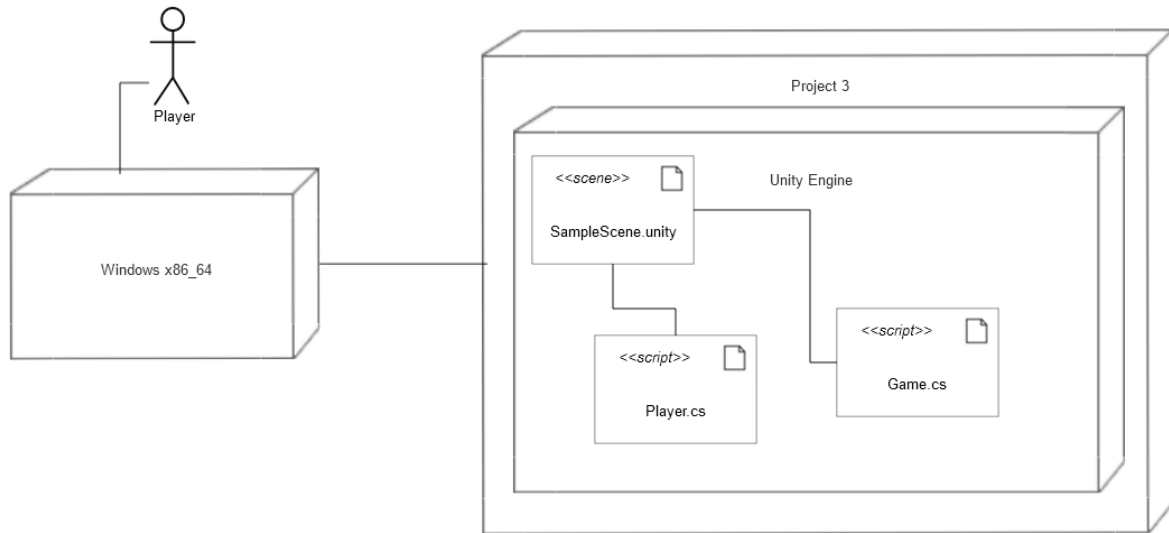
User Interface Model:

Note final implementation will look similar but will likely have different character models and platform designs



UML Diagrams:

Structural - Component Diagram



Behavioral - Case Diagram

