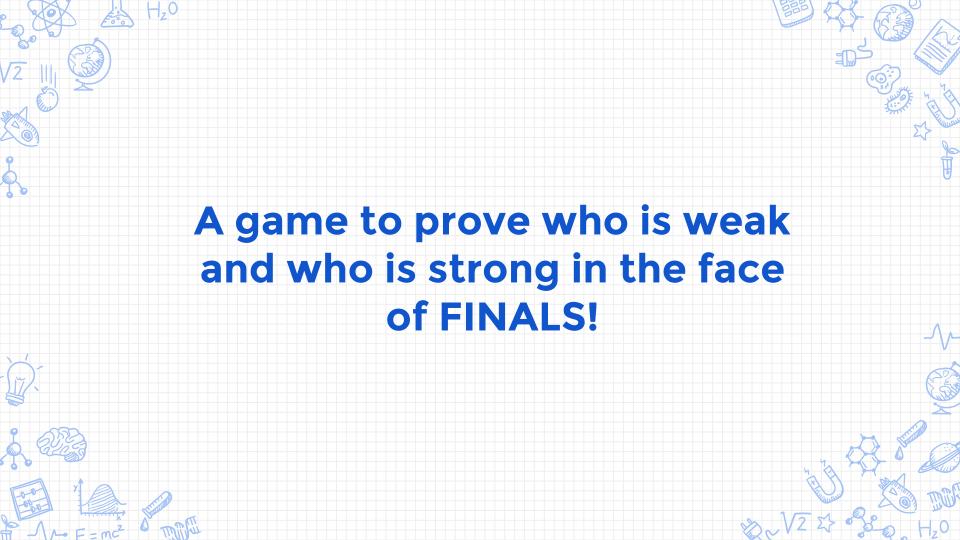
04-Finals-Weak

Dylan Cole, Brooke Robinson, Jesus Ortiz Tovar, Michael Feller





Overview

- Written in Java
- Lightweight Java Game Library (LWJGL)
- OpenGL
- Modular Code



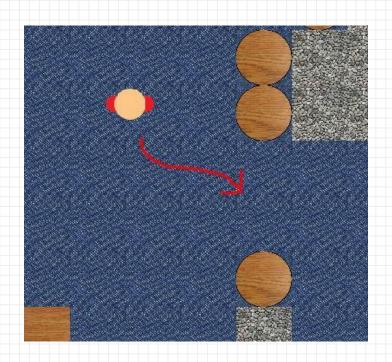




Use Case Name: Moves an avatar in game environment

Description: User starts game and uses keyboard inputs to play game

Frequency of use: Every time the user starts a level



Use Case Name: Selects Level

Description: User restarts game in a different environment with a pre-designed layout

Frequency of use: Whenever the user presses a key to begin another level







Use Case Name: Selects Character

Description: User can select a character for the "enemy" tile by toggling the 'j', 'b', 'd', or 'm' keys

Frequency of use: Whenever the user presses predetermined keys to select a character



Use Case Name: Quit Game

Description: Ability to exit application at any point in application

Frequency of use: Whenever the user want to quit the game





Design Pattern: Flyweight

- Our game is built with tiles
- Each has an assigned texture and can be set as a solid object
- The world can be built with any number of these tiles (ours is currently 32x16)

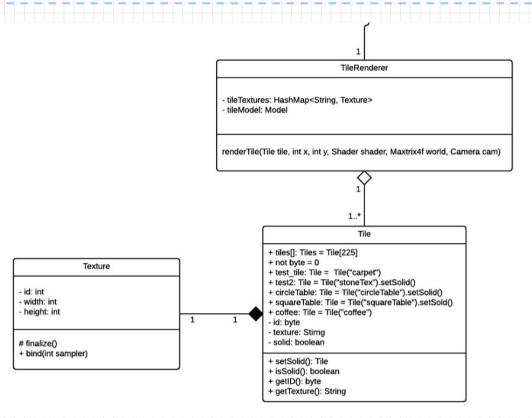








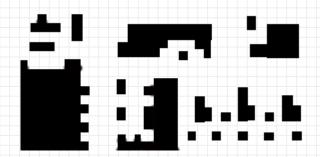
Flyweight Class Diagram





Template

- While our flyweight class generates all of our tiles, our world class provides a template for where to place them
- We can use png maps to build levels at the push of a button. It's a template in both the literal and object-oriented sense.





Class Diagram for Template

