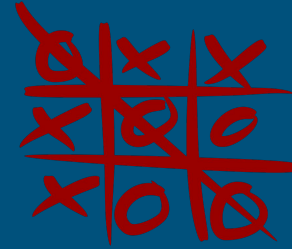# 3D Tic-Tac-Toe

Group 30
Hasan Ali, Umer Qazi, Syed Raza and
Claudio Jimenez

Project Overview

- 3D Tic-Tac-Toe is based on the traditional 2D version but with a modified set of rules and up to four players.
- The game encourage interaction and competition among users.
- The game has been enhanced with the addition of player avatars, a new game board with interactive graphics, a chat feature and new award structure.
- To encourage competition among players we added power charms, the capability to build alliances between players and tournaments.
- The game will available for play in mobile devices and through the web.

Design Goals

- Appealing to the eye
  - Needs to be bright colors to attract all different audiences
- Simple URL
  - Should stick in users mind so they come back for more
- Seamless communication between devices
  - Should not be relevant which device is connecting with which device

Constraints

- Must be available on the Google Play store, Apple app store, and microsoft store
- Full cross platform capabilities
- Must not take up more than 1.3gb storage
- Schedule Constraint
  - Initial marketing: January 2021
  - Testing phase: September 2021
  - Marketing push/customer beta review: February 2022
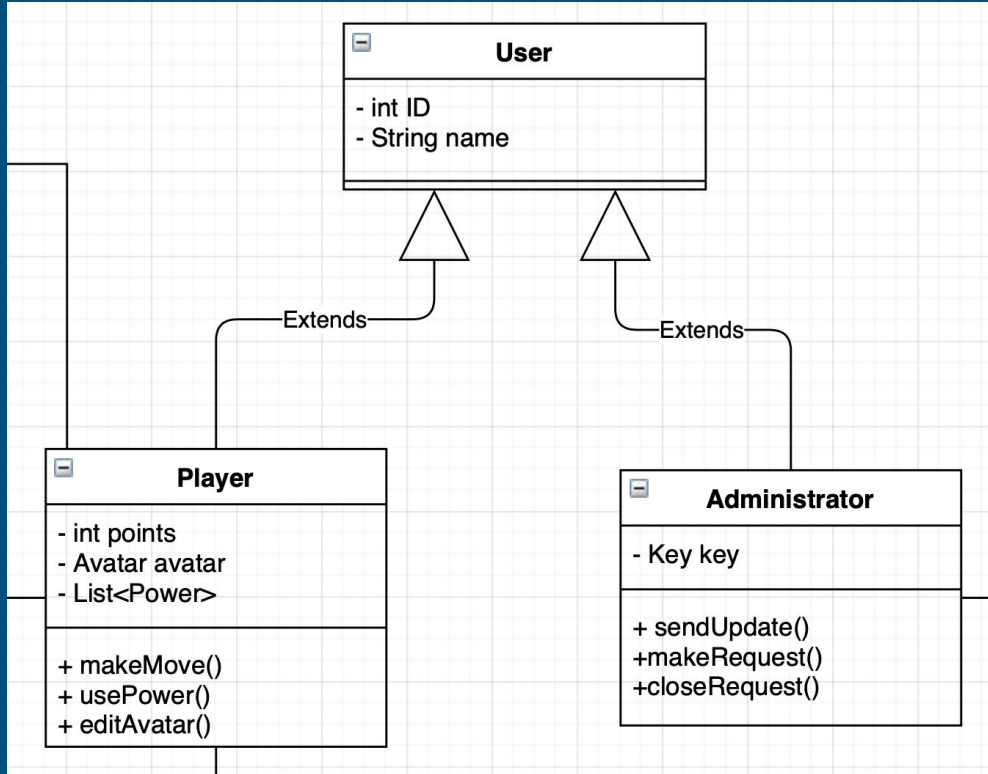 - Release June 2022
- Budget constraint: $300,000

Architecture

- Front-End
  - Model-view-controller set up
    - Model:
    - View:
    - Controller:
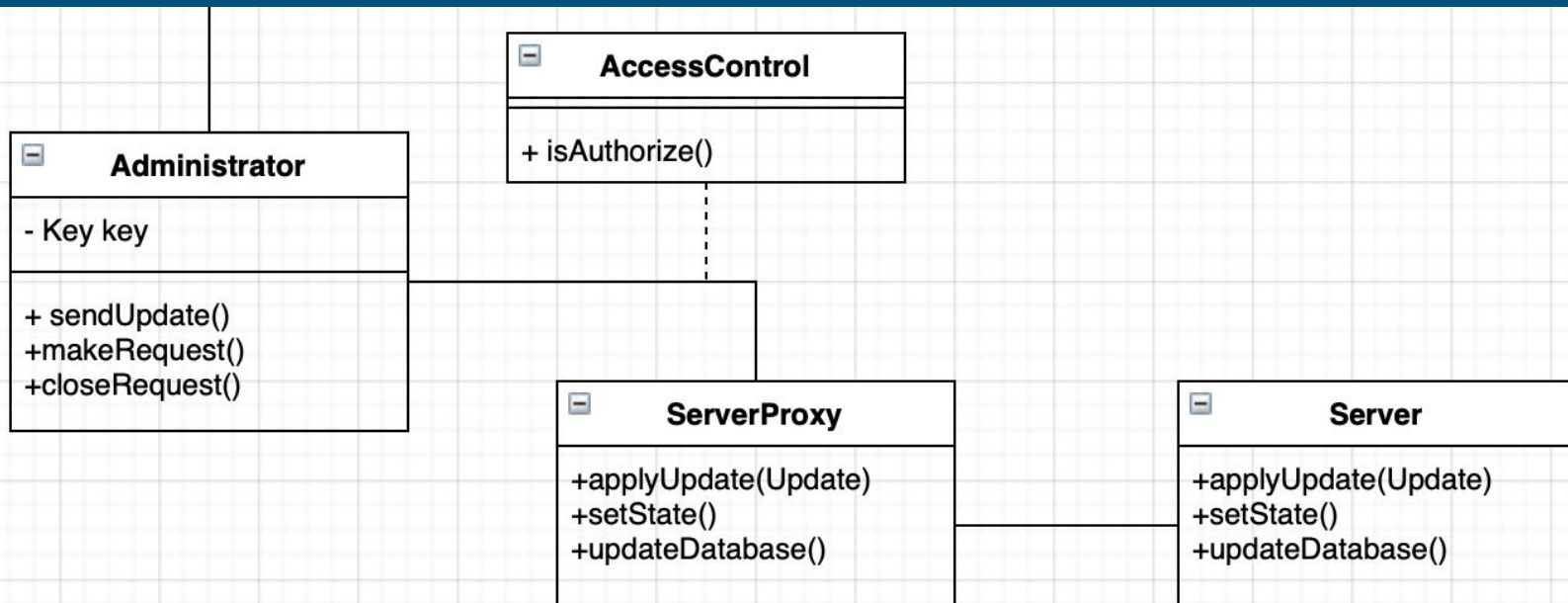- Back-End
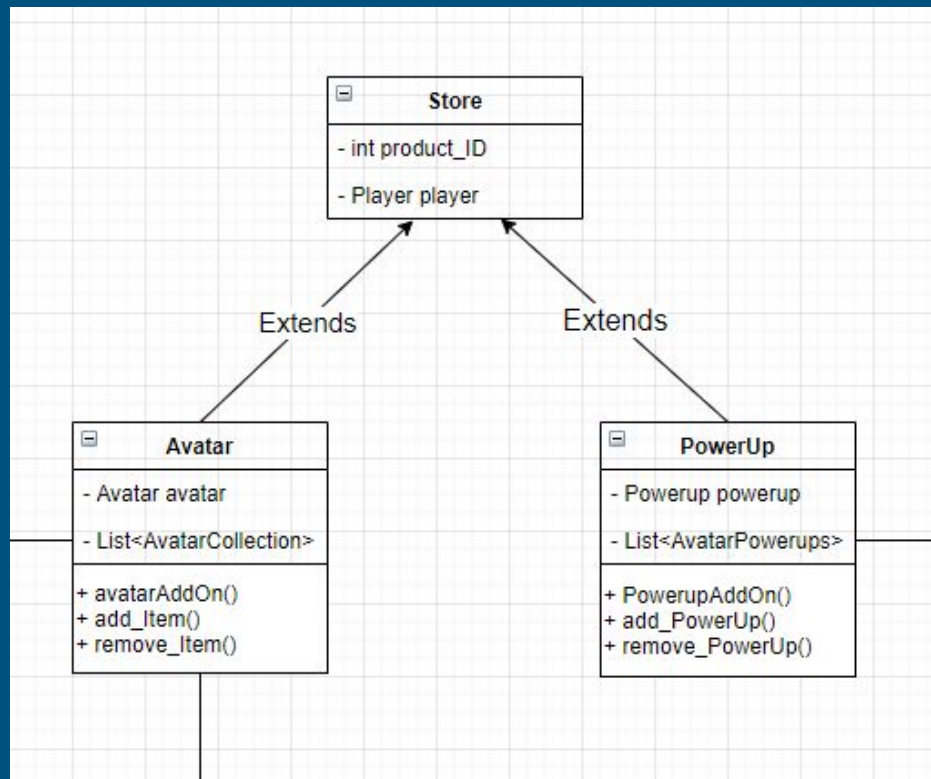 - Client-Server setup

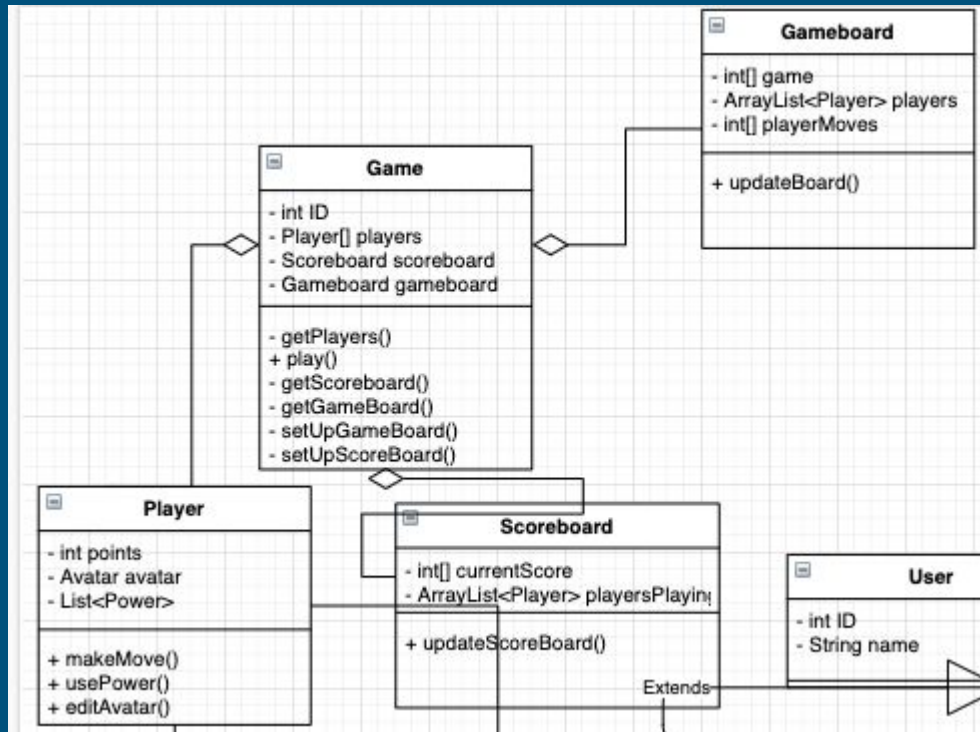# Complete UML Diagram:
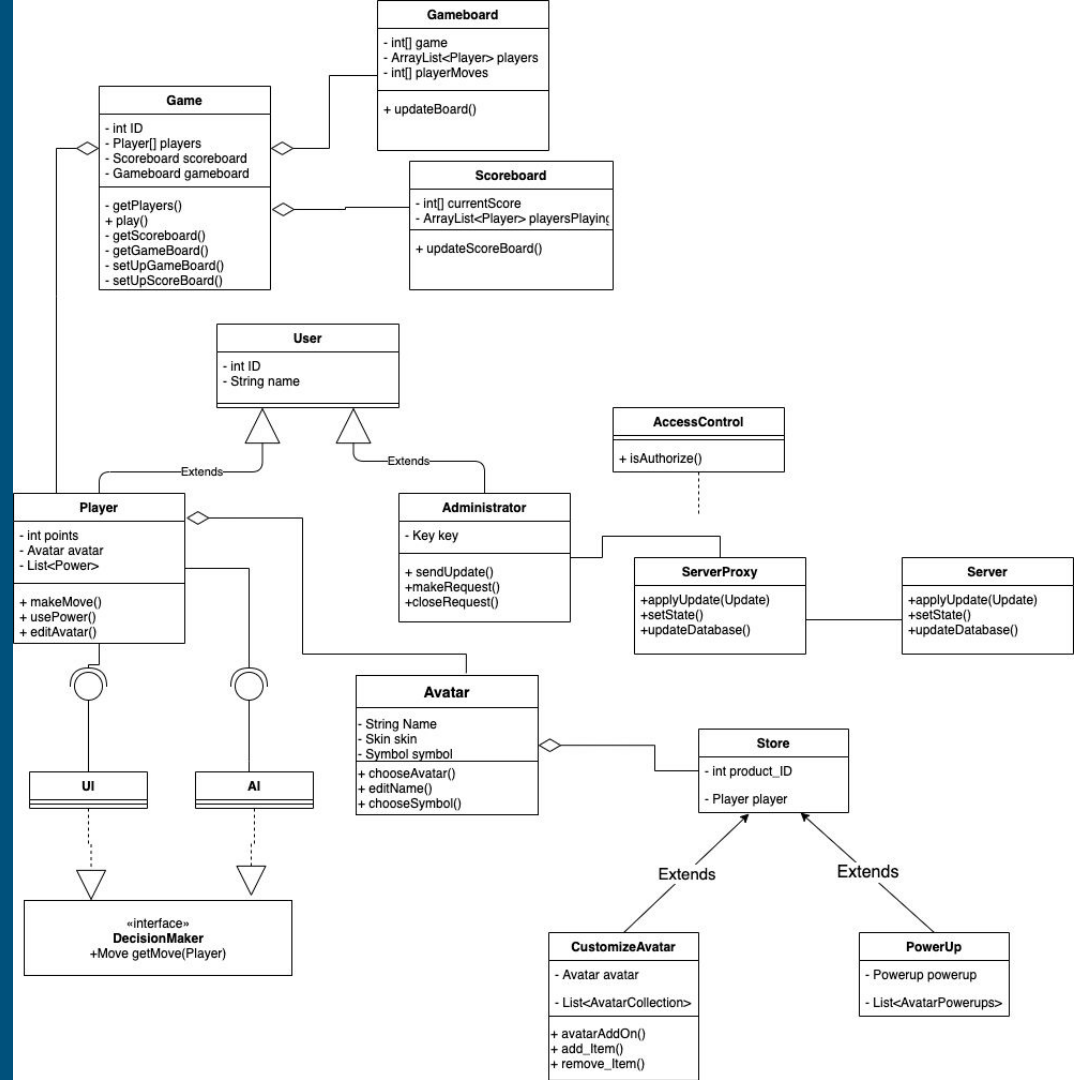
User class

Proxy design pattern and security proxy

Store Class

Game Class

Avatar Class