

Backend Assignment A

Problem Statement

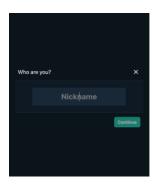
Create a deployable multiplayer Tic-Tac-Toe mobile game in React Native using Nakama backend with Go plugins

Task Details & Breakdown

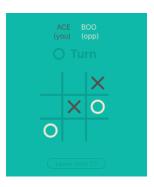
- Install Nakama with PostgreSQL as the database. Create custom Go plugins for Nakama that control the server logic.
- Implement device-based authentication. Generate JWT tokens to securely authenticate users.
- Establish a WebSocket connection between the client and Nakama server to manage real-time communication.
- Implement server-authoritative multiplayer mode to control and update the state of the Tic-Tac-Toe game. Ensure that the server manages the game state rather than relying on the client.
- Create a matchmaking mechanism to allow 2 players to join a game. Use matchmaking tokens for the players and implement queuing for 2 different game modes.
- Implement a leaderboard system that tracks the ranking and performance of players.

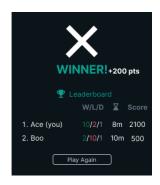
• Deploy the Nakama server and game to Google Cloud. Ensure that the server is scalable and can handle multiple simultaneous games.

Sample Implementation









How to share the assignment

Please share the **deployed link** game and code on **GitHub** along with a **VIDEO** recording that includes a concise presentation on how you have implemented the task, coupled with a demonstration showcasing its functionality.

Good Luck!