



ORTOS

Open Roundnet Tournament Software

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Introduction

ORTOS stands for Open Roundnet Tournament Organizing Software. We aim to create a set of tools to make running tournaments for roundnet easier and better.

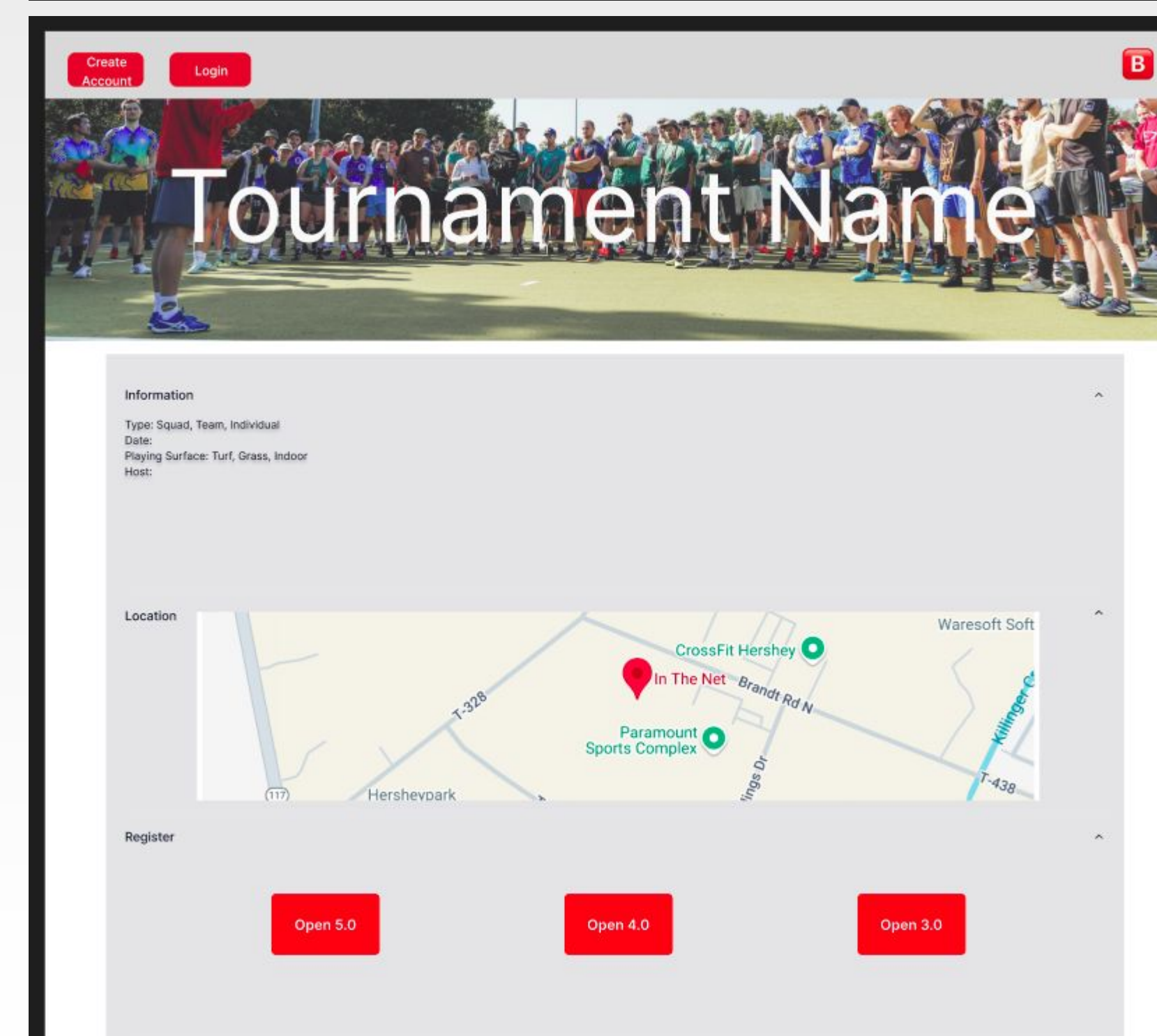
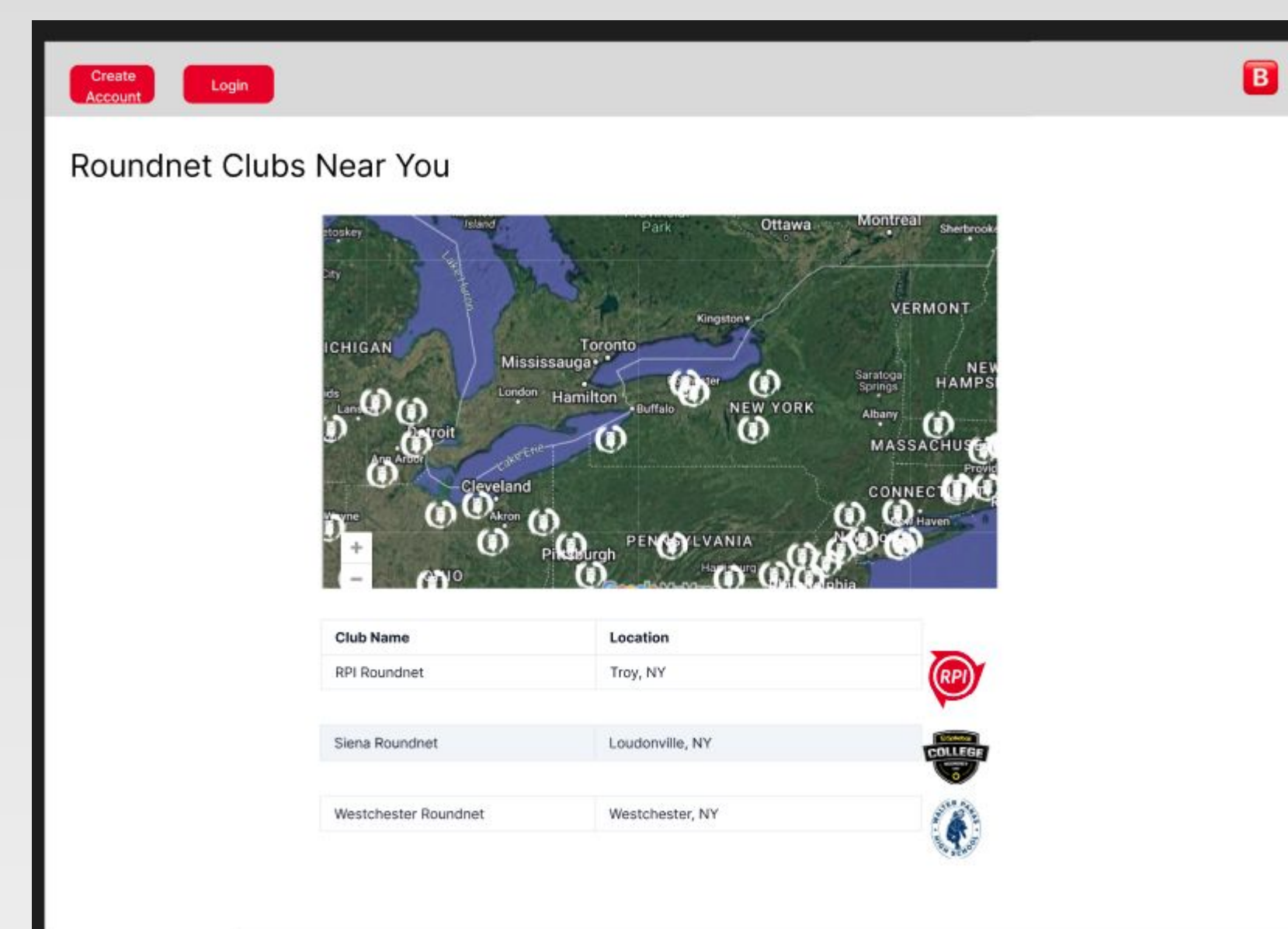
Why

The current software used for organizing roundnet tournaments in proprietary software owned by Spikeball Inc. and it has problems. ORTOS aims to offer a more flexible approach to tournaments by supporting leagues, squad formats, etc. We also have been inspired by Roundnet Germany’s Playerzone and we hope to implement our tools in a community hub that can help connect people to their local roundnet organizations and have more fun in the sport of roundnet

MVP Objectives

- Create a tournament that has one bracket stage with seeding, games, and score entry
- User authentication and database to store profiles, teams, and tournament information

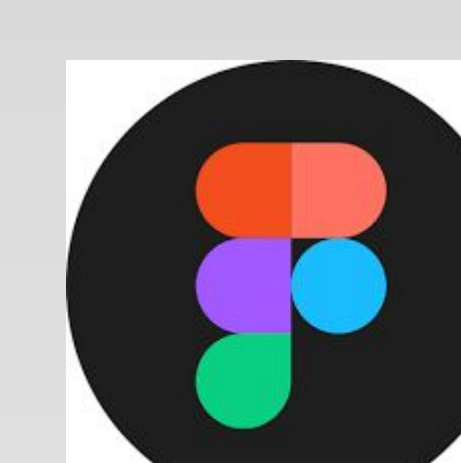
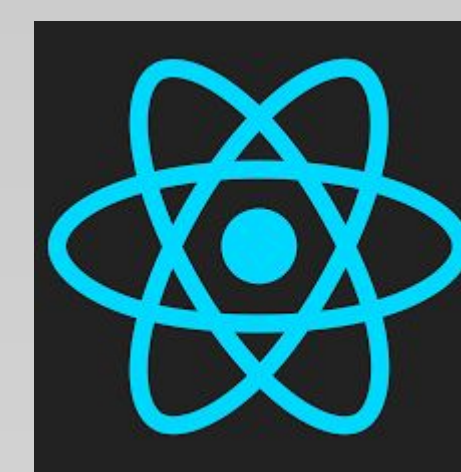
Design



Materials and Methods

Technology Stack:

- Frontend:
 - React JS with Expo and TypeScript
 - React Native Reusables (components)
- Backend:
 - Supabase
- Cloud Infrastructure:
 - Microsoft Azure - Container Instances
- Other:
 - Design - Figma
 - Version control, project boarding, CI/CD - Github

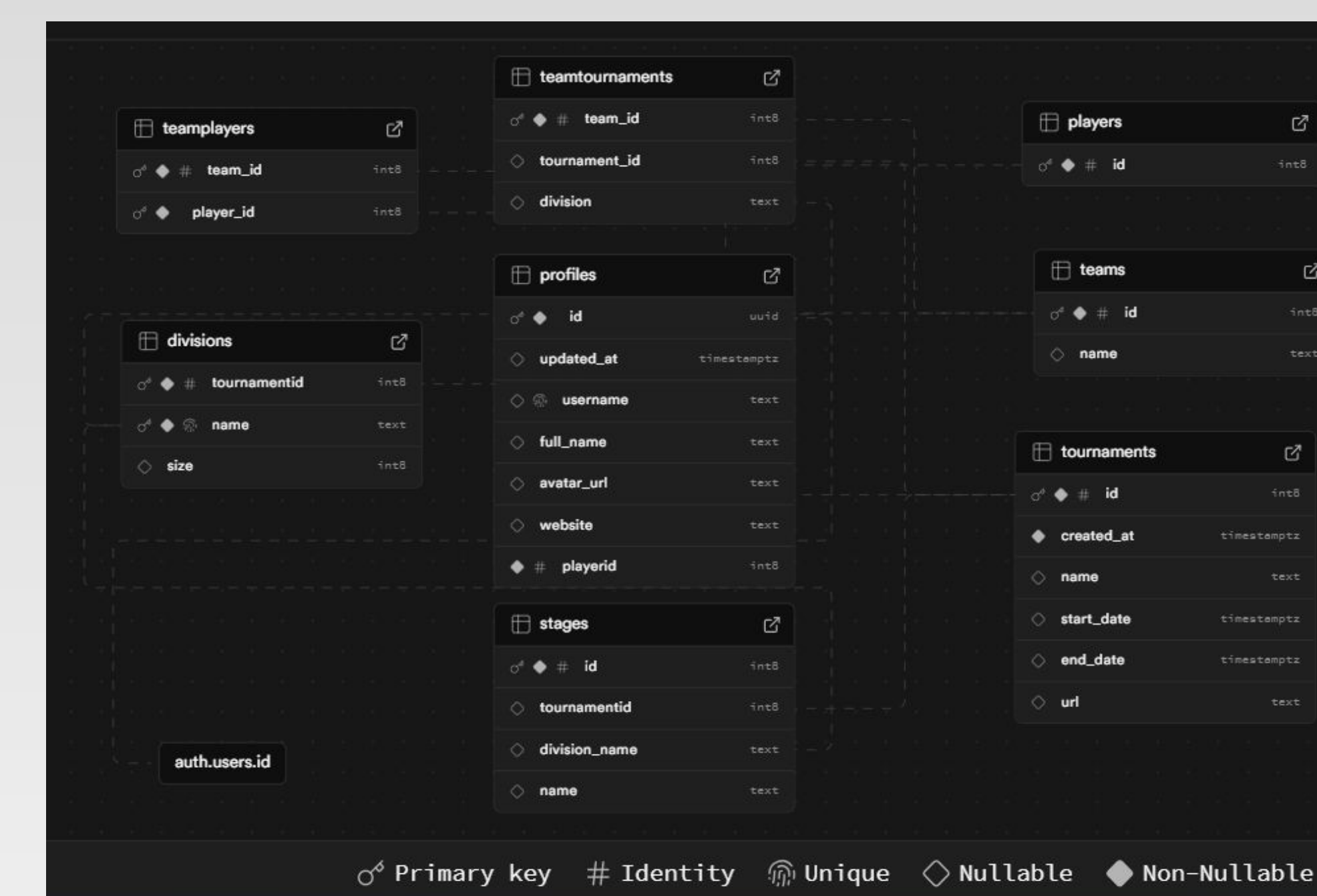
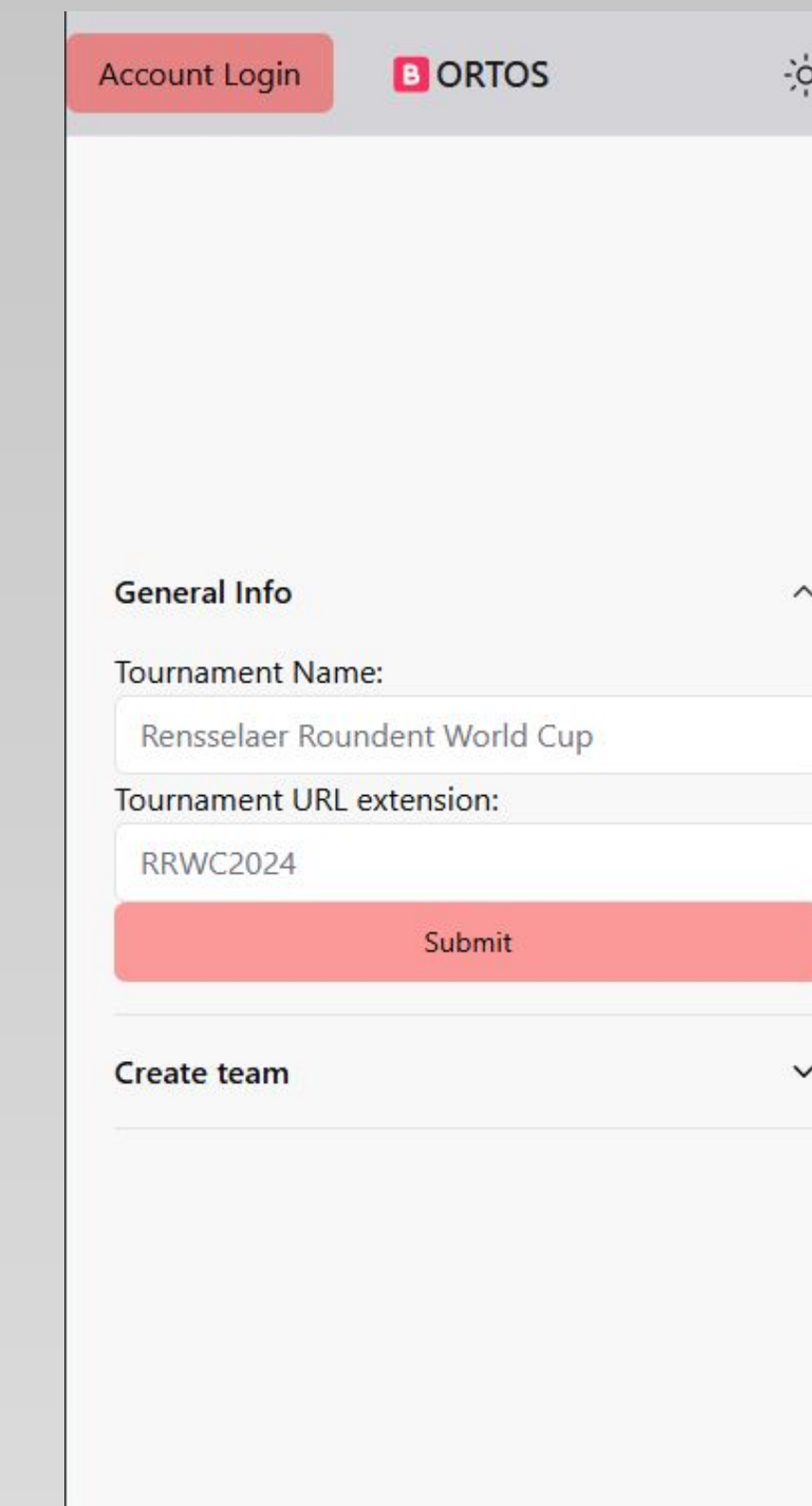
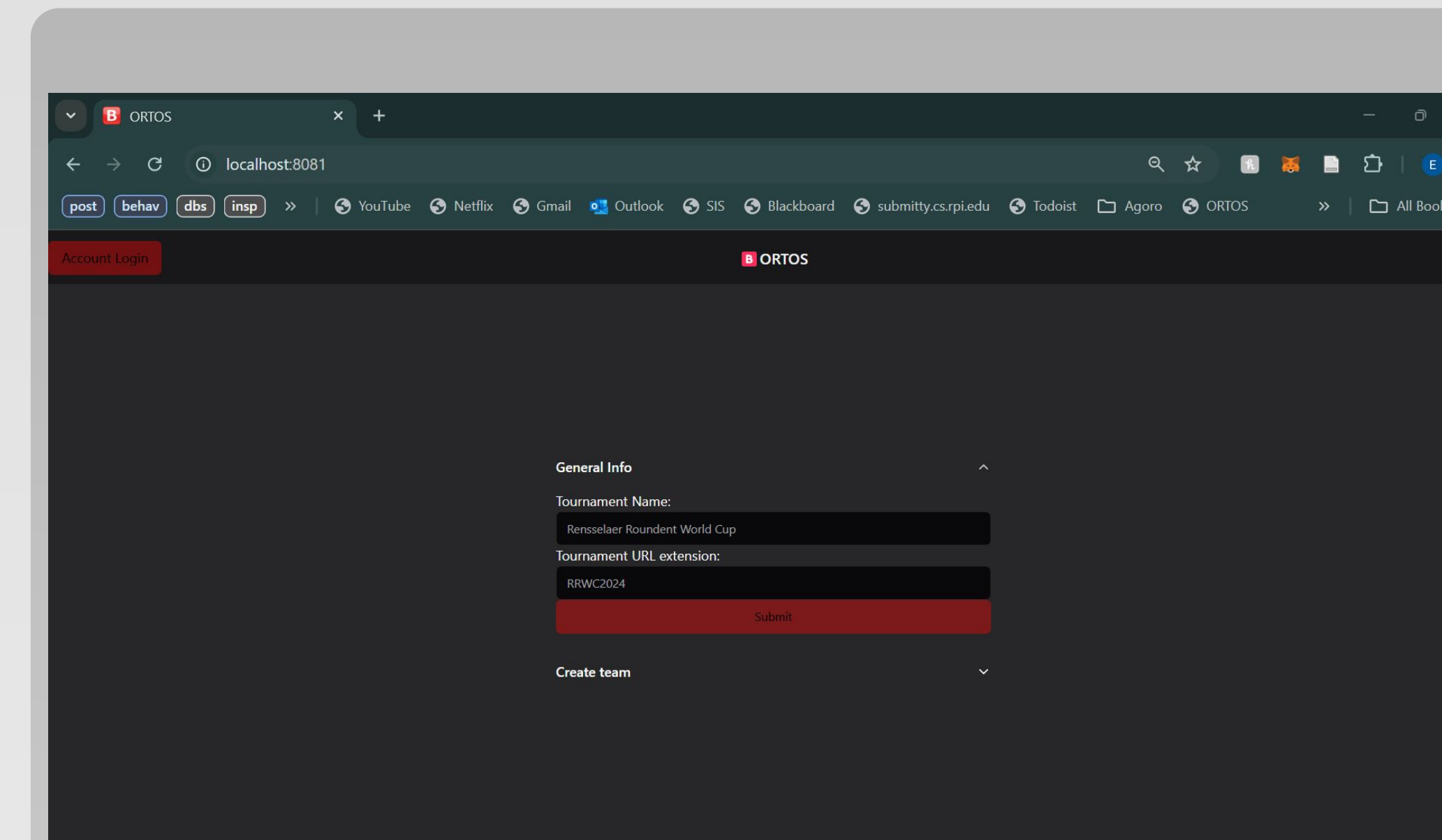


Challenges

- Limited frontend experience
- First web application ever developed
- Functionality on Mobile and Desktop

What We Accomplished

- Planning and Design
 - Figma diagrams for pages including tournament view and create, club hub, and more.
 - Research and decided on techstack
- Backend
 - User authentication setup in supabase
 - PostgreSQL database that works with authentication, and several tables needed for tournaments and profiles
- Frontend
 - Light and Dark Mode
 - Page frames for tournament create/view
 - Working tournament creation and view functionality



Conclusions

- Need to be better about working towards MVP. Easy to get sidetracked worrying about fine details and debugging tricky issues.
- More proficient in frontend and backend development
- I do not want to be a full time software developer - Kolton
- Gained experience in project management including creating/assigning tickets, reviewing pull requests and how to tackle blockers

Future Goals

- We will be back working on ORTOS next semester!
- In preparation for next semester we plan to study The Odin Project to help address our frontend challenges.
- First we must create database functions that allow for updating game scores so that brackets can function properly and this will complete our MVP
- Reach goals
 - Community hubs
 - Rankings
 - Squad and League formats
 - Payment
 - Membership management
 - Field maps with assignable nets for games and observers
 - Attaching video and statistics to individual games of tournaments
 - Fun community features i.e Roundnet Germany’s couch finder, wrapped, fantasy

References

- Other open source bracket(fastapi): <https://github.com/evroon/bracket>
- Database models of above link: <https://github.com/evroon/bracket/blob/master/backend/bracket/models/db/>
- Expo setup: <https://docs.expo.dev/get-started/set-up-your-environment/?platform=android&device=simulated>
- Expo/supabase integration tutorial: <https://docs.expo.dev/guides/using-supabase/>
- <https://supabase.com/docs/guides/getting-started/tutorials/with-expo-react-native?queryGroups=auth-store&auth-store=async-storage>
- Chatgpt for frontend: V0.dev
- Router Docs: <https://docs.expo.dev/router/introduction/>
- Rnr: <https://rnr-docs.vercel.app/getting-started/introduction/>

Acknowledgements

<https://fwango.io>
<https://playerzone.roundnetgermany.de/>