

ShuttleQL

SE464 Project Demonstrations

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Problem

- ▶ Hundreds of student playing at UW Badminton club
- ▶ Bad club management system
 - ▶ crowded line ups between games
 - ▶ manual error prone matchmaking
 - ▶ inefficient communication between execs and members

Solution

ShuttleQL

- ▶ Mobile web optimized player dashboard
- ▶ Web based admin management dashboard

Functional Requirements

Player Dashboard

- ▶ match checker
- ▶ announcement
- ▶ player profile

Admin Management Dashboard

- ▶ remote session management
- ▶ player registration
- ▶ player checkin / checkout
- ▶ user management
- ▶ announcement broadcast
- ▶ match overrides

Non-Functional Requirements

Portability

- ▶ Player dashboard must work on both mobile chrome and safari browser
- ▶ Admin management dashboard must work on web chrome and safari browser

Efficiency

- ▶ Micro services are difficult to coordinate
- ▶ Deploying is expensive due to so many services

Evolvability

- ▶ Court numbers can be changed through a config file
- ▶ Court can be specified as Single or Doubles game type

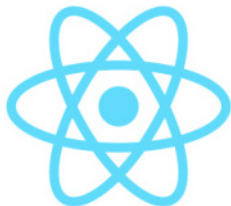
Unfinished Requirements

Dependability

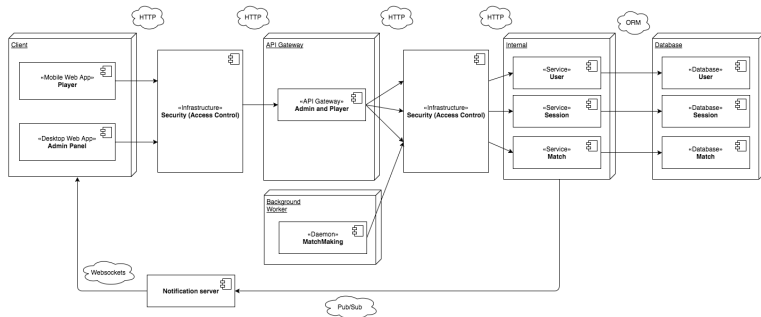


Architecture

Technologies



Architecture Diagram



Challenges

Challenges

- ▶ learning new technologies (scala, react)
- ▶ managing tasks
- ▶ micro services are difficult to deploy
- ▶ lack of time