

Design Requirements

Functional Requirements: Be able to formulate and display hole assignments, weekly schedule, team pairings, and leaderboard.

Non-Functional Requirements: Must have low cost and simple/easy to use interface.

Engineering Constraints: We decided utilized agile development and continuous Integration.

Operating Environment: Final product will be a website able to run on any device with internet.

Electronic Golf League Scheduler

Advisor: Mai Zheng

Client: Tina Prouty

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Nick Landon, Maxwell Farver

sddec21-03

Project Summary

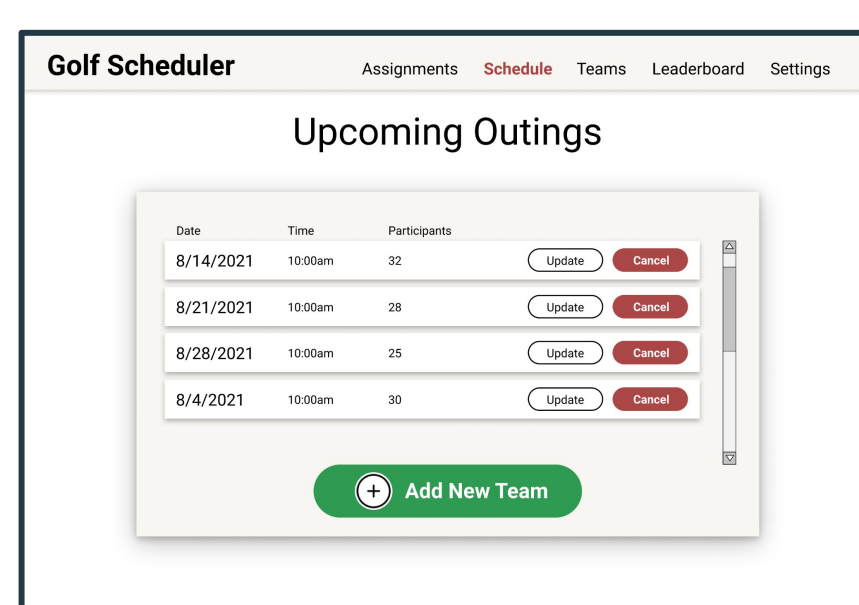
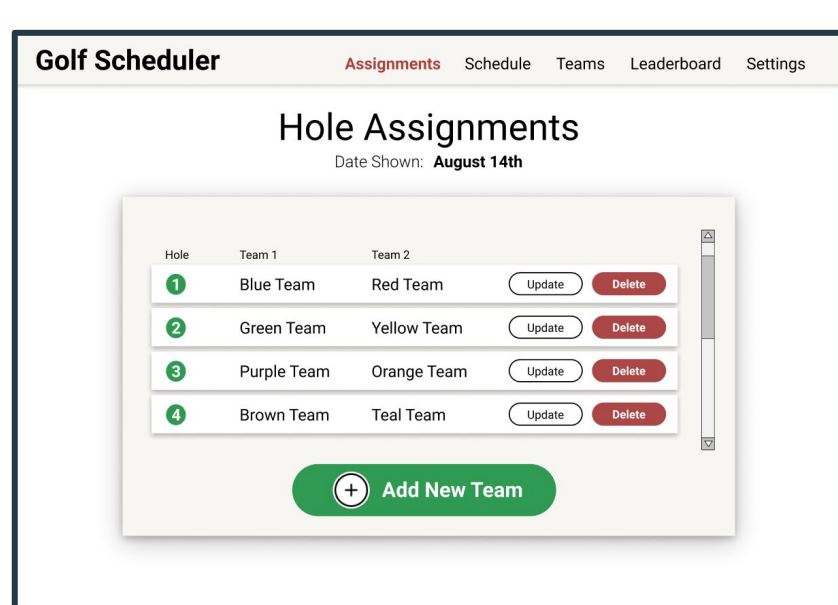
Problem Statement

Tina Prouty is an administrator for a women's golf league at Honey Creek Golf club in Boone, Iowa. Her current system for scheduling the league's weekly outings can no longer handle the size of the club, due to it requiring manual scheduling and adjustments.

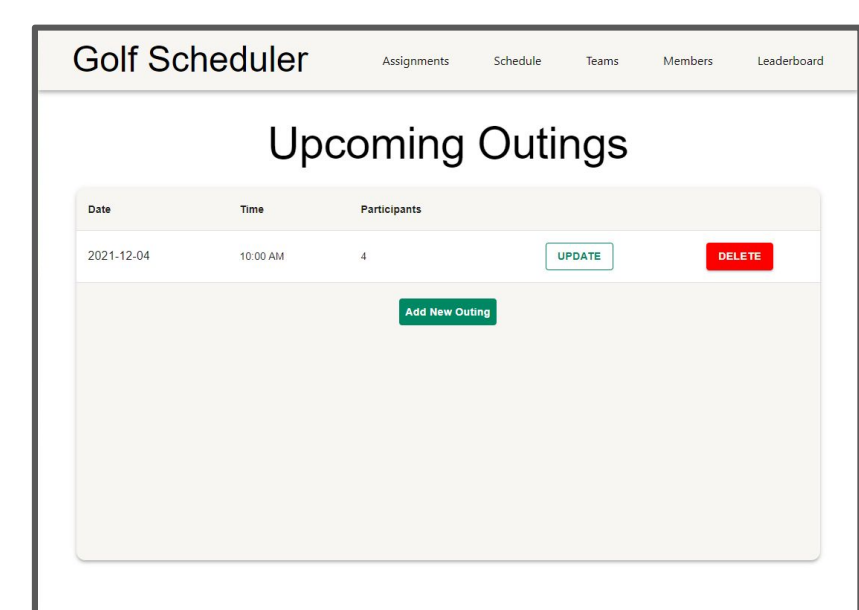
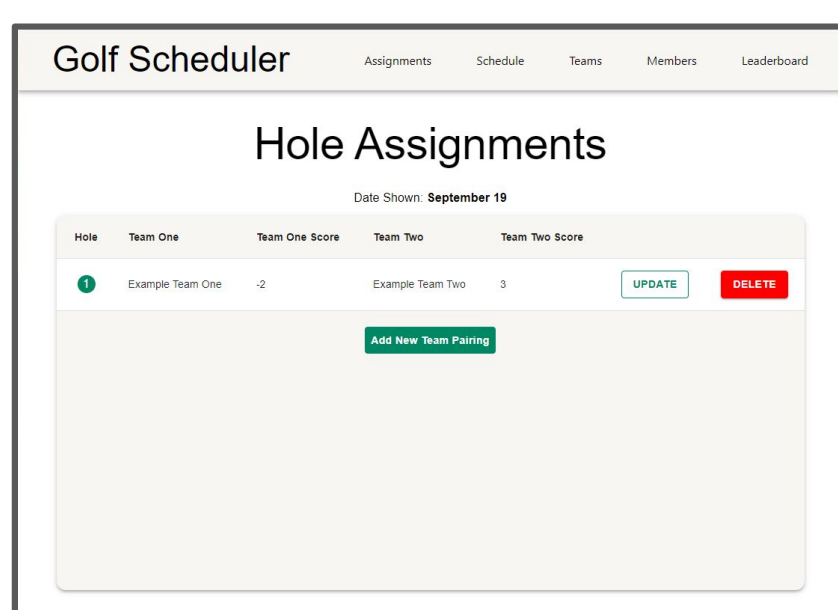
Solution

Our solution is to create a website accessible to our client. The site will allow her to enter player and team information and calculate/display a schedule for the league as well as other information such as team info, player info, and current standings.

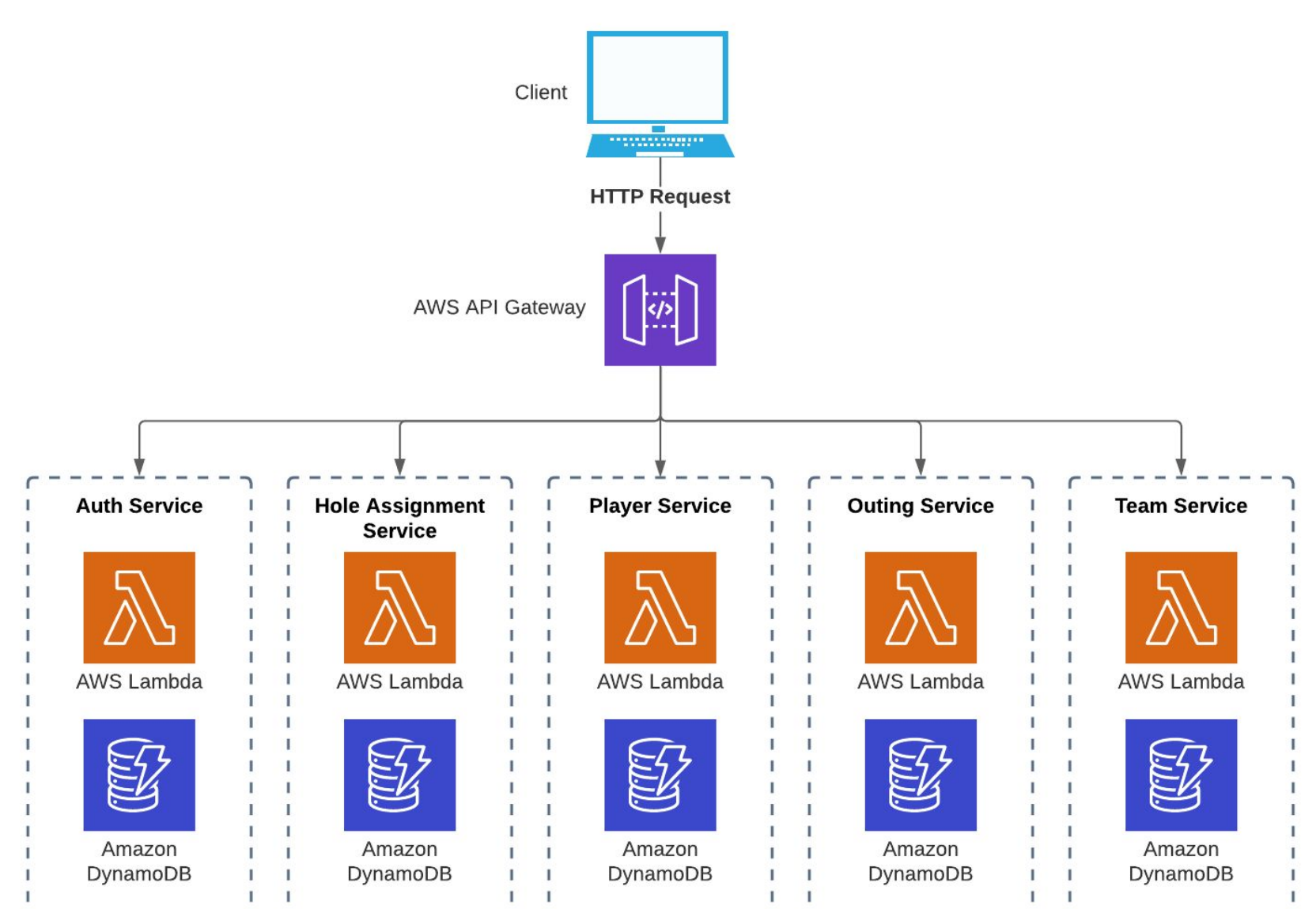
Concepts



Final Screenshots



Architecture Diagram



Testing

- Postman Collection used for endpoint testing
- Unit test coverage for all business logic and data access
- Mock database for ensuring database query correctness
- User Acceptance Testing

Technical Details

- Utilize AWS free tier for backed
- Node.js chosen for its cold starts
- DynamoDB chosen for compatibility with AWS and serverless architecture
- Netlify chosen for simplicity of deployment and domain configuration
- Single Page Application written in React