

THE LATE ARRIVALS:

ROSTER TRACK

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Overview

We had a goal to create “simple” rostering web application, which could possibly help a family friend to eliminate the hassles of using spreadsheets and manually emailing or printing.

RosterTrack is an online roster management platform designed to streamline team management. It is to provide an intuitive and efficient solution for creating, managing, and communicating team rosters.

It had to be simple, knowing that we would be busy during this final project. Low and behold, our work and life got even busier...

FEATURES

- **Secure login and user management (partially implemented):**

Secure login system to ensure that only authorized individuals can access the platform. You can also manage users, including adding, editing, and deleting users.

- **Automated email notifications (not implemented):**

Automated email notifications to team members for their assigned shifts. This helps to reduce manual communication efforts.

- **Create and manage team rosters (not implemented):**

Create and manage team rosters. You can easily add, edit, and delete employees, and you can also assign shifts to employees.

- **Interactive calendar interface (partially implemented):**

Easily see which employees are assigned to which shifts, and you can also see the availability of employees.

- **User roles (not implemented):**

Supports different user roles, so you can give different users different permissions. For example, owners/admins have full roster management capabilities, and you can give standard users the ability to view the calendar and their assigned shifts.

TECH STACK (MERN)

Frontend

- React
- Redux
- Material-UI
-

Backend

- Node.js
- Express
- MongoDB

Database

- MongoDB

TRIED MULTIPLE HOSTS...

AWS

- To familiarise with AWS architecture and its robust security settings.
- Unfortunately, it took a chunk of time just setting up accounts.

Cloudflare

- CORS issues
- Serverless host

Netfiliiy

- Required payment for public repos

Render

- No credit card registration
- After a week of troubleshooting, it worked for both frontend and backend

OPTIMISTIC USER STORIES

Staff

Staff members can use RosterTrack to view their schedules, set their availability preferences, and receive notifications about changes to their schedules.

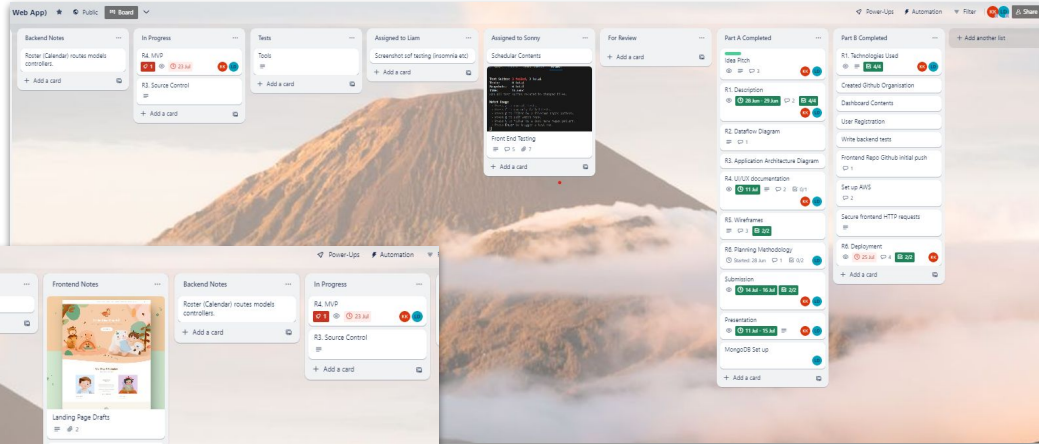
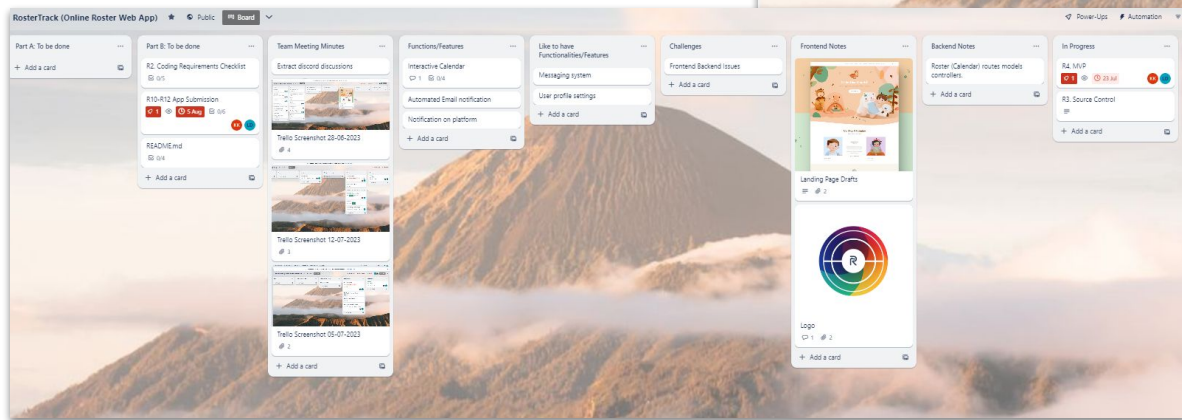
Managers

Managers can use RosterTrack to create and manage team rosters, assign shifts to employees, and communicate with employees about their schedules.

Directors

Directors can use RosterTrack to track the availability of employees and ensure that adequate staffing is in place for all shifts.

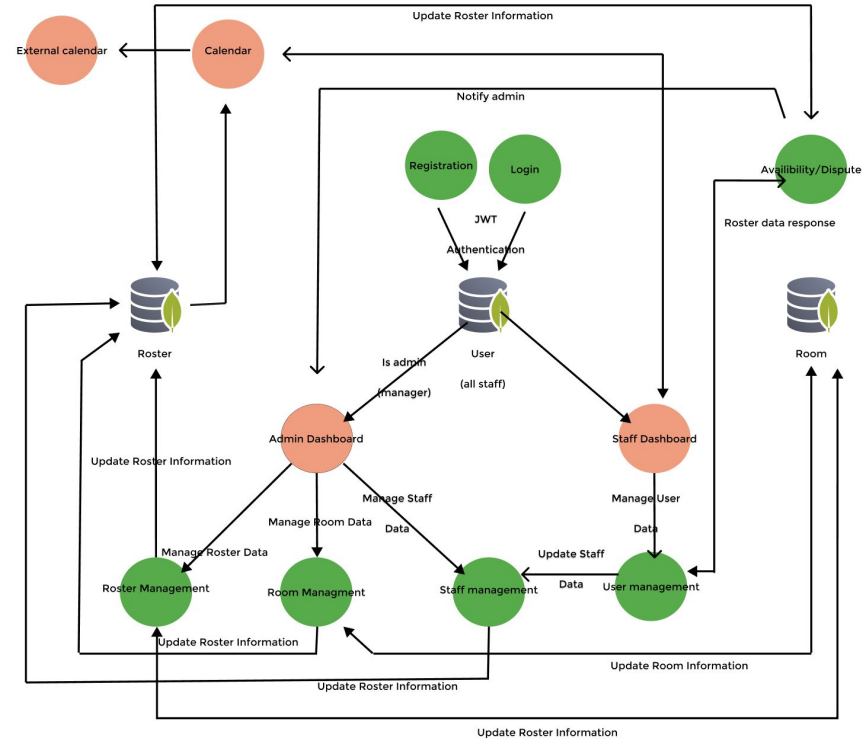
THE PLAN (KANBAN STYLE)



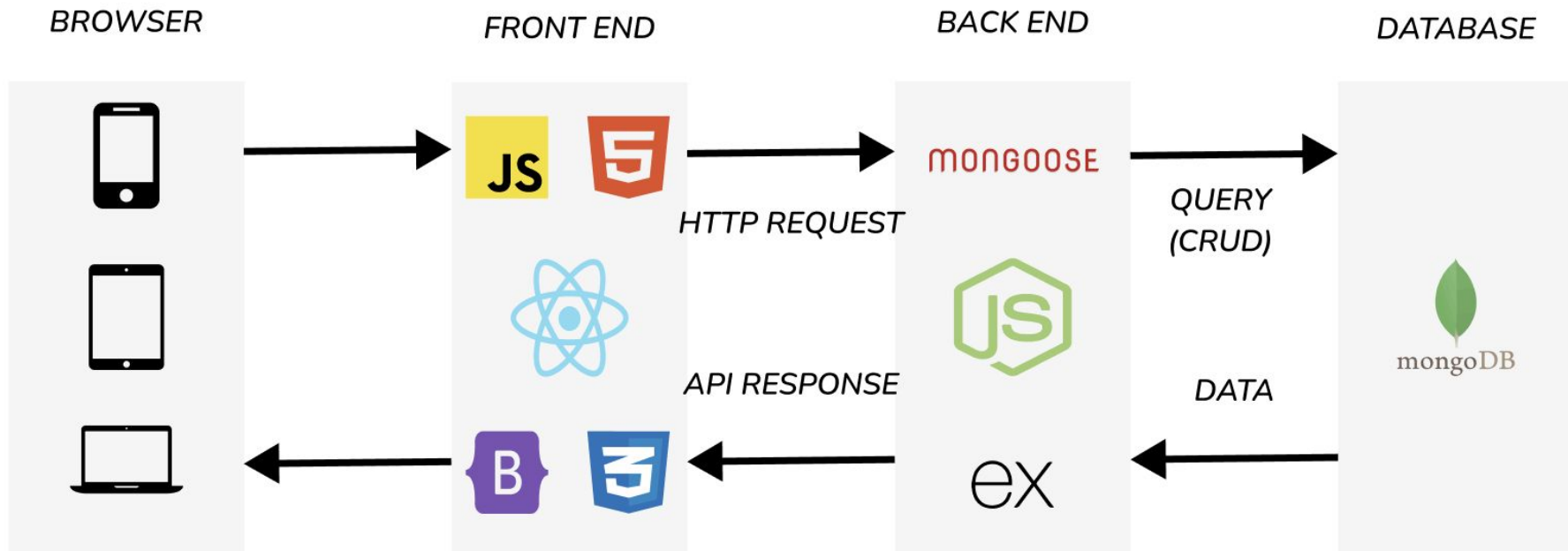
Agile Methodology

Agile is great for quick changes and teamwork. It's perfect for us since we collaborate remotely and need to adjust plans or goals during our busy schedules.

THE PLAN: DATA FLOW DIAGRAM



THE PLAN: APPLICATION ARCHITECTURE DIAGRAM



THE JOURNEY


THE JOURNEY...

Locally

We've managed to set out our framework for the frontend and backend very early on. Locally, the registration function work and sent user's data to the Mongo Database.

Log in' is visible. The browser's address bar shows 'localhost:3000'." data-bbox="428 154 937 886"/>

localhost:3000



RosterTrack

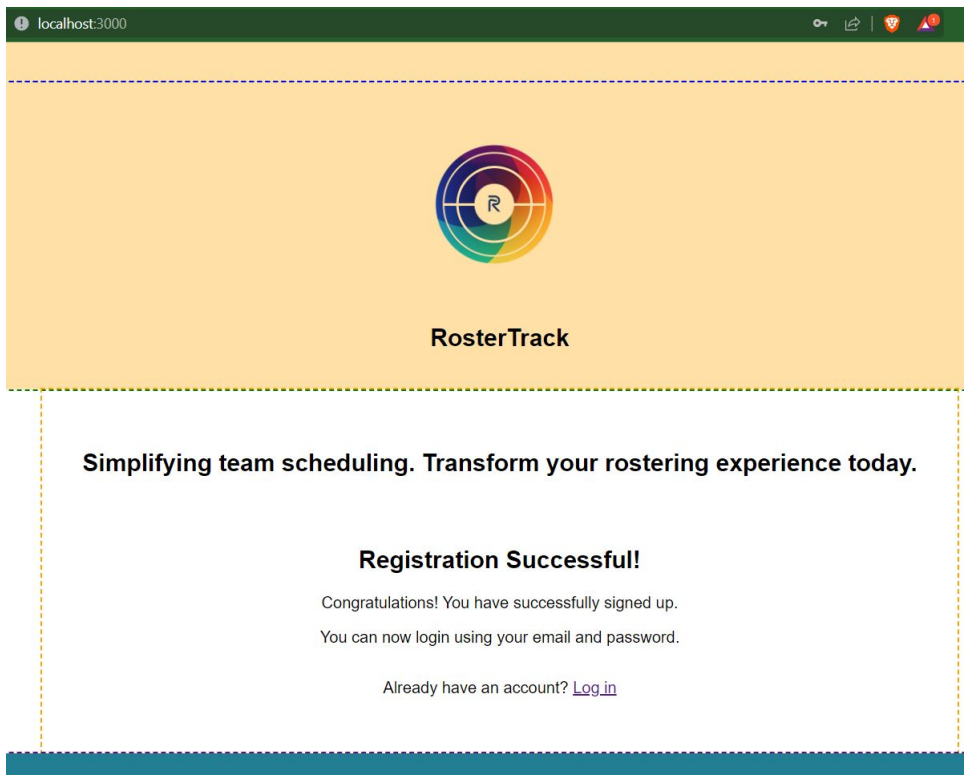
Simplifying team scheduling. Transform your rostering experience today.

slidedeck

last@minute.com

Sign Up

Already have an account? [Log in](#)



Locally

Message to user on
successful registration

```
_id: ObjectId('64cf60386f580cc58f8bfab7')
username: "slidedeck"
password: "$2b$10$P1gwU0j2nD7rLG5YK0ZQtuHfcnGze3f3oY0hB4QXpqJ5B8ZcG031S"
email: "last@minute.com"
is_admin: false
__v: 0
```

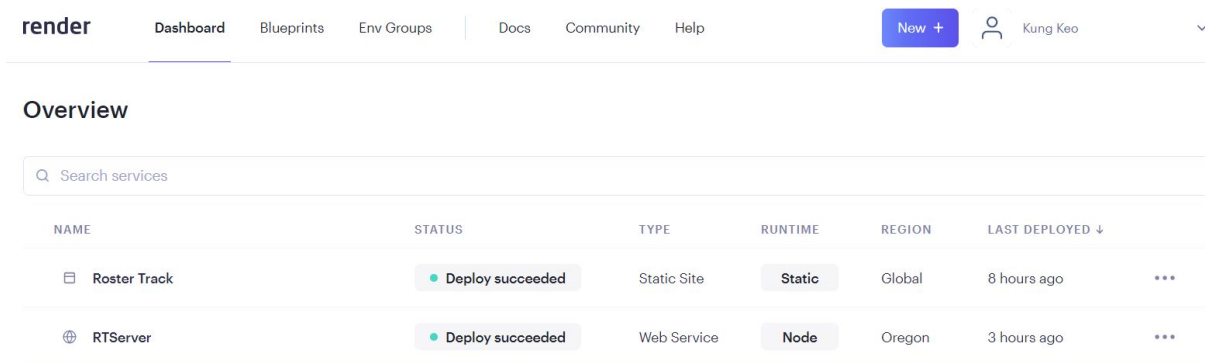
Locally

From the local machine, user had successfully registered their details to MongoDB.



THE JOURNEY...

Deployment

Deployment took a toll on us, as we took a very long time to figure out what was causing the CORS error.



The screenshot shows the Render dashboard interface. At the top, there's a navigation bar with the 'render' logo, tabs for 'Dashboard', 'Blueprints', 'Env Groups', 'Docs', 'Community', and 'Help'. On the right of the navigation bar, there's a 'New +' button, a user profile icon for 'Kung Keo', and a dropdown arrow. Below the navigation bar, the 'Overview' section is active. It features a search bar labeled 'Search services'. Below the search bar is a table listing services. The table has columns for NAME, STATUS, TYPE, RUNTIME, REGION, and LAST DEPLOYED. Two services are listed: 'Roster Track' and 'RTServer'. Both show a 'Deploy succeeded' status. 'Roster Track' is a Static Site using the 'Static' runtime, located in the 'Global' region, and was last deployed 8 hours ago. 'RTServer' is a Web Service using the 'Node' runtime, located in the 'Oregon' region, and was last deployed 3 hours ago. Both services have a three-dot menu icon to their right.

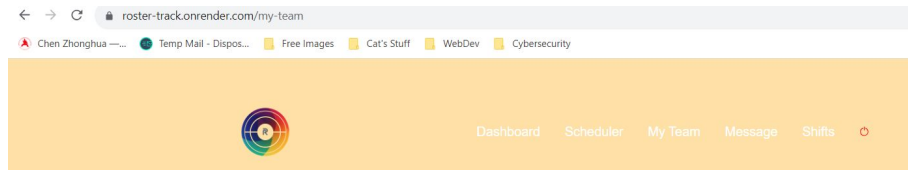
NAME	STATUS	TYPE	RUNTIME	REGION	LAST DEPLOYED ↓
 Roster Track	● Deploy succeeded	Static Site	Static	Global	8 hours ago ...
 RTServer	● Deploy succeeded	Web Service	Node	Oregon	3 hours ago ...

Ans: REACT_APP prefix

THE JOURNEY...

Site is live

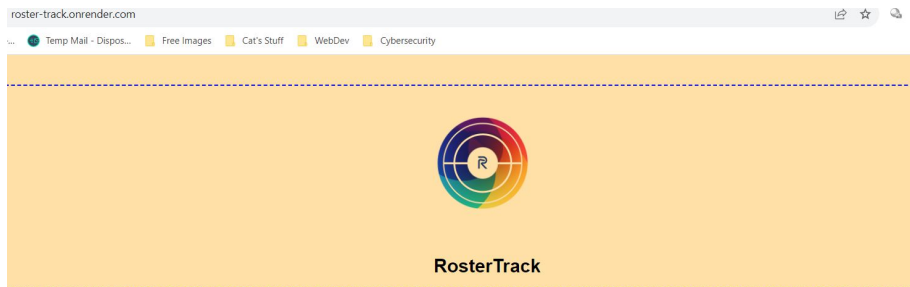
<https://roster-track.onrender.com/>



My Team

Enter first name Enter last name Enter email Add Staff

- Alex Holder - holder@ca.com Delete Staff
- Jairo Bilbao - bilbao@ca.com Delete Staff



Simplifying team scheduling. Transform your rostering experience today.

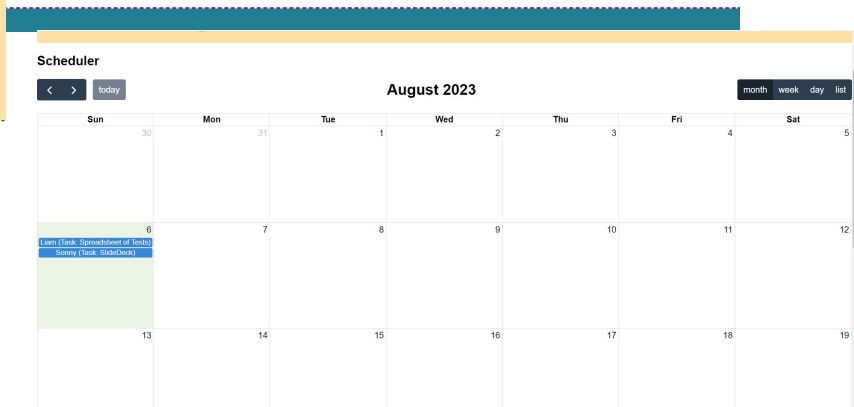
Username

Email

Password

Sign Up

Already have an account? [Log in](#)



THE JOURNEY...

under construction

- Project unfinished.
- Partially implemented two features.
- Multiply road blocks
 - Deployment
 - Environment Compatibility
 - Worklife
 - Family

THE JOURNEY...

Lessons

- Features that we thought were simple, were not simple
- Different host requires certain environment settings

GOALS FOR NEXT PROJECT

Create a extremely
simple web app that
fits into our work/life
schedule