VT Carpool

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TABLE OF **CONTENTS**

PROJECT DESCRIPTION

- Carpooling is connecting people who are going to a common destination.
- It reduces each person's travel costs by saving on fuel.
- Carpooling also reduces traffic congestion and saves the environment by reducing fuel intake.

CONTEXT & **BACKGROUND**

EXCLUSIVITY

This application is exclusive for Virginia Tech students and employees

NETWORKING

Help hokies of different majors network in a safe way

PROJECT GOALS

- Implemented a carpool web application prototype localized to Blacksburg and neighbouring areas.
- Connect rider and ride seeker travelling to a same destination.
- Google Map integration for route visualization and picking rider seekers on the way.

CORE **FEATURES**

Ease

Source and destination based matching

Safety

Safety through the Hokie Community

Security

Email Verification for security and authorization

User Experience

Request rides from Ride providers by Ride seekers

IDE & **TOOLS**

VISUAL STUDIO

Our main code editor
and for version Control

NODE JS

Back end using
REST APIs

REACT

For creating an engaging
UI

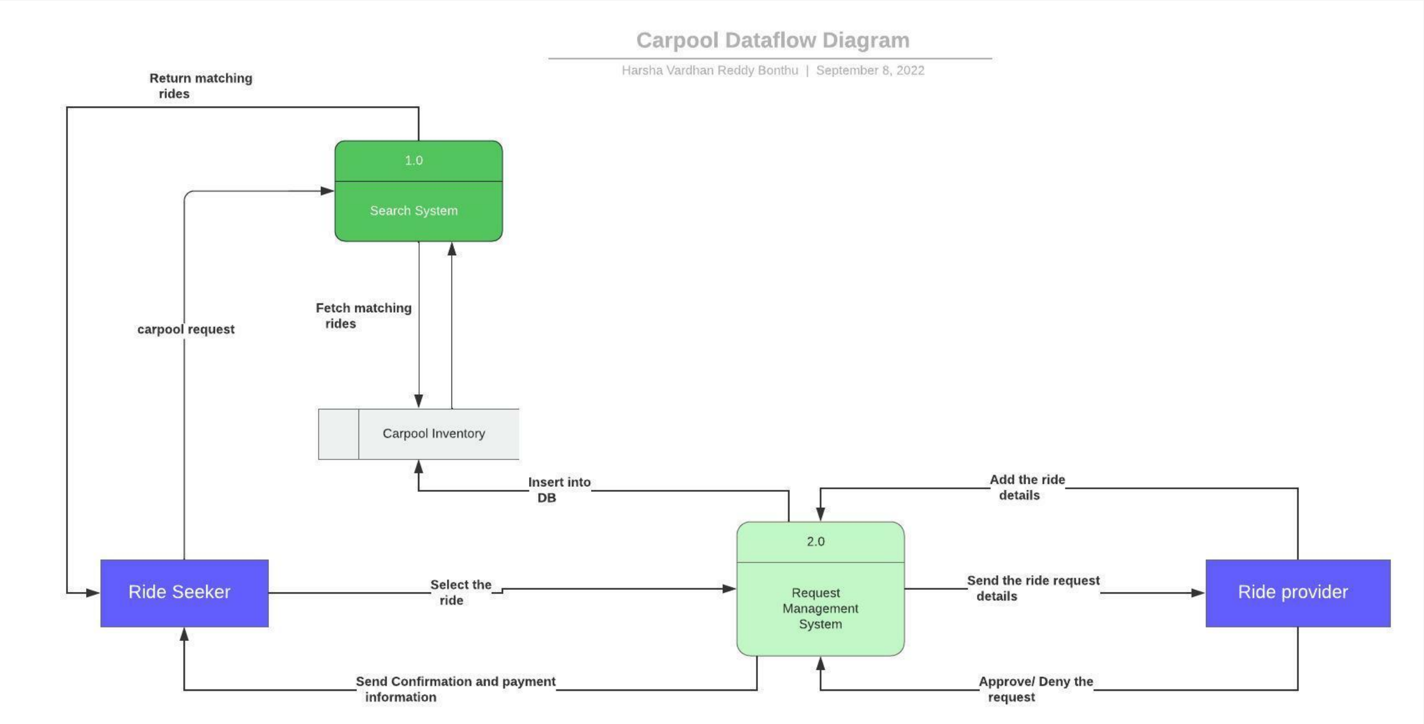
MONGODB

Store all the ride and
user details

TECHNICAL DETAILS

- Using Rest API to update the database with the required details.
- Used the flexibility of mongoDB database to create new entries as part of the database.
- With the help of react to create a dynamic website with passing the data into the different pages of the website.

DATA FLOW **DIAGRAM**



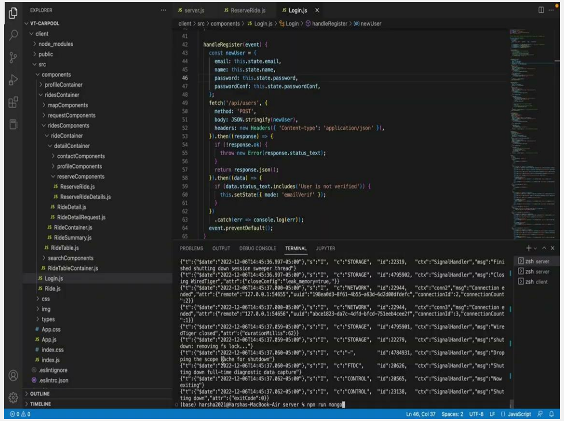
CHALLENGES

- Implementing a secure cryptic algorithm to store private information.
- Designing schema of MongoDB and writing API calls to fetch appropriate data.
- Finalizing data flow process to prevent any anomalies or bugs.

LESSONS LEARNED

- Best principles when using react when it comes to creating a dynamic website.
- Handling asynchronous calls in Node JS.
- Learned how to properly plan and track sprints while trying our best to achieve that goal.

DEMO TIME



THANK YOU