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CSE299

Project Proposal

Presentation

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RideZ0

A platform designed to help NSU students share rides, reduce transportation costs, and minimize campus traffic congestion.



Motivation of the project

The motivation for developing the **RideZ0 App** stems from the need for a reliable, cost-effective, and eco-friendly transportation solution for NSU students. The current transportation options are expensive and lead to high traffic congestion on campus. This app addresses these issues by offering students the ability to carpool, reducing transportation costs, and promoting sustainability on campus.



Project Goal

The goal of the **RideZ0** app is to:

1. Provide an easy-to-use platform for students to share rides to and from NSU.
2. Integrate Uber API for fare estimation and seamless ride booking.
3. Enhance student safety through real-time tracking, emergency features, and NSU credential verification.
4. Create a user-friendly and reliable ride-sharing experience for students.



Project Scope

Target Audience

- NSU students (with future plans for expansion to other universities).

Platform

- Flutter** for cross-platform mobile app development (iOS and Android).

Core Features

- User authentication with Firebase.
- Ride slot creation and joining.
- Fare calculation and splitting using Uber API.
- Real-time tracking and push notifications.
- Chat System.



Tools to be Used

Software:

- **Android Studio** for app development.
- **Flutter** for cross-platform mobile app development (for both iOS and Android).

Database Management:

- **Firebase** for user authentication, real-time database storage, and push notifications. Firebase will manage ride slot data, user profiles, and communication features.

API Integrations:

- **Google Maps API** for location-based services (ride tracking, route mapping).
- **Uber API** for fetching ride fare estimates and integrating Uber bookings.

Version Control:

- **GitHub** for version control and team collaboration during development.



Expected Outcomes

1. Convenient and Cost-effective Transportation: Students can easily share rides and split costs, leading to reduced transportation expenses.

2. Traffic Reduction: By promoting ride-sharing, the app will reduce traffic congestion on campus.

3. Enhanced Safety: Real-time ride tracking and emergency features provide added security for students.

4. Community Engagement: The app encourages social interaction among students by facilitating carpooling.

Conclusion

The **RideZ0 App** will provide NSU students with a cost-effective, secure, and convenient transportation solution, addressing issues such as high transportation costs and traffic congestion.

THANK YOU