Project overview

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Our project endeavors to develop a robust mobile application akin to UBER for moving services, with the primary objective of simplifying and enhancing the moving process for both customers and movers. By addressing prevalent challenges such as fragmented processes, difficulty in comparing price proposals, inefficiencies in coordination, and limited visibility for movers, we aim to revolutionize the moving services industry.

1.What is the problem you are trying to solve?

•Facilitate the moving process for customers and movers.

•Reduce moving costs.

•Create a sense of security in the process using a rating system.

2. Describe briefly, in high level your presumed solution

An application similar to UBER for moving services that connects customers with movers (both registered and private individuals). It relies on a database of current customers and matches them with different movers that suit their needs.

3. Are there other approaches?

An EASY mock product, which is essentially a forum for movers' advertisements, leaves the decision and contact initiation to the customer, unlike our product where the mover reaches out to the customer.

4. Who are the expected users of the application?

From the customer's perspective: people in the process of moving houses, people interested in equipment transfers (even on a small scale), professional movers, and individuals with suitable vehicles for various types of moves seeking secondary income.

5. Are there any external dependencies?

Integration with mapping or navigation services for routing and distance calculations.

Key Features:

1. Automated Matching: Utilize algorithms to match customers with suitable movers based on their requirements and preferences.

2. Rating System: Implement a robust rating system where customers can rate movers based on their experience, ensuring quality service.

3. Real-time Chat Communication: Facilitate direct communication between customers and movers through an in-app messaging system, enabling them to discuss details, ask questions, and coordinate the move efficiently.

4. Privacy-Preserving Matching: Implement a privacy-preserving matching algorithm that ensures the confidentiality of customer information until the final stage of the matching process. Instead of sharing the exact location of the customer upfront, the system utilizes proximity-based matching, wherein potential movers are only provided with general proximity information (e.g., distance from their current location to the customer's area). Once a customer selects a mover and confirms the booking, their precise location is shared securely with the chosen mover for the purpose of facilitating the move. This approach safeguards customer privacy while still enabling efficient matching and coordination between customers and movers.

Main Features and Flows for Users

Customer:

Create Moving Request:

- Users can easily create a moving request by providing details of the items to be moved, including dimensions (length, width, height), quantity, and any special handling instructions.

Receive Price Proposals:

- Upon posting the moving request, customers receive price proposals from both registered and private movers within their preferred radius. These proposals include estimated costs for the move based on the provided details.

Select Desired Mover:

- Customers have the flexibility to review and compare price proposals from different movers. They can then select the desired mover based on factors such as price, availability, ratings, and reviews.

Rate Mover:

- After the move is completed, customers have the option to rate and provide feedback on their experience with the chosen mover. This rating system helps maintain quality and transparency within the platform.

Mover:

Register and Set Preferences:

- Movers can easily register on the platform and set their preferred radius and distance for service coverage. This ensures that they receive moving requests within their specified area.

Publish Cargo Capacity:

- Upon registration, movers can publish details of the cargo capacity available in their vehicle. This includes information about the types of items they can transport and the maximum load they can accommodate.

Receive and Review Requests:

- Movers receive moving requests that match their specified preferences and cargo capacity. They can review the details of each request, including the items to be moved and any special requirements.

Reach Out to Customers:

- Movers can proactively reach out to customers they've been matched with to discuss the moving details and finalize the arrangements. This communication allows for efficient coordination and ensures a smooth moving process.

Proceed with Move:

- Once the mover and customer agree on the terms and arrangements, the mover proceeds with the move as scheduled. They handle the transportation of items with care and ensure timely delivery to the destination.

Technical and Technologies in the project:

Front end:

React native

As the project aims to develop a mobile application similar to UBER for moving services, React Native is an ideal choice for building the front end of the application. It enables the creation of a responsive and user-friendly interface that works seamlessly across different devices.

Backend:

ASP.NET: In this project, ASP.NET will serve as the backbone of the application's backend infrastructure. It will be responsible for processing requests from the mobile app, managing user data, handling business logic, and interacting with the database.

MySQL DataBase:

MySQL will be used to store various data entities within the application, such as user profiles, moving requests, mover details, ratings, and more. It provides a solid foundation for managing and organizing the application's data in a structured manner.

Hosting platform:

Kubernetes will be utilized as the cloud platform for hosting and managing the application's containerized components, ensuring scalability, resilience, and efficient resource utilization. It provides a flexible and robust environment for deploying and running the application in a cloud-native manner.