**Week 1 Research Document**

1. **Purpose of Research**

The purpose of this study is to analyze existing carpooling platforms in order to understand their features, user interfaces, and overall workflows. This will help us develop a more efficient and successful version of our carpooling web application.

The platforms researched are:

* Uber pool
* Lyft Line
* BlaBlaCar
* Waze Carpool
* Scoop

1. **Research**
   1. **Uber Pool**

* **Overview**: Uber Pool reduces expenses and eases traffic by allowing users to share a ride with other users traveling in the same direction.
* **Key Features** :
* Ride matching based on location & route.
* Automatic cost-sharing between riders.
* Real-time tracking of rides.
* **User Interface Elements** :
* Ride request form(pickup , drop , time).
* Map to view ride route.
* **Simplification of our Project** :
* Focus only on ride search and posting (ignore cost-sharing)
  1. **Lyft Line**
* **Overview:** seeks to connect drivers and passengers going to similar locations.
* **Key Features :**
* Route optimization based on traffic conditions.
* Push notification for available rides.
* Uses Google Maps for navigation.
* **User Interface Elements** :
* Routes are highlighted .
* Notification for ride matches.
* **Simplification of our Project** : Use only manual ride search or enter pickup and drop .
  1. **BlaBlaCar**
* **Overview:** A popular long-distance carpooling service connecting drivers and passengers.
* **Key Features :**
* Users can offer rides or book available seats.
* Driver & passenger profiles with ratings.
* Messaging system for coordination.
* **User Interface Elements** :
* Ride listings with price & seat availability.
* Driver profile page.
* **Simplification of our Project** : Functionality of seat availablitiy.
  1. **Waze Carpool**
* **Overview:** Waze Carpool was a feature in the Waze app that connected drivers with riders heading in the same direction.
* **Key Features**: It utilized Waze's real-time traffic data for route matching, allowed for advance or last-minute scheduling, and facilitated cost-sharing.
* **Simplification for our Project:** The project will focus on a manual ride search and posting system, omitting the complex, real-time matching algorithms.
  1. **Scoop**
* **Overview**: Scoop is a carpooling platform that primarily organizes commutes for employees by partnering with their companies.
* **Key Features:** It focuses on matching colleagues for daily commutes, provides smart scheduling, and offers flexibility by allowing users to be either a driver or a rider.
* **Simplification for our Project:** The project will implement a straightforward ride-scheduling function, without the corporate-level features like a "Guaranteed Ride Home."