User Story:

1. As a user, I wish to reserve a car for future use on Uber.

When the user opens the Uber app, they can type or select the pickup location and time to view the reservation results, which will be sent via email to the user.

2. As a user, I would like to share information about Uber with others.

Upon opening the page, the user can press the "share" button to share the information with those they choose.

3. As a user, I want to see my current location on a map.

Upon opening the Uber app, a map with a marker for the user's GPS location will be displayed.

4. As a user, I want to search for an address or landmark and see it on the map.

Upon opening the Uber app, the user can click the search bar and enter an address or landmark name to view a list of search results for relevant addresses. Upon clicking on a search result, the address will be marked on the map, and the map view will move to the marker.

5. As a user, I wish to provide feedback on the car/driver.

After the user completes the trip, a window will appear for them to write a comment. When the user clicks on a car, a list of comments collected from other users for that driver will be displayed.

6. As a user, I want to choose the type of car that suits me when reserving an Uber.

When the user opens the Uber app, different car models and service rates will be displayed for them to choose from.

7. As a user, I want to know the prices for different locations and see them on the map.

When the user opens the Uber app, they can type in an address or click on a landmark to view the prices for that location on the map.

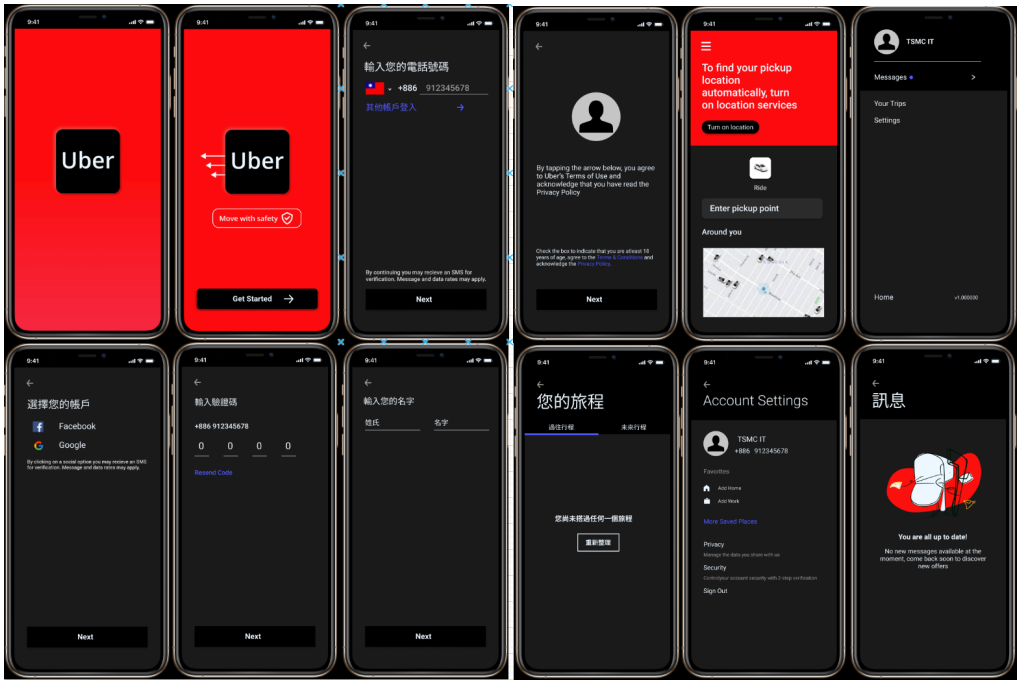
8. As a user, I want the option to carpool with others.

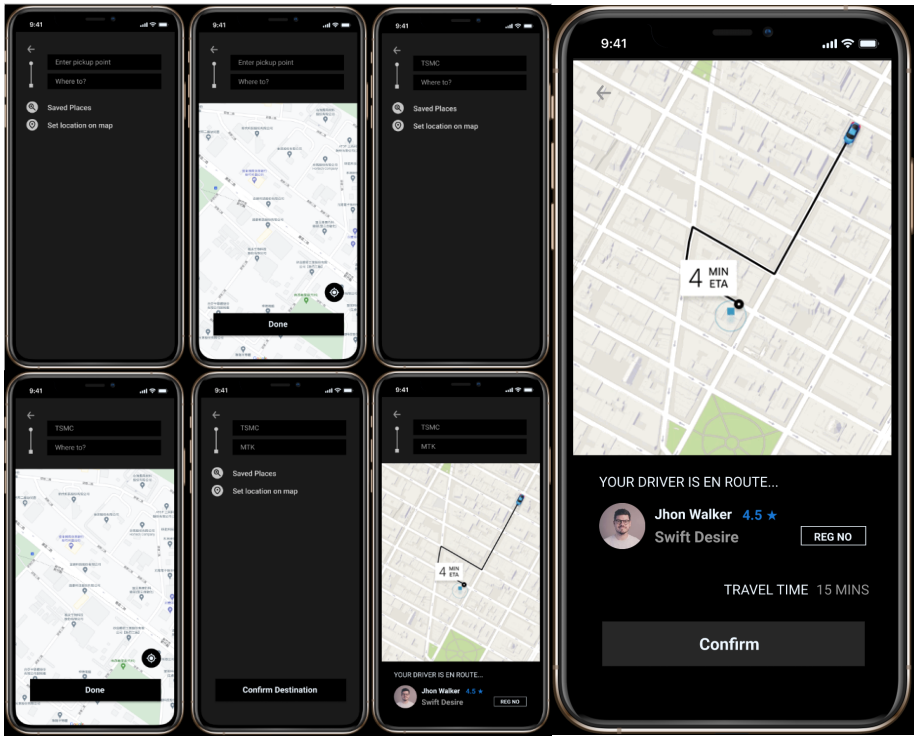
When the user checks the carpool checkbox, multiple possible paths and their fees will be displayed. After the user confirms the carpool path, the app will display the amount of time and money saved through carpooling.

UI Design & User Experience:

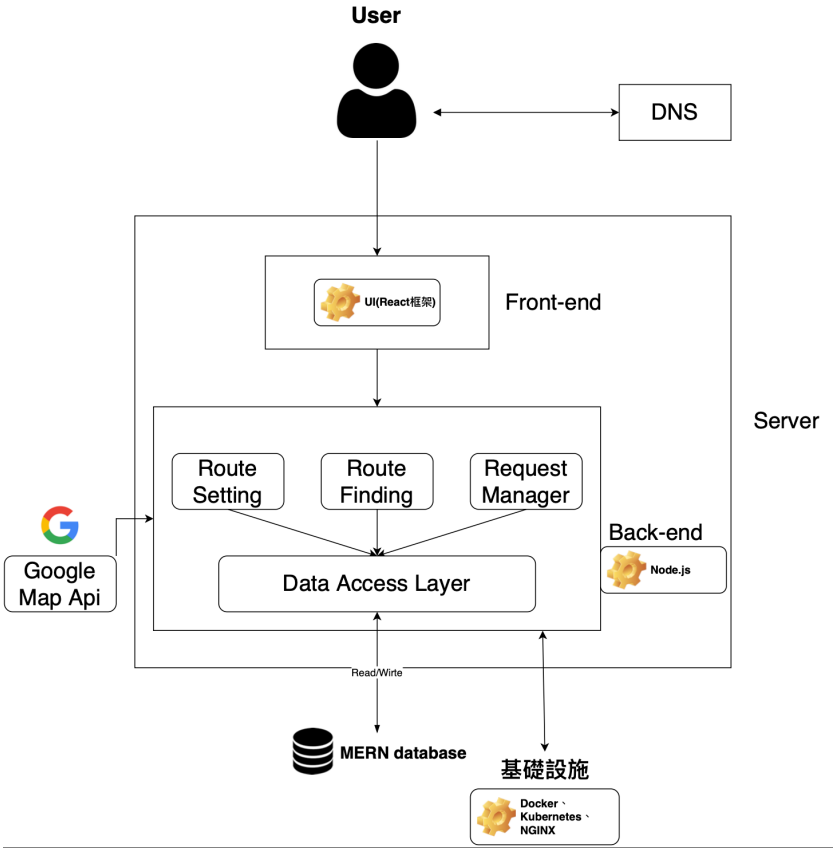
https://www.figma.com/file/26kS34uOBubyVtprvY5rzm/UBER-APP-DESIGN-31155185?node-id=0-1&t=rX225HYdz1yptMh4-0

細圖，詳細流程可點上方網址實際操作。





Application Architrcture:



The ride-sharing platform has a front-end, back-end, and infrastructure architecture. The front-end uses React to create a single-page application for user interactions. The back-end uses Node.js with RESTful API services for authentication, ride searching, booking and management, driver services, and payments, with a MongoDB database. Google Maps API is used for navigation, while Prometheus and Grafana monitor system metrics. The infrastructure uses Docker containers with Kubernetes for deployment, NGINX for load balancing and

reverse proxy, and backup recovery for data integrity. This architecture provides modern technology stacks and containerized deployment, improving system performance, scalability, and reliability.