**Group Members :**

**Bipin Chhetri, Bimal Bikram Karki, Saroj Gopali, Subash Subedi**

**Question No1 a, b by Saroj Gopali**

**Question No2 a, b by Bimal Bikram Karki**

**Question No 3 a, by Subash Subedi**

**Question No 3, b,c by Bipin Chhetri**

**Team-based Project: Release # 2 (Practicing Agile Methodology)**

1. Requirements documentation and specification
   1. **Use Case diagram Ride Share Application**

A close up of text on a white background

Description automatically generated

* 1. **Use Cases Description**

|  |  |
| --- | --- |
| **Use Case Name** | **Sign Up** |
| **Actor** | Any customer (who want to register for the service), driver or rider |
| **Trigger** | The user will sign up and provide personal information to use the service |
| **Precondition** | The user should have valid Texas Tech University email address and phone number |
| **Post Condition** | The user can able to use the service after login. |
| **Normal flow** | * The user enters first name, last name. * For the communication user have to provide phone number. * For login user need to provide valid Texas Tech university email address. |

|  |  |
| --- | --- |
| **Use Case Name** | **Log In** |
| **Actor** | Any customer (who want to register for the service), driver or rider |
| **Trigger** | The user will provide login email address and password |
| **Precondition** | The user should have sign up. |
| **Post Condition** | Login successfully. |
| **Normal flow** | * The user input email address and password * Verify the username and password from the database. * After verification successfully login or display error if the username or password didn’t match. |

|  |  |
| --- | --- |
| **Use Case Name** | **Address** |
| **Actor** | Any customer (who want to register for the service), driver or rider |
| **Trigger** | The user will provide destination address |
| **Precondition** | The user should have log in |
| **Post Condition** | Choose either drive or ride |
| **Normal flow** | * The user input destination address * The user will choose either drive or ride. * After user choose drive or ride, find the driver or rider which has closed or similar destination address. |

|  |  |
| --- | --- |
| **Use Case Name** | **Drive** |
| **Actor** | Driver |
| **Trigger** | Find the rider with similar or closed destination address |
| **Precondition** | The user should have chosen drive |
| **Post Condition** | Find the rider using destination location of the driver |
| **Normal flow** | * The user input destination address * The user will choose drive. * After user choose drive, find the rider which has closed or similar destination address. * Provide the estimated time of travel for pick up and completed the trip to destination |

|  |  |
| --- | --- |
| **Use Case Name** | **Ride** |
| **Actor** | Rider |
| **Trigger** | Find the driver with similar or closed destination address |
| **Precondition** | The user should have chosen ride |
| **Post Condition** | Find the driver using destination location of the driver |
| **Normal flow** | * The user input destination address * The user will choose ride. * After user choose ride, find the driver which has closed or similar destination address. * Provide the estimated time of travel for pick up and completed the trip to destination |

|  |  |
| --- | --- |
| **Use Case Name** | **Match** |
| **Actor** | Admin |
| **Trigger** | Find the driver and rider |
| **Precondition** | List of driver and rider |
| **Post Condition** | Pair driver and rider based on the destination location |
| **Normal flow** | * Find the list of driver and rider based on destination location * Calculate the time and distance of travel to pick up rider. * After user choose drive or ride, find the driver or rider which has closed or similar destination address. |

1. Structural Design
   1. The architecture of your application

A screenshot of a cell phone

Description automatically generated

* 1. A class diagram for the project

A screenshot of a cell phone

Description automatically generated

1. Dynamic Design
   1. The sequence diagrams for each use case
2. Sign up

A screenshot of a cell phone

Description automatically generated

1. Login

A screenshot of a cell phone

Description automatically generated

1. Address

A screenshot of a cell phone

Description automatically generated

1. Drive

A screenshot of a cell phone

Description automatically generated

1. Ride

A screenshot of a cell phone

Description automatically generated

1. Match

A screenshot of a social media post

Description automatically generated

* 1. The state diagram for each object
     1. Signup

A screenshot of a social media post

Description automatically generated

* + 1. Login

A picture containing screenshot

Description automatically generated

* + 1. Forgot password

A picture containing screenshot

Description automatically generated

* + 1. Drive

A screenshot of a cell phone

Description automatically generated

* + 1. Ride

A screenshot of a cell phone

Description automatically generated

* + 1. Driver address

A picture containing screenshot

Description automatically generated

* + 1. Pickup address

A screenshot of a cell phone

Description automatically generated

* + 1. Travel time

A screenshot of a cell phone

Description automatically generated

* 1. The activity diagrams for the application

A close up of text on a white background

Description automatically generated