



Cégep de la Gaspésie et des Îles, Montreal

**A Project Report
On**

Carpool Application

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Academic year
2020

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1. Introduction

Carpool application is specially developed for the CEGEP students to help each other for ride share. This is simple javascript and HTML base website which is easily accessible from anywhere using phone or computer. It is specially developed for CEGEP students so other people can not use this application for book a ride or share a ride. Students can easily sign up using their student id and be able to create a post for a ride or book ride for a specific destination. They can also pay directly from here using the authentic payment method which is used in the Application.

It is built by using the following technologies:

Front End - HTML, CSS, Java Script

Development Tool – Notepad++

1.1 Purpose

In today's world everyone needs to travel from one place to another place more often than any other time. Due to the daily increase in the price of petrol and gas people are not able to afford cars or travel alone. Students need a ride more often than other people so this application is specially developed for the CEGEP student. This application is used by CEGEP students to help each other to give a lift or a ride.

1.2 Scope

The main functionality of this application is to book or share rides with other CEGEP students so if any student needs to go to the same place then they can contact another student for a lift or a ride. This application also shows different rides according to location and date so if any student is making plans for upcoming days than also they can check if any ride is available or not. It is also accessible from anywhere so students can search for a ride from any device. This application is only available for cegep students so it has very limited clients so it has very little chance to crash or fail so every service is always available for everybody.

2. General Description

2.1 Product Functions

- Book Ride
- Create Post
- Login
- Log Out
- Reset user's password
- Sign Up
- Search Ride

2.2 User Characteristics

- A use of the application can be possible by the registered user only.
- Registered users can use all the functionalities of the app.
- Users can login or signup.
- Users can create posts for a ride and at the same time they also can book rides for going to specific locations.
- User can also search ride according to location
- User can also reset their password if they forgot their password

3. Specific Requirements

3.1 Functional Requirements

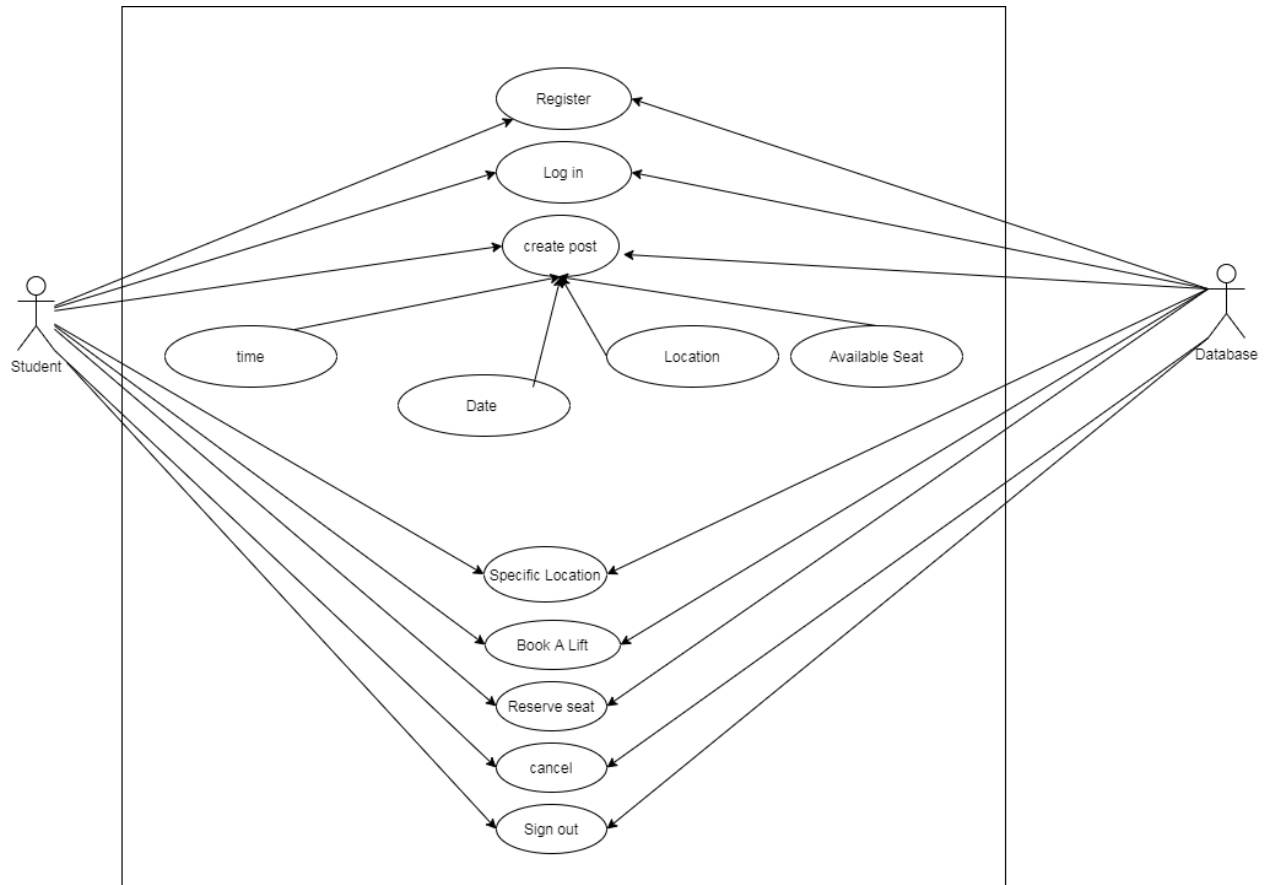
Requirement Id	Requirement Statement	Priority	Comments
FR001	Login Page	HIGH	The system must have a login screen as a home to login using email and password for registered users.
FR002	Sign Up	HIGH	The application must have a sign up page where the new user can register using email,name,studentid and password.
FR003	Search Ride	HIGH	The registered user can search for a ride using location and time they want a ride.
FR004	Forgot Password	HIGH	Follow the secure procedure to recover the password in case a registered user forgets.
FR005	Book Ride	HIGH	Registered user can able to book ride and they also can able to book multiple ride at same time
FR006	Create Post	HIGH	The registered user can create a post for their own ride if they need any student who wants to come with them.
FR007	Log Out	HIGH	To allow users to logout from the application.
FR008	Send Password Reset Link	HIGH	Password reset link send to the registered email id.

3.2 Non-functional Requirements

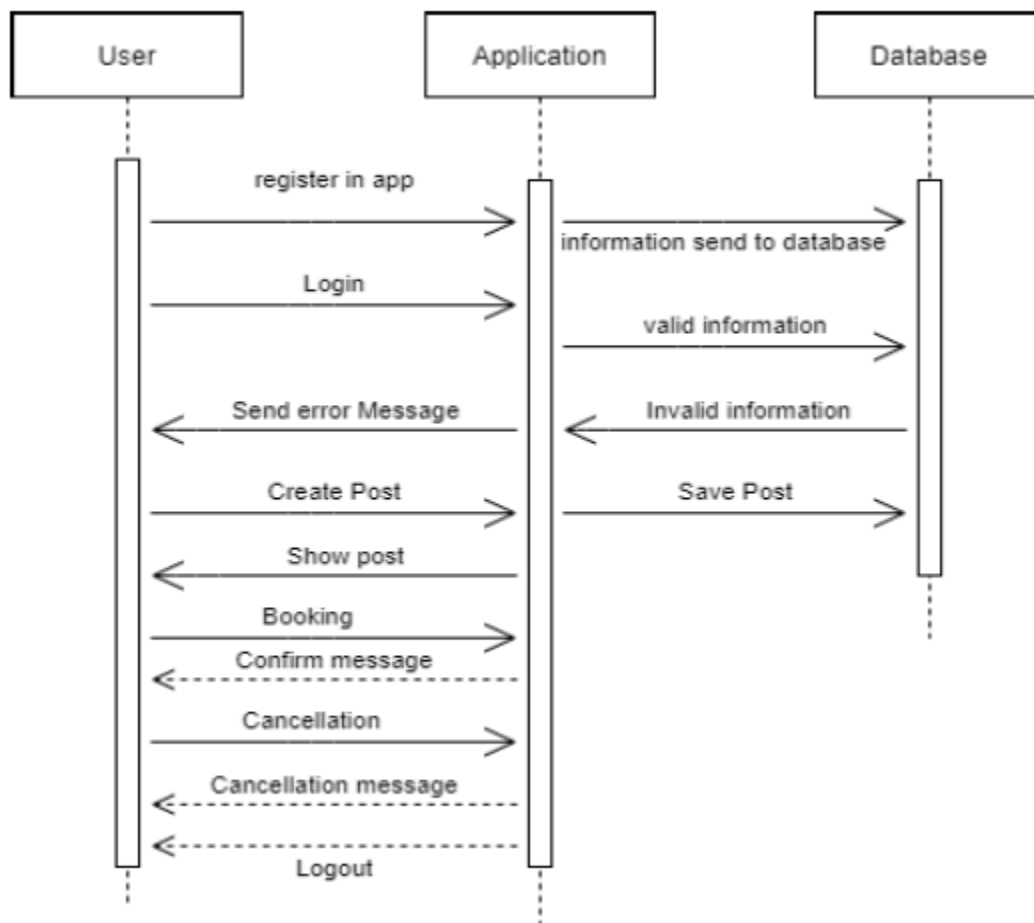
Requirement Id	Requirement	Priority	Comments
NFR001	Login authentication	HIGH	The system must provide login after secure authentication with the server for Registered users.
NFR002	Performance and response time	HIGH	The performance of the app must be highly scaled with accurate and fast response time.
NFR003	Usability	HIGH	App UI needs to be Effective, Efficient, Engaging, Error Tolerant, Easy to Learn so even the first time user will be able to use the app easily.
NFR004	Power and memory consumption	HIGH	App will make sure that it uses very low power and memory for performing different functionality.

4. Analysis Models

4.1 Use Case



4.2 Sequence Diagrams



4.3 Class Diagram

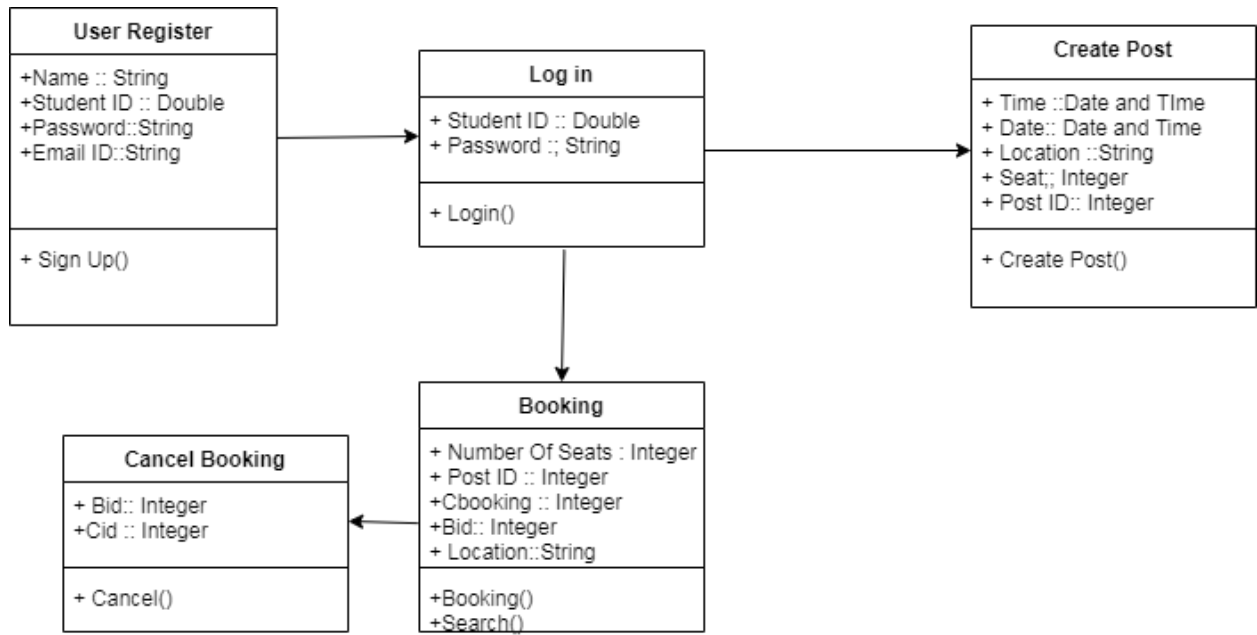


Figure 7. Class diagram

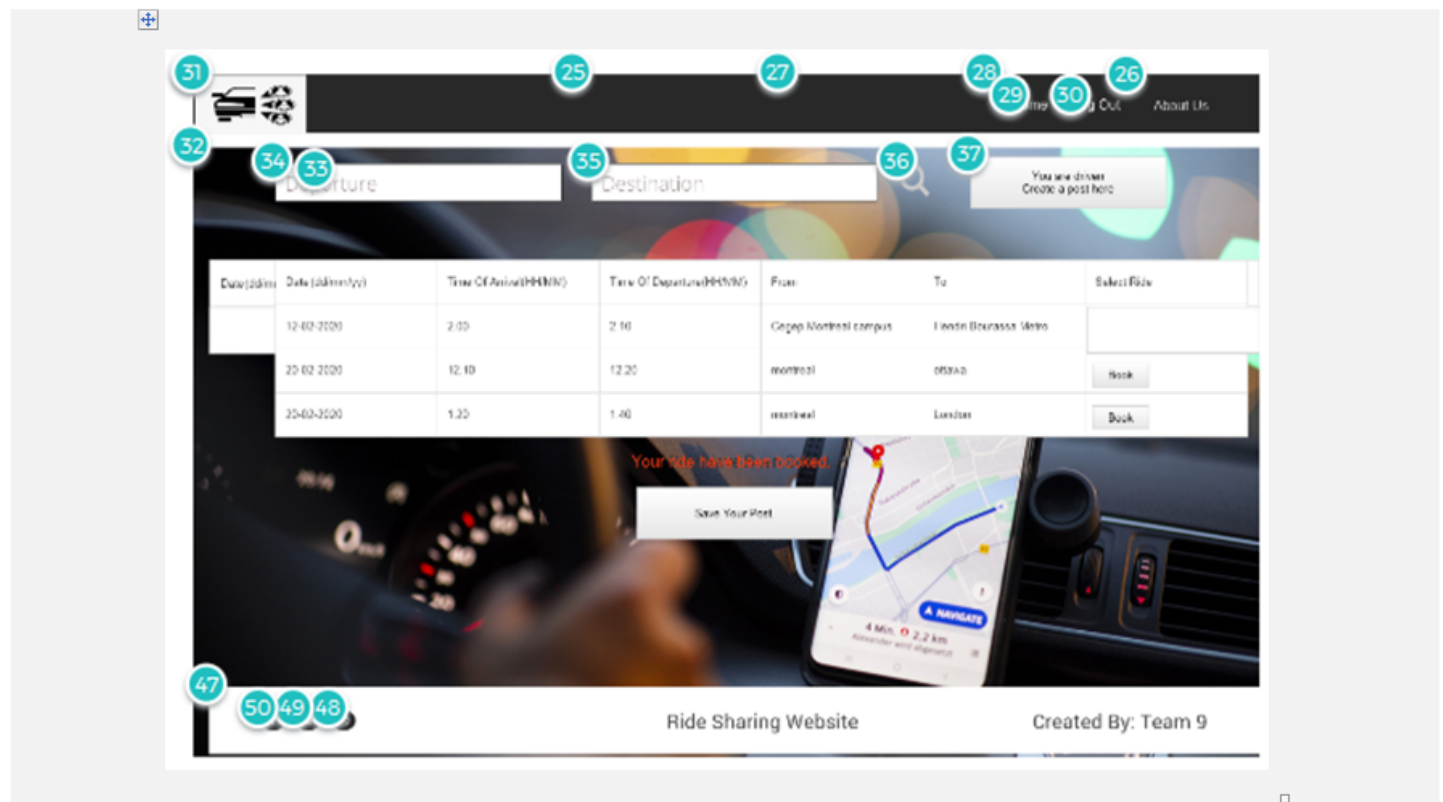
4.4 Screen flows diagram and Screen design

Screen 1



Interactions

- 2 on Mouse Down: changes style of 'text_1': text color, background color →
on Mouse Up: changes style of 'text_1': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 3 on Mouse Down: changes style of 'text_2': text color, background color →
on Mouse Up: changes style of 'text_2': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
on Double Click: scrolls to 'Bg' →
- 4 on Mouse Down: changes style of 'text_3': text color, background color →
on Mouse Up: changes style of 'text_3': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 5 on Mouse Down: changes style of 'text_5': text color, background color →
on Mouse Up: changes style of 'text_5': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 13 on Click: goes to 'home page' with effect: fade in 700ms →
on Double Click: goes to 'home page' →
- 20 on Double Click: goes to 'Account creates' →
- 21 on Click: goes to 'forgot password' →



Interactions

- 25 on Mouse Down:** changes style of 'text_1': text color, background color →

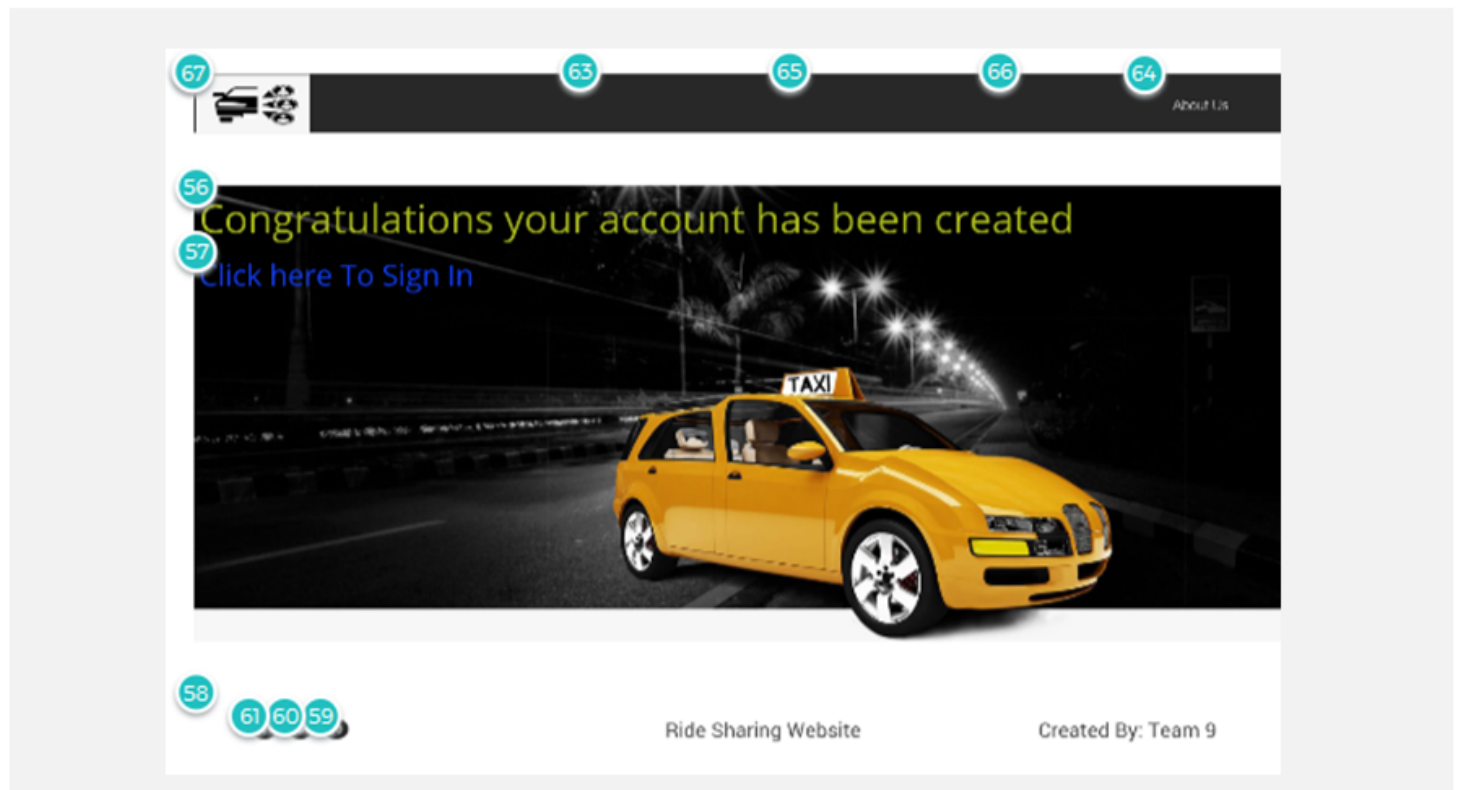
on Mouse Up: changes style of 'text_1': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 26 on Mouse Down:** changes style of 'text_2': text color, background color →

on Mouse Up: changes style of 'text_2': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 27 on Mouse Down:** changes style of 'text_3': text color, background color →

on Mouse Up: changes style of 'text_3': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 28 on Mouse Down:** changes style of 'text_5': text color, background color →

on Mouse Up: changes style of 'text_5': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 30 on Click:** goes to 'Screen 1' →
- 36 on Click:** shows 'Table' → shows 'Button, Button, Button' →
- 37 on Click:** shows 'Table' → shows 'Input, Input, Input, Input, Table, Input' → shows 'Button' →

Account creates



Interactions

- 57 on Click:** goes to 'Screen 1' with effect: slide and fade in 500ms →
- 63 on Mouse Down:** changes style of 'text_1': text color, background color →
on Mouse Up: changes style of 'text_1': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 64 on Click:** scrolls to 'Bg' →
on Mouse Down: changes style of 'text_2': text color, background color →
on Mouse Up: changes style of 'text_2': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 65 on Mouse Down:** changes style of 'text_3': text color, background color →
on Mouse Up: changes style of 'text_3': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 66 on Mouse Down:** changes style of 'text_5': text color, background color →
on Mouse Up: changes style of 'text_5': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →

The screenshot shows a web form for password recovery. At the top is a dark header bar with a logo on the left (callout 73) and navigation links on the right: '69', '71', '72', and '70'. The main content area contains two input fields: 'Enter Student Id.' (callout 74) and 'Enter Email Id.' (callout 75). To the right of these fields are two more callouts, 77 and 78, pointing to the input boxes. Below the input fields is a button labeled 'Send verification code' (callout 76).

Interactions

- 69 on Mouse Down:** changes style of 'text_1': text color, background color →
on Mouse Up: changes style of 'text_1': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 70 on Mouse Down:** changes style of 'text_2': text color, background color →
on Mouse Up: changes style of 'text_2': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 71 on Mouse Down:** changes style of 'text_3': text color, background color →
on Mouse Up: changes style of 'text_3': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 72 on Mouse Down:** changes style of 'text_5': text color, background color →
on Mouse Up: changes style of 'text_5': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 76 on Click:** goes to '[Rechange Password](#)' →

Rechange Password

Interactions

- 80 on Mouse Down:** changes style of 'text_1': text color, background color →

on Mouse Up: changes style of 'text_1': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 81 on Mouse Down:** changes style of 'text_2': text color, background color →

on Mouse Up: changes style of 'text_2': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 82 on Mouse Down:** changes style of 'text_3': text color, background color →

on Mouse Up: changes style of 'text_3': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 83 on Mouse Down:** changes style of 'text_5': text color, background color →

on Mouse Up: changes style of 'text_5': text family and style, text size, text color, text horizontal alignment, text vertical alignment, text decoration, text line height, background color →
- 87 on Click:** shows 'Input, Paragraph, Paragraph, Input, Button' →

payment

A screenshot of a payment form interface. The form is contained within a light gray border. At the top left of the form area is a small blue icon with a plus sign. The form elements are as follows:

- 98** No. of seat you want to book. (Label)
- 99** (Input field for number of seats)
- 93** **Payment** (Section header)
- 94** (Input field for card number)
- 95** (Input field for expiry date)
- 96** (Input field for CVV number)
- 97** (Pay button)

Interactions

97 on Click: goes to 'home page' →

5. Use Case Scenarios

5.1 User Story

As a...	I want to...	So that...	Acceptance Criteria
Register User	Fill all my login details only once	I can access my application without doing login process every time.	User does not have to fill login information several time.
Register User	Search ride	So I can search ride for a specific location	User can search ride only putting destination and pickup location
Register User	Create Post	So that I am able to create posts for my ride so I can get some students for a ride sharing.	User can able to create post and they have to add pickup and destination location.
Register User	Book Ride	So that I can book ride for my destination	User can search ride and book ride then they have to do payment using app.
Register User	Forgot Password	So that I can reset the password using email link.	User have to add their email so they can get email link for the changing password.
Register User	Log out	So that I want to exit from system i can easily logout from the system	User can click on the logout and able to logout from the system.
Register User	I want to reset my password.	So that I can login to my account.	User will get password reset link on their registered email.

