

**A  
Project Report  
On  
"University Transport Management System"**

**(CE255 – Software Group Project)**

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**Submitted to**

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for 4<sup>th</sup> semester B.Tech.

**Submitted at**



**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

**Chandubhai S. Patel Institute of Technology (CSPIT)**

**Faculty of Technology & Engineering (FTE), CHARUSAT**

**At: Changa, Dist.: Anand, Pin: 388421.**

**April 2022**



**Accredited with Grade A by NAAC**  
**Accredited with Grade A by KCG**

## CERTIFICATE

This is to certify that the report entitled “**University Transport Management System**” is a bonafied work carried out by **Kishan Prajapati (ID: 20CS065)** and **Shivam Patel (ID: 20CS057)** under the guidance and supervision of **Dr. Amit Thakkar** for the subject **Software Group Project (CE255)** of 4<sup>th</sup> Semester of Bachelor of Technology in **Computer Science & Engineering** at Chandubhai S. Patel Institute of Technology (CSPIT), Faculty of Technology & Engineering (FTE) – CHARUSAT, Gujarat.

To the best of my knowledge and belief, this work embodies the work of candidate Kishan Prajapati (20CS065) and Shivam Patel (20CS057) has duly been completed, and fulfills the requirement of the ordinance relating to the B.Tech. Degree of the University and is up to the standard in respect of content, presentation and language for being referred by the examiner(s).

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# **Software Requirements Specification**

**for**

## **University Transport Management System**

**Version 1.1 approved**

**Prepared by: 20CS065 Kishan Prajapati**

**20CS057 Shivam Patel**

**Group 2 CSPIT CSE 2**

**13-04-2022**

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# 1. Introduction

The University Transport Management System is a web based application developed for Transport authorities of the university to enter the details regarding their services to university from nearby cities on the website and students of the university can check those details and decide upon the possible option for them when looking for Transport services(Bus service from nearby cities to university) .

## 1.1 Problem Address

The purpose of the system is to help the transport authorities put their detailed service info on one place and students accessing those details easily and deciding the best possible option for themselves.

The system is developed to overcome below mentioned problems.

- Efficient process at student's as well as transport authority's end.
- Less time consumption.
- Easy comparison of possible options at student's end.
- Convenience in updating the details at authority's side.
- Precise information of Transport.

## 1.2 Intended Users

- *Intended users*
  - Transport authorities to enter details regarding services they provide from different cities.
  - Students, to get detailed information about available bus services from nearby cities to university.

## 1.3 Project Scope

This system makes the process of looking for bus services if any available from nearby city to university easier for students.

The system also makes it easier for Transport authorities to enter their details at one place and makes the hectic process of contacting and giving details about their services to each individual efficient.

## **2. Overall Description**

### **2.1 Product perspective**

The system is designed to overcome the issues faced by student to get detailed information when looking for bus services available from their cities to university and deciding upon a suitable option for them and also making the process more convenient at transport's authorities end by providing them a place where they can put detailed information about their services at one place.

### **2.2 Product Features**

The significant functions performed by the system are as follows.

- Register page and Sign in page for entry.
- Adding details of Transport like
  - + Travels name.
  - + City.
  - + Available pickup points.
  - + Rates.
  - + Bus categories etc.
- Student's section to view details of transport.
- Feedback/review section for students regarding transport.
- Booking service for transport

### **2.3 Usage by different Users**

- *Transport authorities-*  
They can use the system to fill up the necessary details of the services they provide.
- Students who are looking for Bus services from their cities to university.

### **2.4 Operating Environment**

The system will be developed using HTML, CSS, JavaScript and Firebase for the data storage and its handling .

***Server-Minimum Hardware Requirement***

- Any basic desktop Computer / Laptop with minimum 3GB RAM working on any OS.

***Server-Minimum Software Requirement***

- Firebase database and Internet Connectivity.

***Client -Minimum Hardware Requirement***

- Any basic desktop Computer / Laptop with 4gb RAM working on any OS with internet connectivity.

## **2.5 User Documentation**

System is easy to operate yet a demo training will be provided as and when required for fine usage of the system.

## **2.6 Assumption and Dependencies**

The system has email and password sign in verification process without which the operator may not be able to use the system.

The system may ask for email and password to enter the “Transport” section, only with correct email and password the user will be allowed to enter the very section of system.

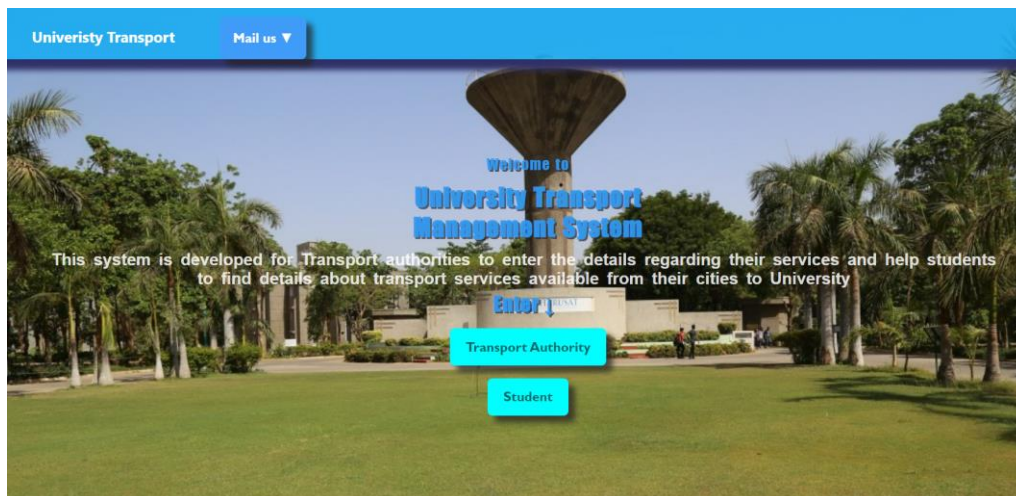
## 3. System Features

### 3.1 Home Page

#### *Description*

The first page of web site is a home page where a short description about website is mentioned.

#### **Interface-**



#### **Stimulus/Response Sequences**

The button is provided to enter Transport Authority or Student's section which would redirect user to respective pages.



## **3.2 Transport Section**

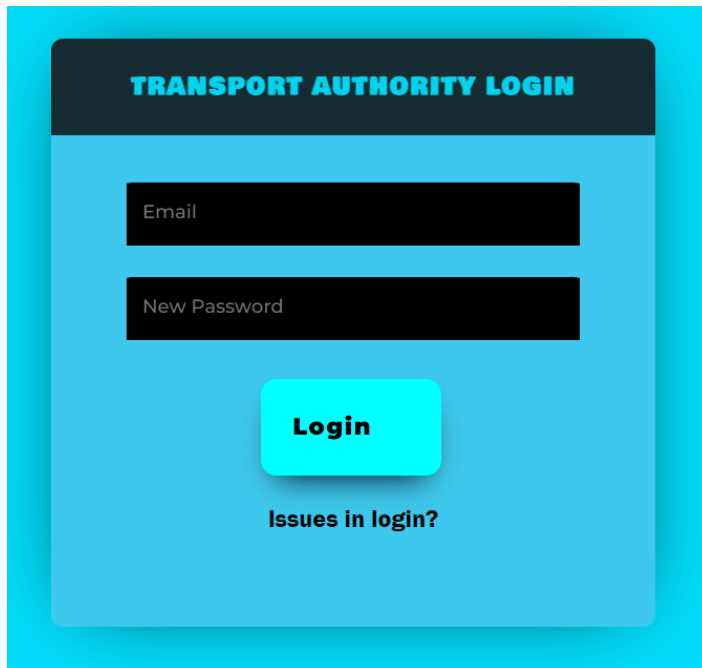
### **3.2.1 Entry to Transport section**

The entry to Hostel and Transport section is Email and password protected to keep only the intended users to access it so only with correct email and password the user will be forwarded to the further subpages.

#### **Stimulus/Response Sequences**

Text boxes are provided for entering the email and password. In case of unsuccessful login there will be a pop up alert message.

#### **Interface-**



The image shows a login interface for the Transport Authority. It features a dark blue header with the text "TRANSPORT AUTHORITY LOGIN" in white. Below the header, there are two input fields: "Email" and "New Password", both with light blue borders and light blue text. A red "Login" button is positioned below the input fields. At the bottom, there is a link that says "Issues in login?". The entire interface is set against a solid red background.

### **3.2.2 Enter Transport details**

#### ***Description***

This page is for the concerted authority who will be responsible for adding up the Bus Transport details. The user will be directed to this page after successful login in “Transport” section option on 3.2.1 section.

#### ***Features:***

- Add Travels name.
- Add city.
- Pickup location
- Rates
- Types of bus
- Enter duration available (1/3/6 months or if any other).
- Refund policy details.

The page will further display buttons which will be doing following functions

- Add details.
- View details.
- Update details
- Delete details

A button will be provided “view booking details” which will direct user to the next page which will display details of students who booked the bus.

#### **Interface-**

**--ENTER TRANSPORT DETAILS--**

**Login id**

**Travels Name**

**City**

**Pickup locations**

**Rates**

**Enter type of bus**

**Enter Duration**

**Enter Refund Policy**

[Activate V](#)  
[Go to Setting](#)

**INSERT** **SELECT** **UPDATE** **DELETE**

[Click here to view booking details](#)

### Stimulus/Response Sequences

The page contains textboxes which can be filled by clicking on them.

An alert message will conform user about successful operation on data when clicked on any of the button.

### 3.2.3 View Booking details

#### **Description**

This page will display the details of people who booked the transport.

#### **Features:**

Following details will be displayed in form of table to the user

- Student ID
- Student Name
- Travels Name
- Destination area
- City
- Duration
- Date
- Payment details
- Payment status
- Contact No.

A button is provided at the bottom which will direct user to “View Feedback Page”.

#### **Interface-**

Student booking details											
Sno	Student ID	Student Name	Travels name	Tname	Destination area	City	Duration	Date	Payment Details	Payment status	Contact Number
1	20CS065	Kishan	Brahmani	brahmani	Vishwakarma	Ahmedabad	one to and fro journey	2022-04-06	cash	pending	888

Click here to view Students feedback ↴

### **3.2.4 View Feedback**

#### ***Description***

The transport authority will be able to see the feedbacks given by students on this page.

#### ***Features:***

The following details of feedback will be displayed to transport authority.

- Travels name
- Rating out of 5
- Feedback
- Date of publish

#### ***Interface:***

Student Feedback				
Sno	Travels Name	Rating(out of 5)	Feedback	Date
1	bansari	4	good	2022-04-01
2	bansari	4	its good enough	2022-04-02
3	brahmani	5	awesome	2022-04-03
4	brahmani	5	awesome	2022-04-04
5	bansari	4	its good enough maybe	2022-04-06

## 3.3 Student's Section

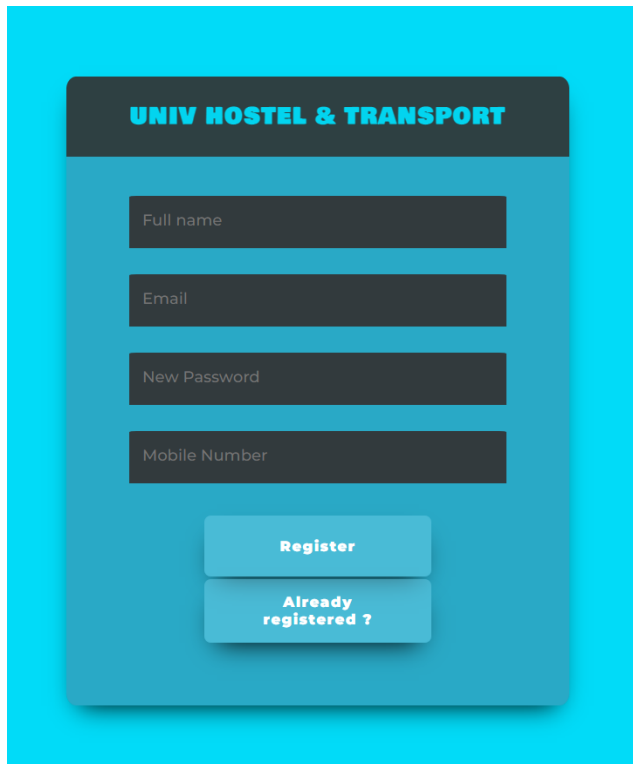
### 3.3.1 Register Page

#### ***Description***

The user will be directed to this page on clicking “Student” button at home page. The user will have to add following details to Register into the system.

- Full Name
- Email address
- Password
- Mobile Number
- 

#### **Interface-**

The image shows a registration form titled "UNIV HOSTEL & TRANSPORT" in a dark blue header. Below the header, there are four text input fields with placeholder text: "Full name", "Email", "New Password", and "Mobile Number". At the bottom of the form, there are two buttons: a blue "Register" button and a light blue "Already registered ?" button. The entire form is set against a light blue background.

#### **Stimulus/Response Sequences**

The page contains textboxes which can be filled by clicking on them.

On successful registration the page will display a pop up stating “Registration successful”.

### **Functional Requirements**

*The system generates error pop-up message in case of unsuccessful Registration in the following cases and the user won't be allowed to move on further pages.*

- The user needs to fill up all the details for successful Registration.
- The email should be appropriate.

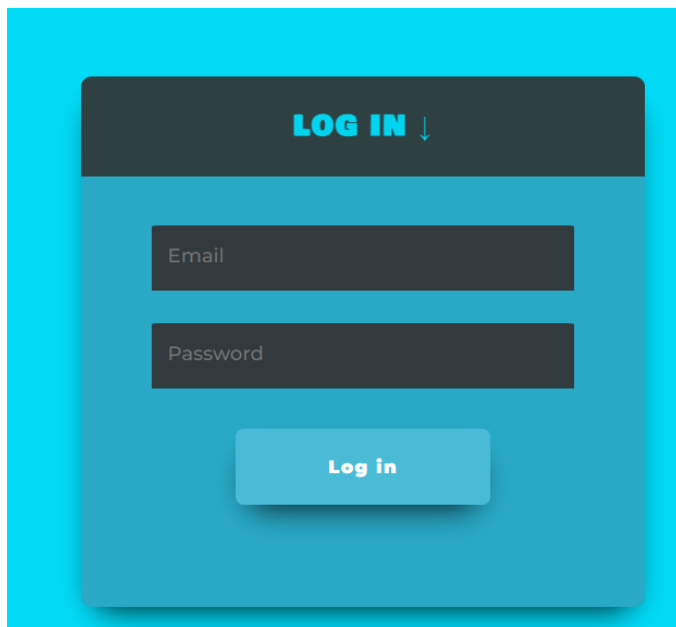
### **3.3.2 Login Page**

The user who has successfully registered into the system can login now with their registered email id and password for further access of the system.

#### **Functional Requirements**

Only with the help of correct email and password the user will be allowed to access further pages.

#### **Interface:**

The image shows a login interface on a dark blue background. At the top, there is a dark blue header bar with the text "LOG IN" in white, followed by a small downward arrow. Below the header, there are two input fields: "Email" and "Password", both with light blue borders and placeholder text. Below the input fields, there is a light blue button with the text "Log in" in white. The entire interface is centered on the page.

### **Stimulus/Response Sequences**

The page contains textboxes which can be filled by clicking on them.

On successful login the page will display a pop up stating “Successfully logged in”.



### 3.3.3 All Transport details at student's part

#### **Description**

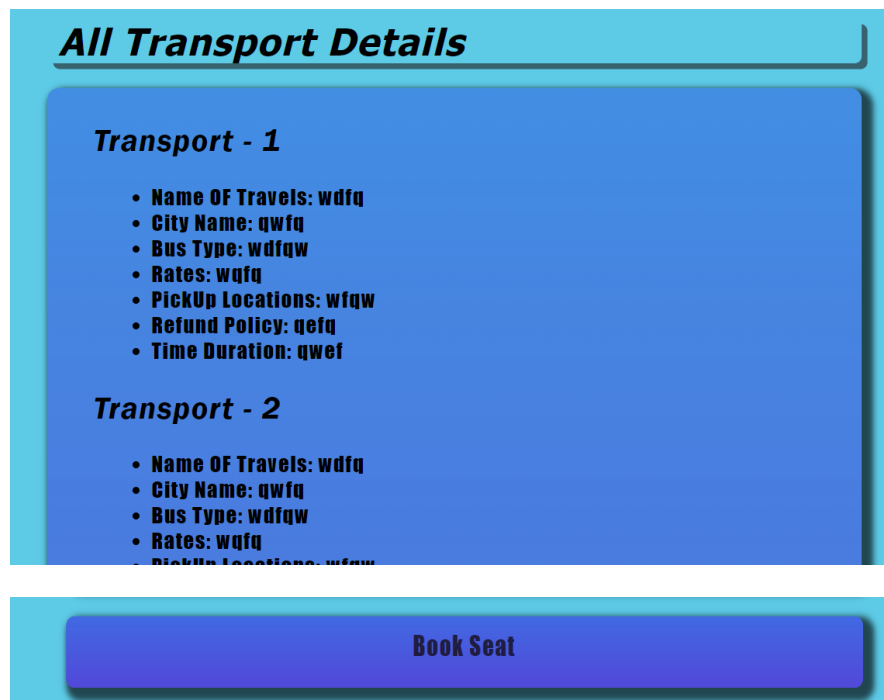
After successful login the user will be able to view all the transport details entered by transport authorities on this page.

#### **Features:**

The user will see following details:

- Name of travels
- City
- Bus types
- Rates
- Pick up locations
- Duration
- Refund policy

#### **Interface:**



#### **Stimulus/Response Sequences**

A button "Book Seat" is provided at the bottom which will direct user to the next page where they will be book transport.

### **3.3.4 Book Transport**

#### ***Description***

The user needs to add necessary details asked by system to book transport.

#### ***Features:***

The following textboxes are provided to user which he needs to fill up for successful booking of transport.

- Enter Student ID
- Enter Student Name
- Enter Travels Name
- Enter Destination area
- Enter City
- Enter Duration
- Enter Date
- Enter Payment details
- Enter Payment status
- Enter Contact No.

Buttons have been provided at bottom to add or update the data or delete the booking.

A “Give feedback” button have been provided which will direct user to the feedback page.

## ***Interface:***

### BOOK TRANSPORT

Student's ID

Student's Full Name

Enter travels name

Select travels name

Brahmani

Enter destination area name

Enter city

Enter duration(eg- one to and fro journey)

dd - mm - yyyy

Enter payment details(cash/online payment)

Enter payment status (done/pending)

Enter your contact details

Submit/Update

Delete Booking

Give feedback

### 3.3.5 Feedback Page

#### ***Description***

The user will be directed to this page after clicking on “Give feedback feedback” button at 3.2.4 section.

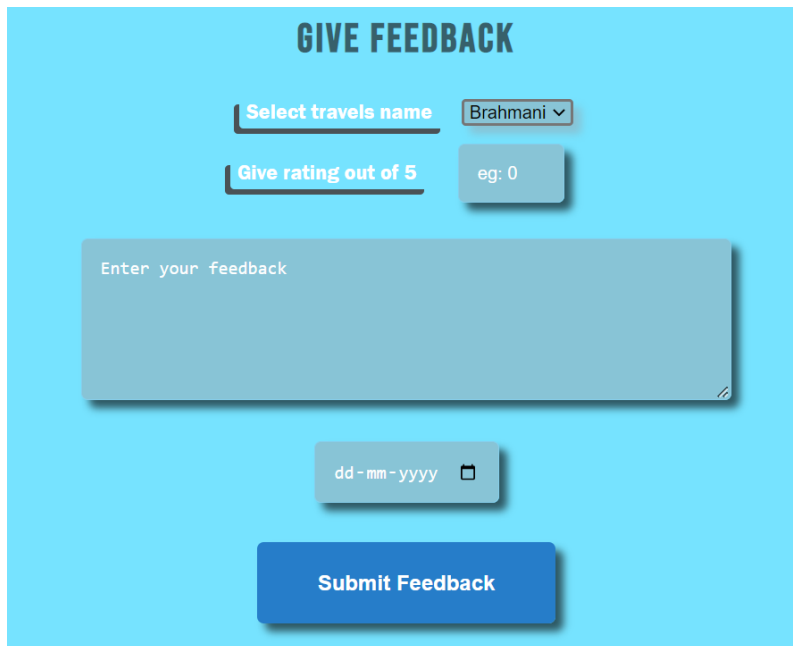
#### ***Features:***

The features it will display are:

- Select travels
- Give rating
- Write feedback

The feedback can be submitted by clicking on button provided.

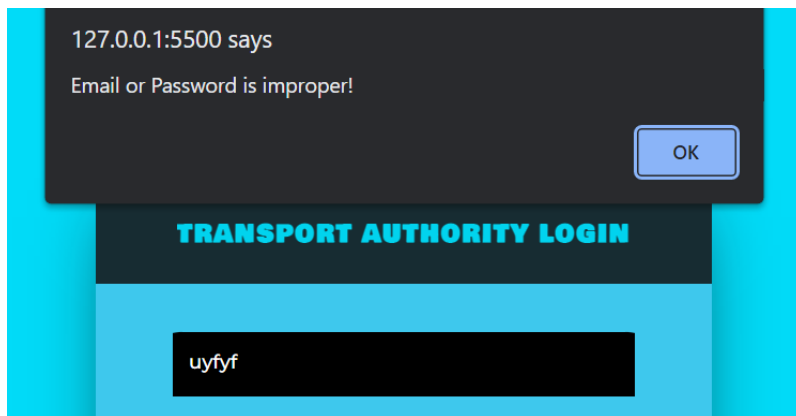
#### **Interface-**



The screenshot displays a web form titled "GIVE FEEDBACK" on a light blue background. The form includes a dropdown menu labeled "Select travels name" with "Brahmani" selected. Below it is a rating input field labeled "Give rating out of 5" with a placeholder "eg: 0". A large text area for feedback is labeled "Enter your feedback". At the bottom, there is a date input field with the placeholder "dd-mm-yyyy" and a calendar icon. A prominent blue "Submit Feedback" button is located at the bottom center.

## **4. External Interface Requirement**

### **User Interface-**



The error message will pop up in the login page if the entered password or email is incorrect.

The page may also display error in case of any unfilled entries.

### **User Interface-**

This system supports all types of web browsers.

## **5. Other Nonfunctional Requirements**

### **Software Quality Attributes:**

**Reliable** - The system can be trusted as the Transport service data can be added and updated only by concerned authorities.

**Adaptability** – The necessary changes could be done in system, in case more fields are needed for some purpose.

**Correctness** – The data entered of Transport/bus service will be as per authority and there won't be any fluctuations in the data while displaying it.

**Usability** – The system is easy to use for the transport authority as well as for students.

**Interoperability** – The interface of this system can work with any browser system at present or in future, in either implementation or access, without any restrictions.

**Reusability** – The system can be used as many numbers of times as needed.

## 6. Appendix

### Project Profile:

	A	B	C	D	E	F	G	H	I	J	
1	PROJECT PROFILE										
2	Title	Univ Transport Management System									
3	Team Members	20CS057 Shivam Patel, 20CS065 Kishan									
4	Frontend Technology	HTML,CSS									
5	Backend Technology	JavaScript, Firebase database									
6	Name of Client	Transport authorities and Students									
7	Contact Details of Client	Shreedeeep-contactno.-9727765994 , Brahmani Travels c									
8	Github repo link:	<a href="https://github.com/KishanPrajapati15/G2_20CS057-20CS065">https://github.com/KishanPrajapati15/G2_20CS057-20CS065</a>									
9	Roles and Responsibilities	20CS065-				20CS065			20CS057		
10		20CS057-				Registration page student			Home page		
11						Login of student			Login of transport		
12						Add transport page			View transport page		
13						Retrive booking details			Book transport page		
14	Name of Team Lead	Kishan Prajapati				Give feedback page			Display feedback page		
15						Updating and solving issues 20CS065,20CS057					
16											

### Weekly Planning of project:

	A	B	C	D	E	F	G	H	I	J	K
1	<b>Weekly PLanning</b>								<b>Remarks by Team Lead</b>		
2	Week-1: Project definition finalization & Explore Technical Skills to develop the project.								Done		
3	Week-2: Interface based Design Like (System Interface, Graphical User Interface, Hardware Interface, Software Int								Done		
4	Week-3: Review of Software Requirement Specification based on Design Constraint								Done		
5	Week-4: Review of Software Requirement Specification								Done		
6	Week-5: Review of Software Requirement Specification								Done		
7	Week-6: Submission of SRS								Done		
8	Week-7: Submission of SRS & Final Plan of Project development								Done		
9	Week-8: (Saturday): First Internal Presentation								Done		
10	Week-9: Review of ongoing Project								Done		
11	Week-10: Review of ongoing Project								Done		
12	Week-11: Review of code development as per the plan development								Done		
13	Week-12: Review of code development as per the plan development								Done		
14	Week-13 & 14: Coding standard review and verification								Done		
15	Week-14-15: Test case preparation and testing								In progress		
16	Week-16(Saturday): Second Internal Presentation [Review development as per SRS Submission]								In progress		
17											

## Reporting: Team meetings done while developing the project.

	A	B	C	D	E	F	G
1	Sr No	Date	Present IDNO	Absent No	Duration	Remarks	
2		06/01/22	20CS057	-	1hr	Comparing two project ideas and finalising the one to go for	
3	1		20CS065	-			
4		07/01/22	20CS057	-	1hr	General meeting with ART for project finalisation	
5	2		20CS065	-			
6		07/01/22	20CS057	-	30mins	Discussion regarding different sections of website	
7	3		20CS065	-			
8		10/01/22	20CS065	-	30mins	Deciding GUI of pages	
9	4		20CS057	-			
10	5	21/01/22	ALL	-	1hr 20mins	Deciding pages fields and excel sheet	
11	6	22/01/22	All	-	30mins	General meeting regarding excel sheet	
12	7	28/01/22	All	-	30mins	Reviewing work done till now and discussion on further work to be done	
13	8	29/01/22	All	-	20mins	Sorting issues of select option page	
14	9	04/02/22	All	-	20mins	General meeting regarding work update	
15	10	11/02/22	All	-	2hrs	PPT instructions, solving firebase issues	
16	11	12/02/22	All	-	25mins	Sorted page 4 data input problem	
17	12	17/02/22	All	-	15mins	General meeting with sir	
18	13	25/02/22	All	-	20mins	General meeting	
19	14	01/02/22	All	-	30mins	Deciding things which can be done in transport section	
20	15	12/02/22	All	-	40mins	solving email id data input issues	
21	16	26/02/22	All	-	30mins	Researching things to add in transport section and issues with multiple database	
22	17	11/03/22	All	-	30mins	General meeting	
23	18	15/03/22	All	-	30mins	Solving book transport page issues	
24	19	18/03/22	All	-	1hr	Looking into work done till now	
25	20	25/03/22	All	-	30mins	General meeting	
26	21	02/04/22	All	-	30mins	Deciding new home page layout	
27	22	08/04/22	All	-	1hr	Review of all the work	

## Menus: Functionality and Features included in each page.

	A	B	C	D	E	F	G	H	I	J	K
10						Number of					
11	Sr No.	Functionality	Sub Functionality	GUI/REPORT	Developer Name	Text Box	Combobox	Dropdown	Radio/Checkbo	Click Button	Total
12			Enter name								
13			Enter email								
14			Enter password								
15	1	Login/Registration	Enter Phone number	GUI	20CS065, 20CS057	4				2	6
16	2	Home Page	Short Website description								
17			Redirecting button	GUI	20CS057					2	2
18	3	Select option page	Entry to hostel section								
19			Entry to transport section								
20			Entry to students section	GUI	20CS057					3	3
21											
22											
23	For Example										
24						Number of					
25	Sr No.	Functionality	Sub Functionality	GUI/REPORT	Developer Name	Text Box	Combobox	Dropdown	Radio/Checkbo	Click Button	Total
26	4	Enter transport details	Enter email								
27			Enter travels name								
28			Enter city								
29			Enter pickup locations								
30			Enter bus type								
31			Enter Rates								
32			Enter duration								
33			Enter Refund policy								
34			Insert button								
35			Update data								
36			Select data								
37			Delete data	GUI	20CS065	8				4	12



# Software Requirements Specification for University Transport Management System

[illegible]

**Tables:** Tables created in system.

	A	B	C	D	E
1	Tablename	Columna Name	Type of Column	Other info	Other Info
2		Student id	Varchar	Displays student id	
3		Student name	Varchar	Displays booker's name	
4		City	Varchar	Displays city name he wants to travel	
5		Location	Varchar	Displays destination area	
6		Travels name	Varchar	Dsiplays travel name selected	
7		Duration	Varchar	Display journey span	
8		Booking details table	Date	Date	Date of travelling
9		Payment details,status			
10					
11	Tablename	Columna Name	Type of Column	Other info	Other Info
12		Travels name	Varchar	Displays travels name of the feedback	
13		Date	Date	Displays date of feedback	
14		Rating	number	Displays rating given by user out of 5	
15		Feedback	Varchar	Displays feedback given by user	
16		Feedback table	S no	number	Sr number
17					
18					
19					
20					

**Work Diary:** Summary of work done by each group member

## Software Requirements Specification for University Transport Management System

	A	B	C	D	E	F	G	H
1	<b>Work Diary</b>		<b>20CS065 Kishan Prajapati</b>		<b>Date</b>		<b>20CS057 Shivam Patel</b>	
2	<b>Date</b>	<b>Hrs</b>	<b>Description of work</b>			<b>Hrs</b>	<b>Description of work</b>	
3	12/01/22	1hr	Looking for similar apps/web for project		13/01/22	1.5hr	started working on design of login page	
4	15/01/22	2hr	Started work on JS of login page		14/01/22	3hr	applying css style to the work done on	
5	16/01/22	3hr	Worked on adding data to database		26/01/22	1hr	Preparing home page for website	
6	18/01/22	1hr	Improved login/register page		27/1/22	1.5hr	completing SRS	
7	21/01/22	1hr	Made rough GUI of each page		27/1/22	1hr	updating Home Page Layout	
8	26/01/22	2.5hr	SRS Preparation		01/02/22	2hr	Created select option page	
9	27/01/22	1hr	SRS Preparation		04/02/22	2.5hr	learning JS	
10	03/02/22	1hr	Started working on Enter transport details		12/02/22	30mins	Sorted transport data input issue	
11	04/02/22	1.5hr	Learning how to add images to		17/02/22	5hrs con	Preparing ppt, updating srs, updating	
12	07/02/22		Completed working on transport details		25/02/22	30mins	general meeting regarding project	
13	11 and 12/02/22	30mins	Sorted transport data input issue		01/03/22	30mins	Deciding things which can be done in transport	
14	17/02/22	5hrs co	Preparing ppt, updating srs, updating		06/03/22	4hrs	Retrive transport page	
15	25/02/22	30mins	General meeting regarding project		07-16/03	10hrs	Book transport page and display feedback	
16	01/03/22	30mins	Deciding things which can be done in		27/03/22	2.5hrs	New home page	
17	06/03/22	4hrs	Updating expired database		29/03/22	2hrs	Change system flow	
18	12/03/22	3hrs	Retrive booking details		01/05/22	2hrs	Updating minimal things	
19	15/03/22	5hrs	Give feedback page		03/05/22	2.5hrs	Looking for new stuff to add in system	
20	27/03/22	2.5hrs	New home page		13/04/22	1.5hrs	Srs preparation second half	
21	29/03/22	2hrs	Change system flow		14/04/22	2hrs	Updating and sorting issues of srs	
22	01/04/22	2hrs	Updating minimal things					
23	13/04/22	1.5hrs	SRS Preparation first half					
24	14/04/22	2hrs	Updating and sorting issues of SRS					
25								

## Deadline: Project Schedule

	A	B	C	D	E	F
1	<b>Start Date</b>	<b>Expected End Date</b>	<b>Alloted To</b>	<b>Description</b>	<b>Status of work</b>	<b>Date of Completion</b>
2	12/01/22	14 or 15 /01/22	20cs057	HTML and CSS	done	15/01/22
3		17 or 18/01/22	20cs065	JS and database	done	18/01/22
4			57 & 65	solve issues and correct stuff		18/01/22
5	21/01/22	21 or 22/01/22	65	Create rough GUI of pages	Done	21/01/22
6	25/01/22	26/01/22	57	Prepare home page	done	26/01/22
7	26/01/22	29/01/22	57 & 65	SRS Preparation	done	28/01/22
8	27/01/22	27/01/22	57	Update home page layout	done	27/01/22
9	01/02/22	03/02/22	57	Create select option page	done	02/02/22
10	03/02/22	08/02/22	65	Create enter transport deta	done	07/02/22
11	11/02/22	12/02/22	65 and 57	Solved input issue of trans	done	12/02/22
12	17/02/22	18/02/22	65 & 57	Completing ppt and srs	done	17/02/22
13	21/02/22	08/03/22	65 & 57	Work on retrival of transpo	done	06/03/22
14	07/03/22	12/03/22	57	Book transport page	done	12/03/22
15	12/03/22	15/03/22	65	Retrive booking details	done	15/03/22
16	15/03/22	25/03/22	57 & 65	Give and Display feedback	done	26/03/22
17	27/03/22	15/04/22	57 & 65	New home page , change f	In progress	
18						