



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Spring 21_22

Section: G

Group No: 4

ONE TAP

A software Engineering project submitted

By

S/N	Student Name	Student ID	Contribution (%)	Individual Marks
05	Tushar, Mahmud Hossain	19-39783-1	20%	
33	Jalal, Md. Shah	20-43479-1	20%	
34	Karmakar, Arpon	20-43493-1	20%	
35	Roy, Mridul Kumar	20-43517-1	20%	
37	Mohiuddin, Mirza	20-43598-1	20%	

The project will be Evaluated for the following Course Outcomes

Your Project will be Evaluated based on the following marking criteria	Total Marks
Requirements Analysis (functional, quality, and project requirements) [5Marks]	
System Design (UI/UX design) & Test case [5Marks]	
Project Management Planning [5Marks]	
Submission, Completeness, Spelling, Grammar and Organization [5Marks]	

Submission Date: 06/08/2022

Description of Student's Contribution in the Project work

Student Name: Tushar, Mahmud Hossain

Student ID: 19-39783-1

Contribution in Percentage (%): 20%

Contribution in the Project:

- **System Features**
- **System Quality Attributes**

Mahmud

06/08/22.

Signature of the Student

Student Name: Jalal, Md. Shah

Student ID: 20-43479-1

Contribution in Percentage (%): 20%

Contribution in the Project:

- **Project Requirements**

Shah Jalal

06/08/22.

Signature of the Student

Student Name: Karmakar, Arpon

Student ID: 20-43493-1

Contribution in Percentage (%): 20%

Contribution in the Project:

- **UI/UX Design**

Arpon Karmakar

06/08/22.

Signature of the Student

Student Name: Roy, Mridul Kumar

Student ID: 20-43517-1


Contribution in Percentage (%): 20%

Contribution in the Project:

- **Project Scheduling**
- **Risk Analysis**

Mridul

06/08/22.

Signature of the Student
Student Name: Mohiuddin, Mirza Student ID: 20-43598-1 Contribution in Percentage (%): 20% <u>Contribution in the Project:</u> ▪ SYSTEM TEST PLAN  06/08/22.
Signature of the Student

1. PRODUCT AND PROJECT DESCRIPTION

1.1 System Features

1. Registration

Functional Requirements:

- 1.1 To create an account, the user must give personal information (name, birthdate, location, mobile number, gender, email).
- 1.2 Users can also sign up quickly by using their Facebook or Google accounts.
- 1.3 They must set a strong password for security and retype it on the form.

Priority Level: High

Precondition: The user must correctly enter all valid information and create a strong password.

Cross-reference:

2. Ride selection

Functional Requirements:

- 2.1 The user is able to choose a ride for their destination. The user can select their preferred ride option by filtering out by the parameters from all the rides along with the comparison of fares to where they wish to travel with their desired budget.
- 2.2 After entering all required information, the user must press the available ride button.
- 2.3 The system will check the selections, specifications and data. Then post it to the available ride list section.

Priority Level: High

Precondition:

The pick-up and drop-off locations must be included in the software's coverage database. The user must include the available transports in the system. The user is required to possess a smartphone.

Cross-reference:

3. Package Finalization

Functional Requirements:

- 3.1 From the available ride list, only those ride which will pick up users within 10 minutes (max).
- 3.2 Only the user will finalize which ride they will choose and then they will make an announcement regarding the selected packages.
- 3.3 After the announcement all the interested user needs to choose their payment method.

Priority Level: High

Precondition: The user must choose an appropriate package and pay immediately after the final package announcement.

Cross-reference: 2.1, 2.2, 2.3, 4.1, 4.2, 4.3

4. Ride Confirmation

Functional Requirements:

- 4.1 From the available ride list, only those rides will the user has chosen which will take maximum 10 mins for pick-up.
- 4.2 The system will finalize which package needs to be executed and then he will make an announcement regarding the selected packages.

Priority Level: High

Precondition: The user must choose a deal and also choose payment method immediately

Cross-reference:

5. Ride Cancellation

Functional Requirements:

- 4.1 User and the admin can cancel packages.
- 4.2 If there is a client, who is not responding within 10 minutes after confirmation then the admin can cancel that ride.
- 4.3 Once a ride gets cancel an email is sent to the interested clients and the system asks them to select another ride.

Priority Level: Low

Precondition: The client does not respond within 10 mins.

Cross-reference:

1.2 System Quality Attributes

Availability: Our system will available almost all the time. Every user will be able to take any facilities from this system. The system will be at least 95.5 percent available on weekdays between 5:00 AM to midnight local time, and at least 98.4 percent available on weekdays between 3:00 PM to 8:00 PM local time.

Performance: The software shall have a maximum user efficiency of at least 90% so that everyone can use the software without issue. Maintaining performance in software development is tough, but important to satisfy users. The software is user-friendly, so requirements contributed by users are the lead users.

Integrity: Users' personal information is stored securely on our system. Only authorized users can access this system. Our system blocked all unauthorized access by itself.

Maintainability: We try our best to maintain our system. If there is any problem with the system, we try to fix it as soon as possible so that the users do not face any interruptions while using this system.

Usability: Our application is very easy to use. We make our user interface reliable as if users' can easily find all options that they want. We continuously work on this to make our application more user-friendly.

Portability: An authorized user can log in to this system from anywhere via any device by using the internet.

Reusability: Any component of our application can be used later in different software which will be able to reduce the work cost of the next project.

Flexibility: Our application is very flexible. Later, if we want to add any new feature to our application. we can easily do it and our users can witness a new experience.

1.3 Project Requirements

User: The software is user-friendly, so requirements contributed by users are the lead users.

Features: The software shall have a securely mounted balance between users and developers. Features of the system should be updated with the time. Developer will ensure the newest features and keep up to date the system regularly.

System Analyst: The system will be updated every hour with recent and authentic information to deliver to the users.

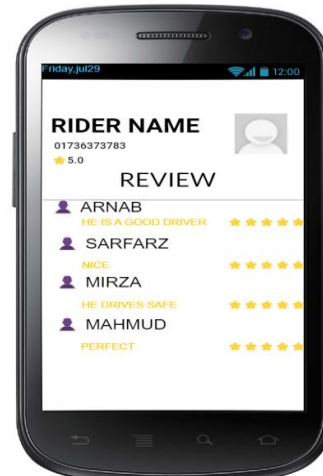
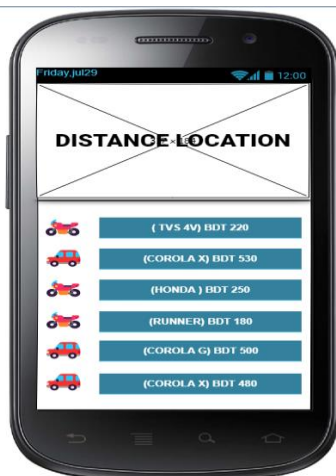
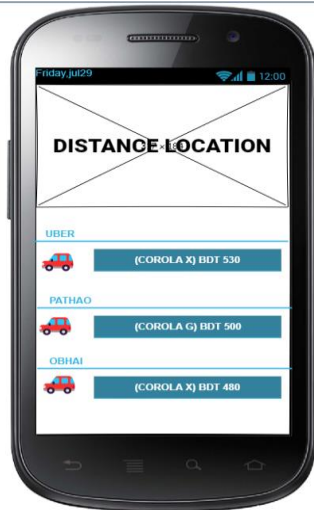
Business requirement: Accurate monthly sales forecast required for the project. For that, a new sales system is needed to be developed. It will only authorize for specifics so that data will be secured.

Resources: Resources are strongly connected to the project cost. The amount of money that's available for achieving the desired outcome will restrict the use and acquisition of resources, which creates a separate constraint. If resource is essential to the project, we'll have to sacrifice making the deadline, because no reasonable amount of money could reduce the delivery time. Resources of project should be high utilized

Budget: This software is a start-up, so it needs funding from the stakeholders. But the budget will be determined by the amount of work that has been done and the amount that is needed to be done.

2. SYSTEM DESIGN SPECIFICATION

2.1 UI/UX Design



3. SYSTEM TEST PLAN

Project Name: One Tap	Test Designed by:
Test Case ID: OT_1	Test Designed date:
Test Priority (Low, Medium, High): Low	Test Executed by:

Module Name: Background Color Session			Test Execution date:	
Test Title: Verify background color changing with user preference				
Description: Test Application background color change page				
Precondition (If any): User need to login into the account first.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the Application. 2. Enter User ID and password to login into the user profile. 3.Go to the User account select the background color icon. 4. Select a preferred color.	Language Type: 1. Black 2.White 3.Navy Blue 4. Purple 5. Mint Green	User should get their selected color.		
Post Condition: The background color of the application will change.				

Project Name: One Tap			Test Designed by:	
Test Case ID: OT_2			Test Designed date:	
Test Priority (Low, Medium, High): Low			Test Executed by:	
Module Name: Language Session			Test Execution date:	
Test Title: Verify language changing with user preference				
Description: Test Application language change page				
Precondition (If any): User need to login into the account first.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)

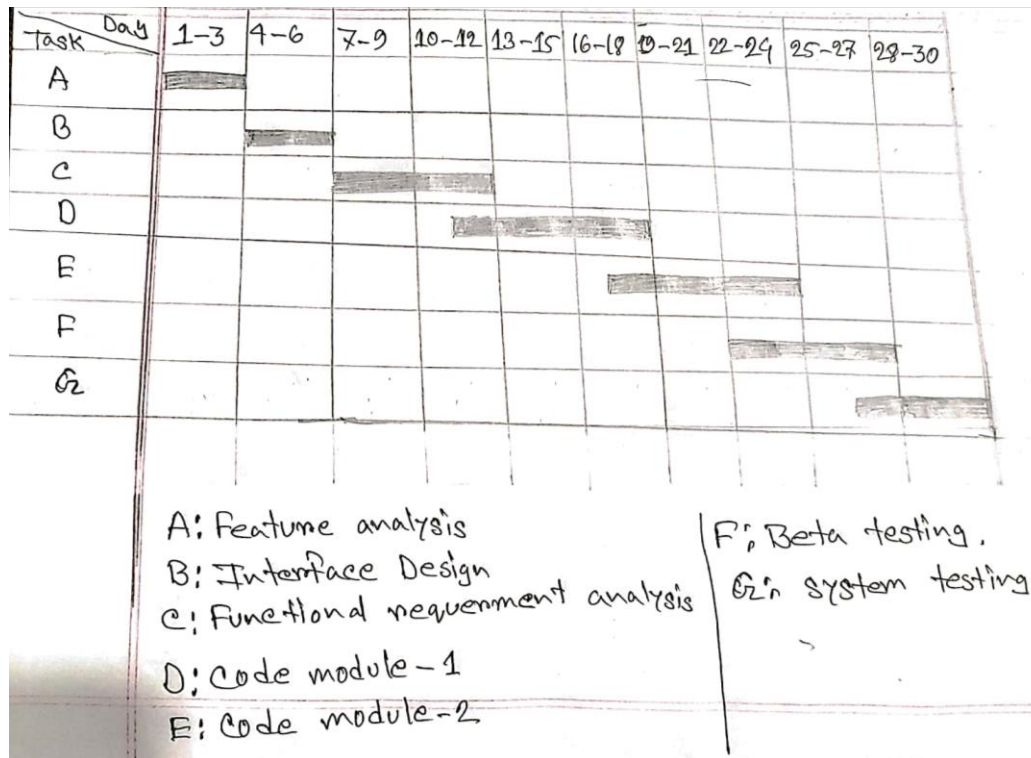
1. Go to the Application. 2. Enter User id and password to login into the user profile. 3.Go to the User account select the language icon. 4. Select a preferred language.	Language Type: 1.Bangla 2.English (USA) 3.English (UK) 4. French 5. Spanish	Account user should get their selected language.		
Post Condition: The device must support the application and also the language.				

Project Name: One Tap			Test Designed by:	
Test Case ID: OT_3			Test Designed date:	
Test Priority (Low, Medium, High): Medium			Test Executed by:	
Module Name: Search Session			Test Execution date:	
Test Title: Verify the Search Bar with searching any user destination				
Description: Test Application search destination.				
Precondition (If any): User need to login into the account first.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to Application login page. 2.Enter User ID. 3.Enter User Password. 4. Go to Search bar 5.Type anywhere the user wants to travel	To find desired user destination	User should successfully find their desired destination		
Post Condition: Users will only be able to find those areas that are included in this system by searching				
Project Name: One Tap			Test Designed by:	

Test Case ID: OT_4			Test Designed date:	
Test Priority (Low, Medium, High): High			Test Executed by:	
Module Name: Ride Selection Session			Test Execution date:	
Test Title: Verify the ride selection of desired destination				
Description: Test Application ride selection page				
Precondition (If any): User must have chosen a destination				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to Application login page. 2.Enter User ID. 3.Enter User Password. 4. Search desired destination 5. Select the desired ride the user wants	Ride selection	User should successfully select the desired ride		
Post Condition: Users can only choose from the selected destination's ride.				

4. PROJECT MANAGEMENT PLAN

4.1 Project Scheduling



4.2 Risk Analysis

The software server might get crashed, or the website might get broken. Due to heavy users visit the website at a time, and the chance is 30%. Managing risks is an important task for project managers. When you estimate probability, a risk will have a certain impact on your project. For instance, we can decide to avoid the risk and insist on the review step. But this decision would affect our timeline and our related costs, since the client would review each of your designs, and a project manager needs to oversee this process. The software server might get crashed, or the website might get broken.

S/N	Risk Description	Probability	Impact	Mitigation Plan
1	More users than planned	30%	Moderate	Place more server
2	Users reject the system	25%	low	Make interface user friendly
3	Enough funding	20%	low	Sacrifice\Discard
4	Lack of tools	35%	Moderate	Introduce latest tools
5	Staff Experience	50%	Significant	Train the inexperienced