



American International University- Bangladesh
Faculty of Science and Technology
Department of Computer Science

SOFTWARE ENGINEERING [C]

Course Teacher: FARZANA BENTE ALAM

PROJECT TITLE : Traffic rules and regulations in Bangladesh

GROUP NO : [2]

Group Member

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PROJECT TITLE : Traffic rules and regulations in Bangladesh

Objective:

The main objective to use this software to reduce traffic jams in all city of Bangladesh. Now adays traffic jam is a major problem. Due to traffic, people can't move properly. Many of us can't attend the classes, offices at due time. Also , people died in ambulance for jam. Also for over speed accident occurs lot and people died for it. And for wrong parking jam occurs too . Moreover, the road become narrow. And, It is too much pathetic . Life become miserable for all , and can't move freely.

So, For this problem, we decide to use a Application which is called **Traffic rules and regulations in Bangladesh** . to reduce the jam and people can move freely. If we discuss about the project and the application , there many way to reduce the current problem . First of all , if anyone cross the speed limit by car or bike and other vehicle ,he or she have to take tickets which is damage the person .and by taking this step many people try to maintain their vehicle speed .

another if we talk about traffic police , we also reduce the traffic police in bangladesh . because by this application we may introduce some of camers and somer software ,which is very common in abroad . this feature capture person and persons vehicle , which goes around over speed or wrong parking or carry over weight and also if any one use mobile phone when hw or she drive the car this feature capture it and without any traffic police, the victim have to carry a ticket so it should be clearly damage the person and slowly the total problems reduce . also by another feature all road car maintain the traffic rules without traffic police .

Key Features:

1. Over speed .
2. Signal break .
3. Wrong parking .
4. Wrong way road .
5. Over loaded truck or carrying over weight vehichle.
6. Suddenly Bus stop for long time .
7. Call ditective . (Using mobile phone when he or she was drive)
8. Traffic congestion .ETC

Benefits:

1. Traffic jam reduces .
2. Driver's won't break the signal easily .
3. Road will be good and the road will not be damaged by overloaded car or trucks .



4. Reduces the accident in Bangladesh .
5. Proper rules for all types of people . in this application everyone equal for this problems .
6. All roads are not easily damage so it is also benefit side .

Solutions:

To solve the problem at first the traffic should be reduces. Using this Application , drivers can't neglect the rules and regulation, if deny then drivers have to give penalty for that. Moreover by this Application allow the signal after 5 minutes so that there is no jam. Also this Application have some function for which the truck won't be overloaded and the road will not be destroyed. I think there is no previous solution of this application in Bangladesh . so we try to make it clear and try to traffic free country .

Functional Requirement :

1: Software fundamental : There are some software which are uses for identified the issue and this software are mini camera , Measurement sensor, normal sensor . Mini camera capture the vehicles information and hidden camera ,and , sensor measurement other things.

2: Information Collector : Information Collector User will be able to generate to Collect the users information And pass the information and any issues to the Control panel .

3: Control panel : Control panel should be collect the users information from information collector and then check the rules break list and then make a list of fine for the rules breaking users also alert the users by SMS . Also monitoring the expired date for pay the fine .

4: User verification : Every user should be verified by providing Phone number , NID , driving licenses copy , Vehicles number plate .

5 : User details : User will be able to see their fine information and the expired deadline of submitting the fine .

6 : Payment System : If users break the rules at that time control panel send a fine information and on that information there are a code of the fine list .then the user pay the fine by online payment system and uses the code for identify his account .

7: Over speed : If users cross the speed limit , the sensor software notify if by itself and pass the information to the information collector

8: Signal break : If the users break the system or break any signal line during traffic , then the camera capture the vehicles number plate and also capture the breaking system .



9: Call detective : Hidden camera basically notify the information who uses the mobile phone during driving . so the camera capture the photo and pass it to the control panel . and control panel user should be identify the person and make a fine list for the user.

10: Wrong parking : If users park the vehicles in wrong road for more then 10 minutes at that time the sensor will be notify the control panel and the user of control panel should be step or make a fine for the owner of the vehicle.

11: Wrong way : If the users break the rules and then go through the wrong road at that time the hidden camera capture the number plate of the vehicles .

12: Motorcycle safety issues : If any users use motorcycle and they don't follow instruction like wearing helmet and not allow two person in one motorcycle . at that time the mini camera captures the motorcycle number plate and pass the information to the information collector.

13: Over loaded truck or carrying over weight vehicles: In one way road there are a sensor in the middle of the road and every vehicle must be cross the road over the sensor and if any truck carry over loaded the sensor notify it and the hidden camera pass the number plate picture on the control panel .

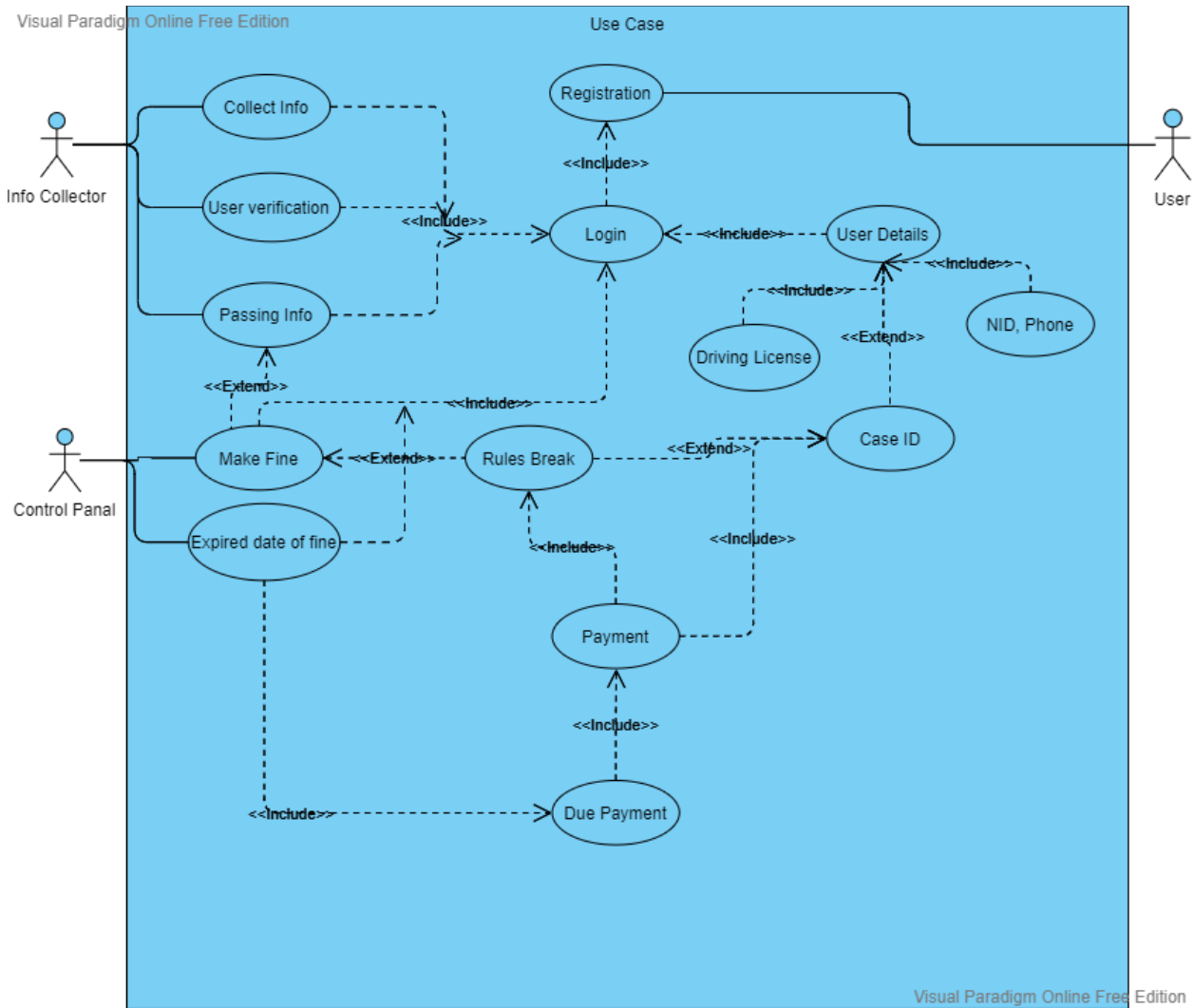
14 : License issue : If the users break rules for more then 5 times in one month at that time the license of the user must be wipe out for 6 month .

15: Warrant issue : If any person break any rules and the person not payment the fine at that time the control panel must be make a warrant issue for the vehicle.

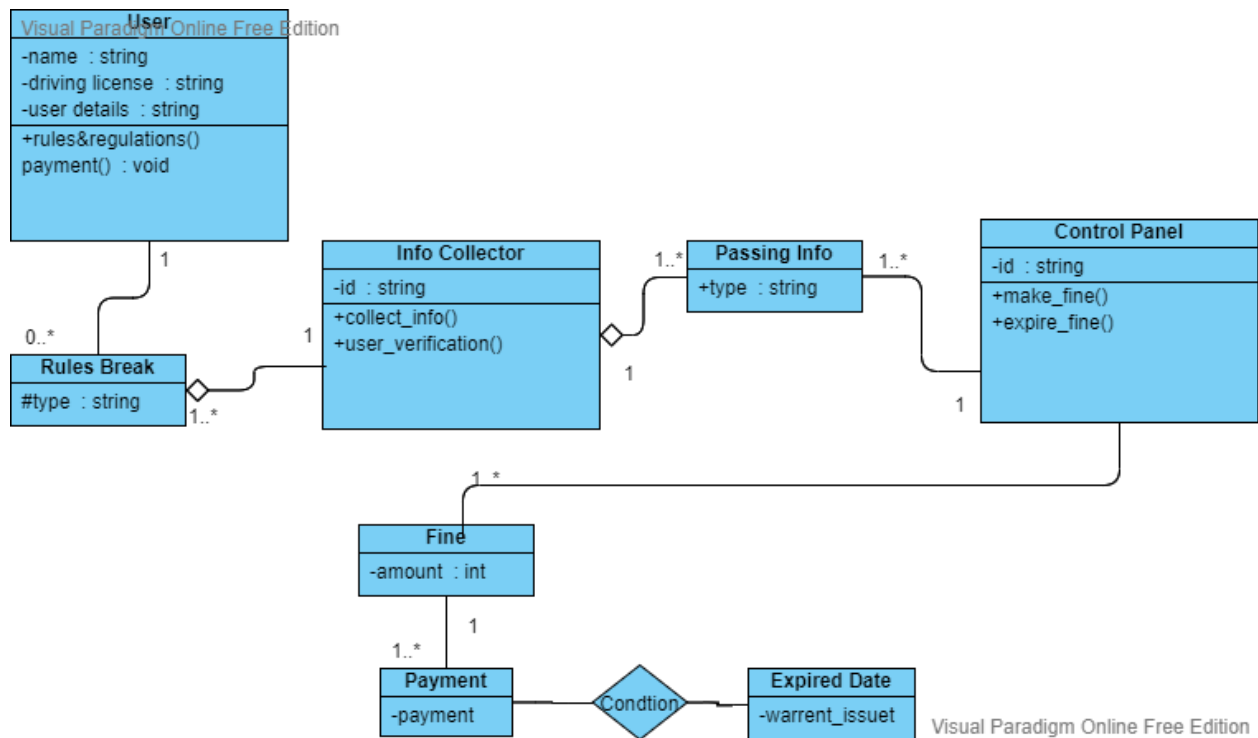
14: User Review : User will be able to review the whole application and also rating the application part.



Use Case Diagram

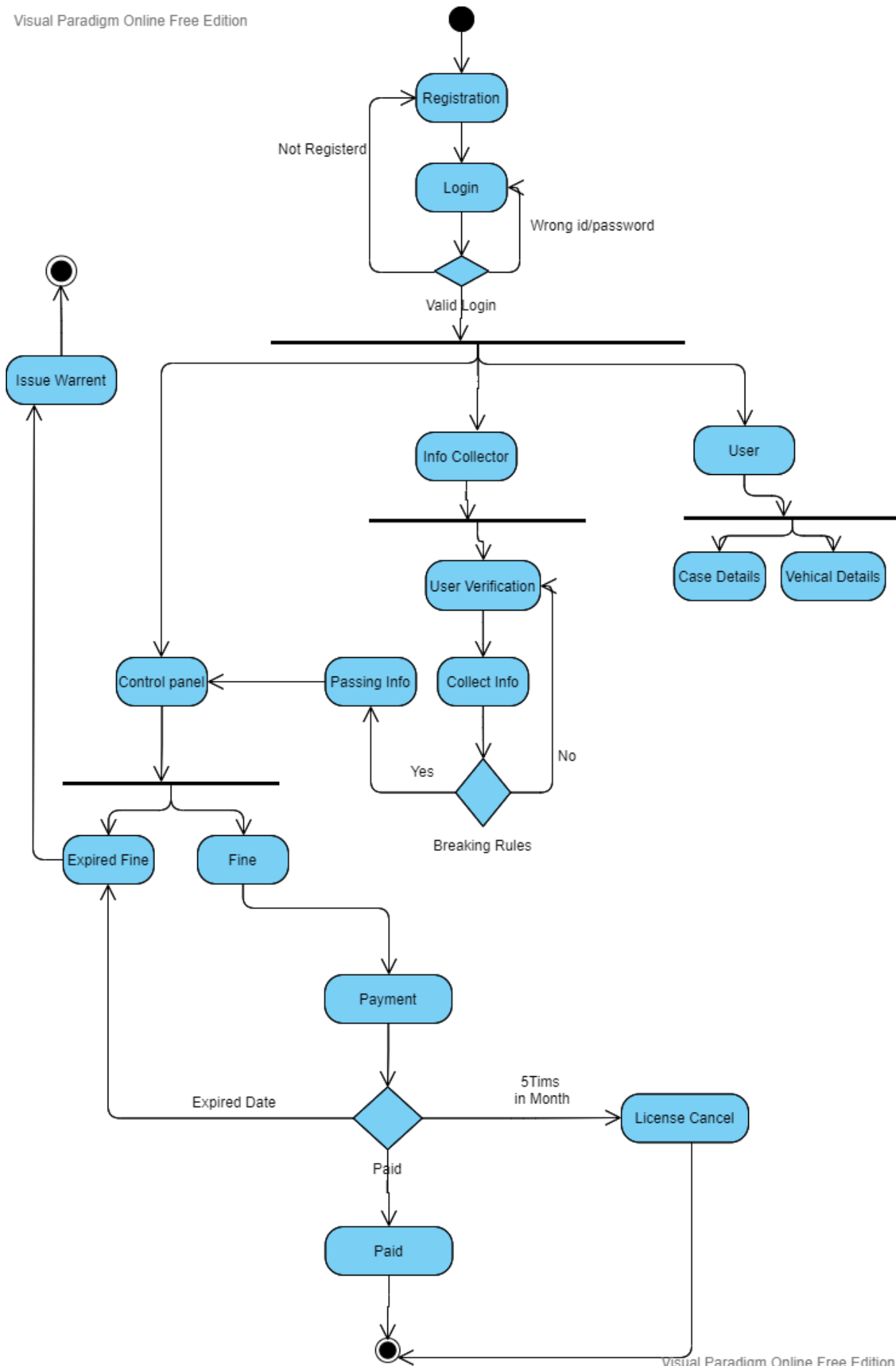


Class Diagram:

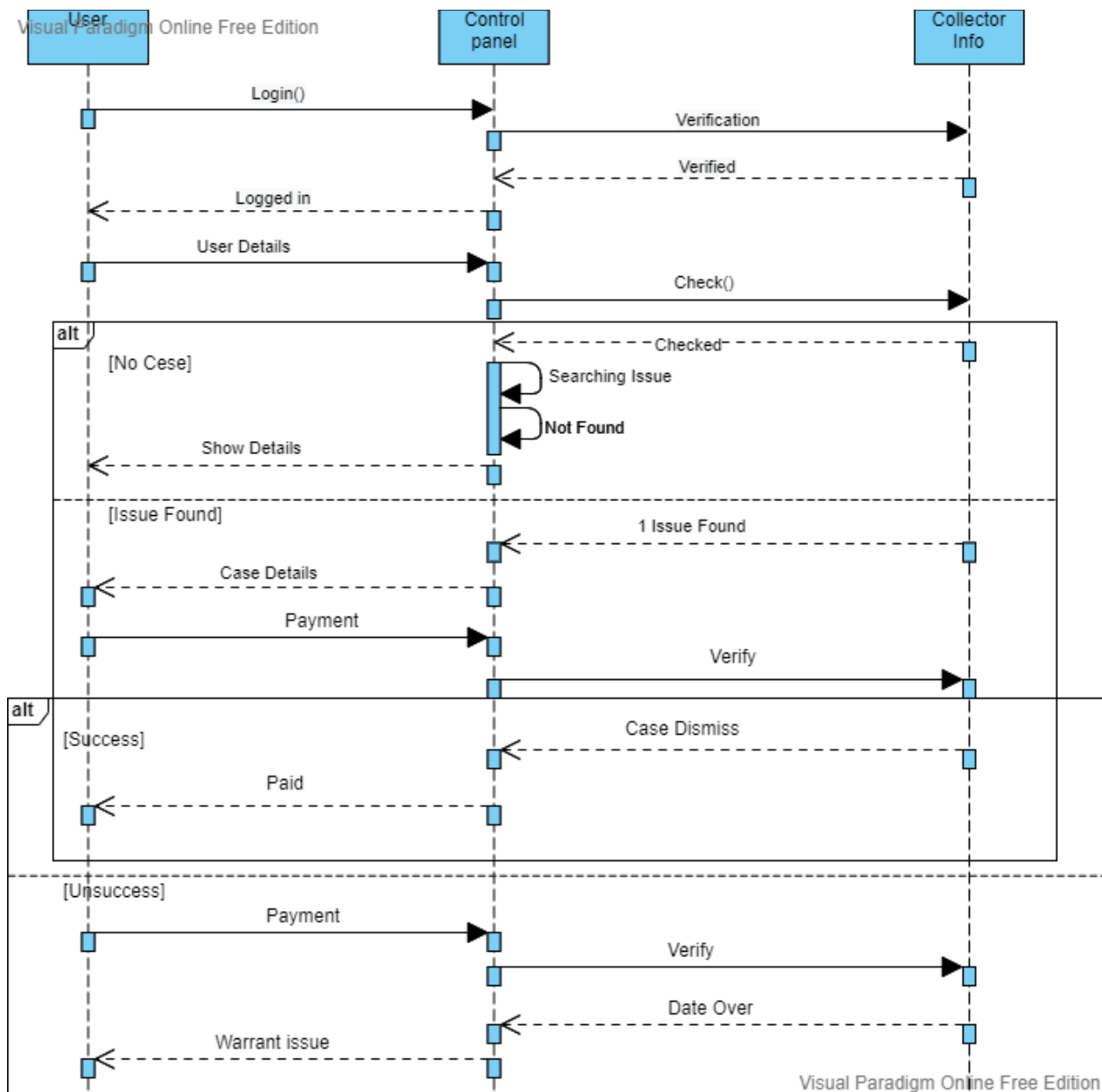


Activity Diagram





Sequence Diagram



Description of the used Software Process Model

The incremental model goes with our project. Our project is Smart traffic system or Traffic rules and regulations in Bangladesh. As the project is small but the settings and requirements are high just like in our projects consists of camera, identify ,overload System are included .

Moreover the process is lengthy ,it needs to checks all the stages again and again. So, if there is an error then it could be fix at the time of developing . Also , change can be make at later on by adding or removing. That's why incremental model goes with our projects.

Normally to other model there is no scope for funding schedule, risk, programme complexity ,but in case of incremental there is possibility for this benefits.

Again, the requirements are clearly understood for incremental just like as the project has lengthy development schedules, a new technology, can also early release when products arises, it have high -risk features . This method is more used for web applications .

At the time of need to have basic functionality delivered as soon as possible . requirement are needed for the project are prioritized . Finally, most of the requirement needed are known before to the starting of the project , but they are expected to change as the project progresses .

As the settings and requirements are high , so, the scrum role and method goes with it . Because it makes the agreement when the requirement are completed and can make final decisions of the tasks .

If there is an error then it can fix it. Moreover there is no function to change the system every few months , which is highly recommend for this project.

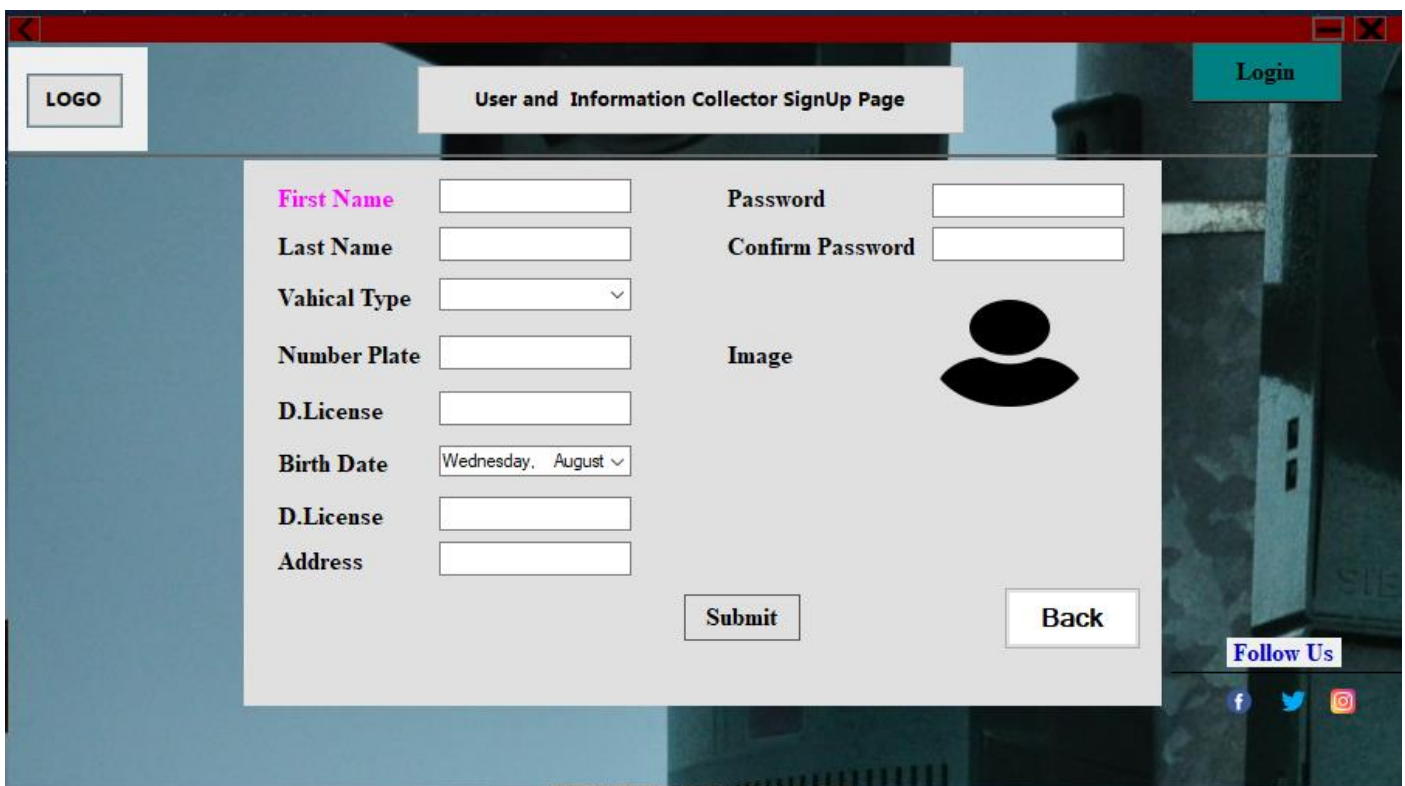
In case of other role and method there are constantly changing requirements or work with customers Who aren't sure what they want the system to do. But , in case of scrum there is high chance to work with the customers.

A small number programmer preferable for others, in case of scrum a large number programmer preferable which suits with our project. For others it able to create automated and functional tests but for scrum its not recommended and for our projects too.

So, from this view we can said that, the incremental model and scrum role and method are suitable for our projects



SOFTWARE DEGINE



LOGO

Information Collector LogIn/SignUp Page

Signup

User Name _____

Password _____

☐ Show Password

Login

Back

LOGO

User LogIn/SignUp Page

Signup

User Name _____

Password _____

☐ Show Password

Login

Back



LOGO

Contact With Us

Name

Phone

DL

Message

Send

Back

LOGO

Information Collector First Page

Edit Profile

Update Rules

Logout

Back

Control User

Control Equipment

Control Panal

New Case

American International University-Bangladesh (AIUB)

LOGO

Control Panel Information Page

Change Photo

Verified

First Name

Last Name

Batch No

NID

Birth Date

D.License

Traffic Zone

Address

Duty Time

Update

Back

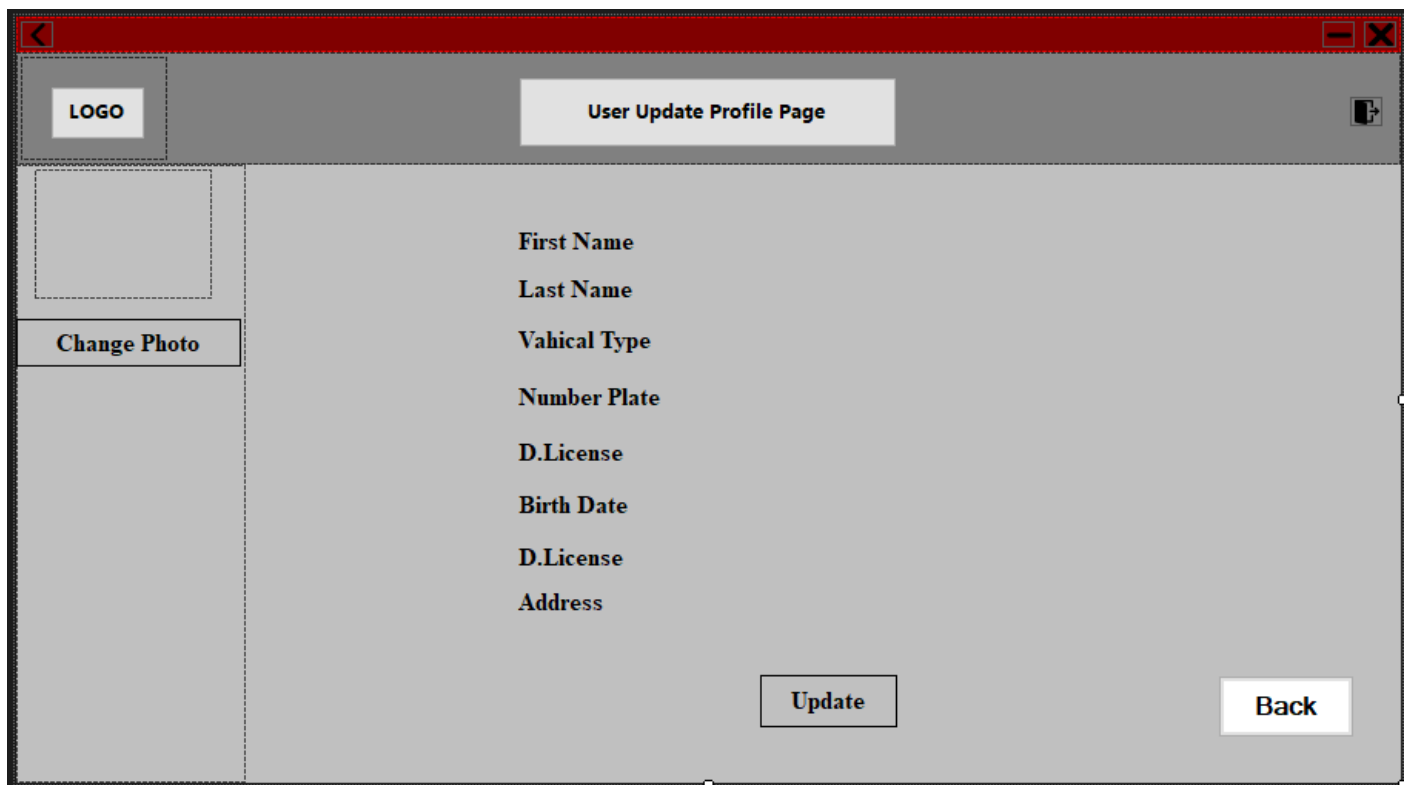
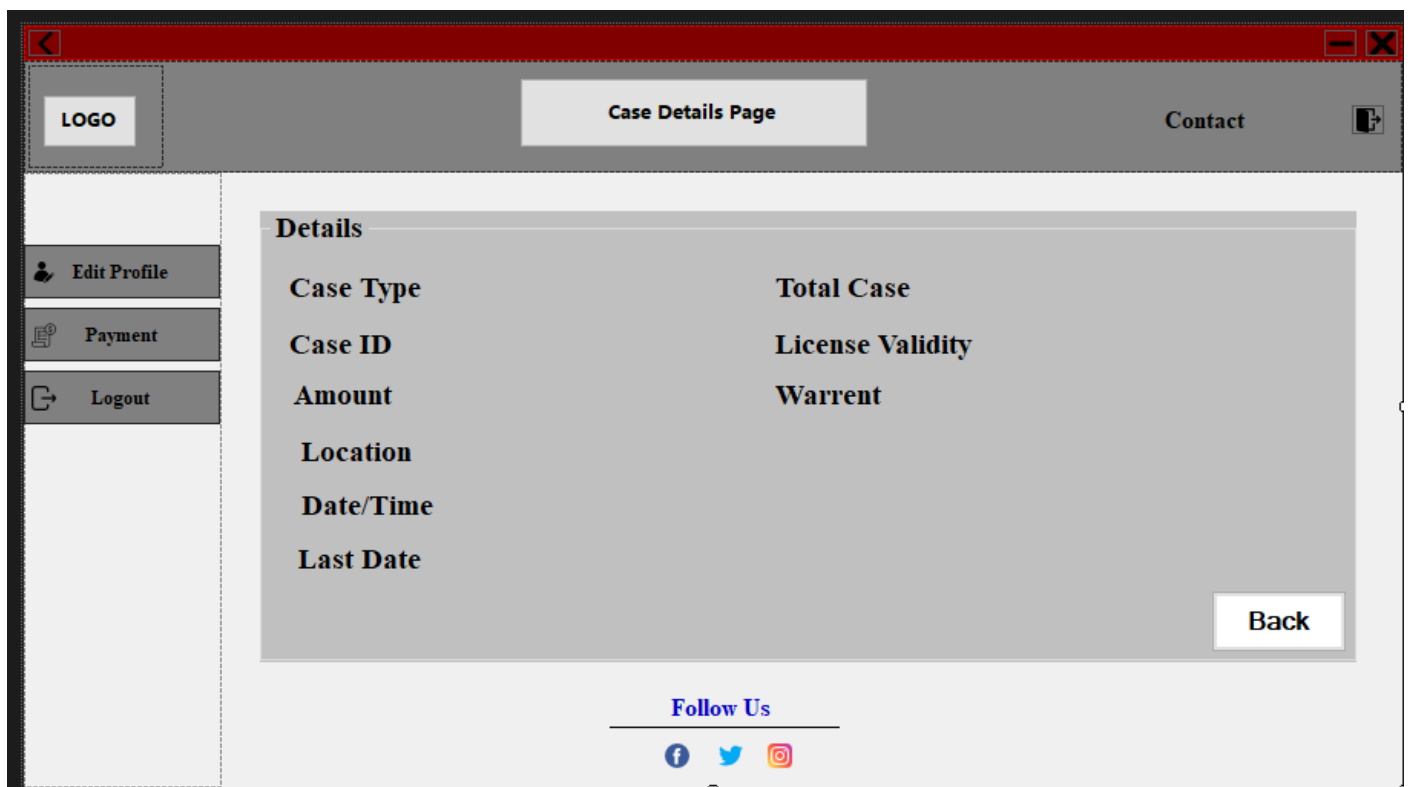
LOGO

Update Rule and Regultaion Page

Rules and Regulation

Back





LOGO

TRRS

PORTAL

ADMIN NAME

Manage Control Panel >

Manage Equipment >

User Information >

MotorByke Safety Issue >

Over Loaded Track >

Call Detective >

Warant Issue >

OTHER >

Camera

Mini Camera

Sensor

Mesurement

Other

Mail Box

License Iss

Somthing Later

Over Speed

Wrong Way

Signal Break

User Review

Employee Shedule

	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day

Employee Details

TOTAL Employee

COUNT ROW

Add

Modify

Delete

Search by IC

NAME

AGE 0

GENDER ☐ MALE ☐ FEMALE

ADDRESS

CONTACT_NO

PASSWOARD

Set Image



LOGO

TRRS

PORTAL

ADMIN NAME

Manage Control Panel >

Manage Equipment >

User Information >

MotorByke Safety Issue >

Over Loaded Track >

Call Detective >

Warant Issue >

OTHER >

Camera

Sensor

Other

Mini Camera

Hidden Camera

Employee Shedule

	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day

LOGO

TRRS

PORTAL

ADMIN NAME

Manage Control Panel >

Manage Equipment >

User Information >

MotorByke Safety Issue >

Over Loaded Track >

Call Detective >

Warant Issue >

OTHER >

Camera

Sensor

Other

Mesurement

Noirmal Sensor

Employee Shedule

	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day



LOGO

TRRS

PORTAL

ADMIN NAME

Manage Control Panel >

Manage Equipment >

User Information >

MotorByke Safety Issue >

Over Loaded Track >

Call Detective >

Warant Issue >

OTHER >

Camera

Sensor

Other

Mail Box

Somthing Later

Employee Shedule

	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day

LOGO

TRRS

PORTAL

ADMIN NAME

Manage Control Panel >

Manage Equipment >

User Information >

MotorByke Safety Issue >

Over Loaded Track >

Call Detective >

Warant Issue >

OTHER >

User Details

User Verification

License Issue

Over Speed

Wrong Way

Signal Break

User Review

Employee Shedule

	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day
	Time	Name	Day



Mini Camera



Area-1

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-2

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-3

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-3

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-4

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Hidden Camera



Area-1

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-2

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-3

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-3

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Area-4

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number

Road Name
Place Name
CCTV Number



Mesurement Sensor



Area-1

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-2

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-3

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-3

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-4

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Normal Sensor



Area-1

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-2

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-3

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-3

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Area-4

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number

Road Name
Place Name
Sensor Number



User Details



No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Over Speed Signal Break	total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Wrong Parking Over Load	total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	MSI Phone Call	total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine

User Verification



Search By Name/DL/L

Block

Wait

Ok

Name

Age

Father Name

Mother Name

Present Address

Permanent Address

License Number

Driving License Number

National Id

Marital Status

Nationality

Verified Contact

Verified E-mail

Blood Group

Religion









Over Speed User Details



Note

Dear user please note that when you double click on a vehicle owner, that means a case was filed in his name








Owner Name	Vechile Type	Vechile Number	Total Wrong	License Validation	Warant Issue	Fine	
							
							
							
							
							
							

Wrong Way User Details



Note

Dear user please note that when you double click on a vehicle owner, that means a case was filed in his name

Owner Name	Vechile Type	Vechile Number	Total Wrong	License Validation	Warant Issue	Fine	
							
							
							
							
							
							



Signal Break User Details



Note

Dear user please note that when you double click on a vehicle owner, that means a case was filed in his name

	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	
Owner Name	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	
Owner Name	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	
Owner Name	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	
Owner Name	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	
Owner Name	Vehicle Type	Vehicle Number	Total Wrong	License Validation	Warant Issue	Fine	

MotorByke Safety Issue



No	Owner Name	Vehicle Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
			Over Speed					
			Signal Break					
			Wrong Parking					
			Over Load					
			Helmate					
No	Owner Name	Vehicle Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vehicle Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vehicle Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	



OverLoaded Track



No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
			Over Speed					
			Signal Break					
			Wrong Parking					
			Over Load					
No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	

Call Detective



No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
				Phone Call					
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	




Warant Details



No	Owner Name	Vechile Type	Vechile Number	Catagorey	Total Wrong	License Validation	Warant Issue	Fine	
No	Owner Name	Vechile Type	Vechile Number	Over Speed Signal Break Wrong Parking Over Load MSI Phone Call					
No	Owner Name	Vechile Type	Vechile Number						
No	Owner Name	Vechile Type	Vechile Number						
No	Owner Name	Vechile Type	Vechile Number						
No	Owner Name	Vechile Type	Vechile Number						
No	Owner Name	Vechile Type	Vechile Number						
No	Owner Name	Vechile Type	Vechile Number						

LOGO

b kash

payment

Name

Case id

Amount

Mobile No

pin

Send

Back



TEST PLANNING

Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_1		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Login session		Test Execution date: 13.11.2022		
Test Title: Verify login with valid username and password				
Description: Test website login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter user name, password 3.click submit	username:----- password: -----	user should login Into application	As expected,	Pass

Project Name: : Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_2		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name: Info collector		Test Execution date: 13.11.2022		
Test Title: Collect info by justification				
Description: Test website Info Collector login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter username, password, vehicle name, vehicle number, image 3.click submit	username:----- password:-----	Info should get by verification	As expected,	Pass



Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_3		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name: Contact option		Test Execution date: 13.11.2022		
Test Title: Able to contact with any issue				
Description: Test website Contact page				
Precondition (If any): User must open TRRB website				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter name , Contact no	<u>xxxxxxxxxxx</u>	Contactable	As expected,	Pass

Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_4		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Payment Session		Test Execution date: 13.11.2022		
Test Title: Verify Payment by using id and mobile number				
Description: Test website Payment page				
Precondition (If any): User must have valid account number				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter account no, money, password 3.click submit	username:----- password: -----	Payment	As expected,	Pass



Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_5		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Control User		Test Execution date: 13.11.2022		
Test Title: Verify control user by editing profile				
Description: Test website control user editing page				
Precondition (If any): User must have valid information				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter edit information 3.click submit	Editing profile	Edit Done	As expected,	Pass



Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_6		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : User Verification		Test Execution date: 13.11.2022		
Test Title: Verification by using NID				
Description: Test website user verification page				
Precondition (If any): Admin must have login TRRB portal				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter NID, name , license 3.click submit	NID:----- Name:----- License:-----	Verification Done	As expected,	Pass



Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_7		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Control panel added session		Test Execution date: 13.11.2022		
Test Title: Added control panel employee by Admin				
Description: Test website employee added page				
Precondition (If any): Admin must have login TRRB portal				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter employee NID, name , address, ETC 3.click submit	NID:----- Name:----- Address:-----	Employee added done	As expected,	Pass

Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_8		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Measurement Session		Test Execution date: 13.11.2022		
Test Title: Verify all Camera working good				
Description: Test website admin measurement page				
Precondition (If any): Admin must have login TRRB portal				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter CCTV No, area no, road no ,road name 3.click submit	CCTV NO:----- Area No:----- Road No:----- Road Name:----	Verification done	As expected,	Pass



Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tubin</u>		
Test Case ID: FR_9		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Control Panel session		Test Execution date: 13.11.2022		
Test Title: Control Panel Checking				
Description: Test website control panel page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter id and password 3.click submit	Id:----- Password:----	Checking done	As expected,	Pass

Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tubin</u>		
Test Case ID: FR_10		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Motorbike Safety Issue		Test Execution date: 13.11.2022		
Test Title: Motorbike safety issue by using owner name, vehicle number				
Description: Test website Admin and control panel page				
Precondition (If any): Users must have login valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter owner name, vehicle number, driving license 3.click submit	Owner Name:-- Vehicle No:----- Driving license:-	Motorbike Safety issue done	As expected,	Pass

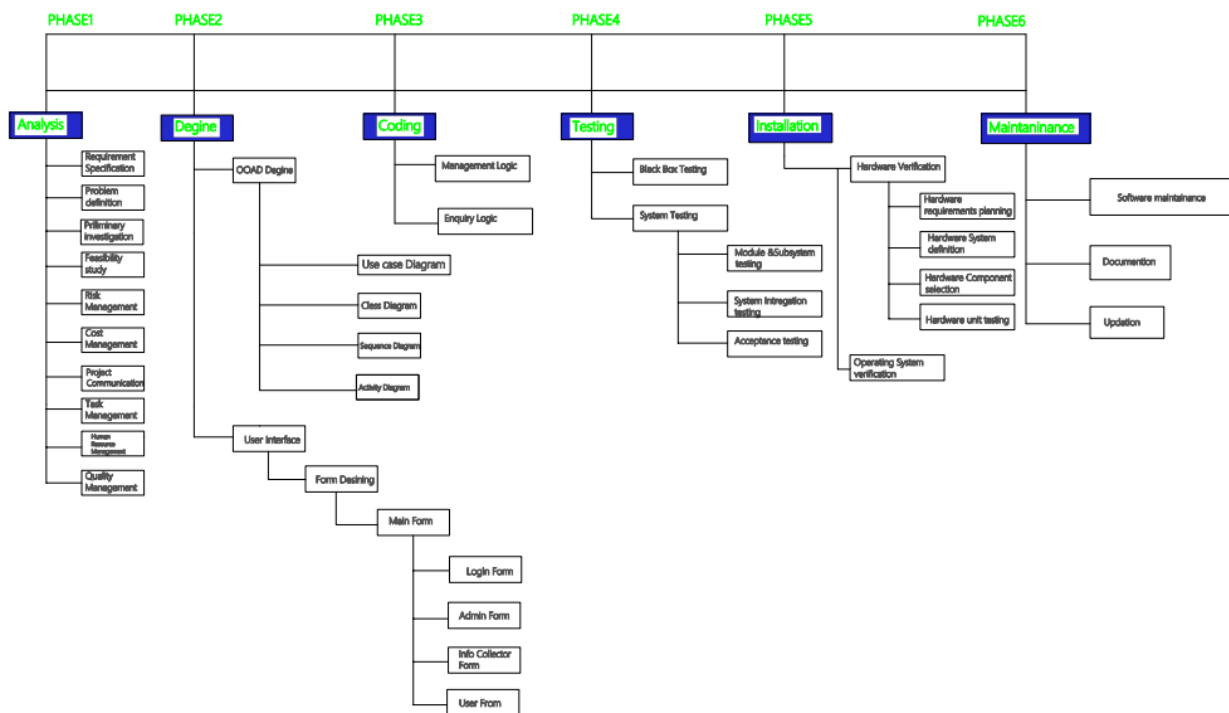


Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_11		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Call detective session		Test Execution date: 13.11.2022		
Test Title : Call detective by using owner name, vehicle number				
Description: Test website Admin page				
Precondition (If any): Users must have login valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter contact number 3.click submit	<u>xxxxxxxxxxxx</u>	Call detective done	As expected,	Pass

Project Name: Traffic rules and regulations in Bangladesh		Test Designed by: <u>Tuhin</u>		
Test Case ID: FR_12		Test Designed date: 11.07.2021		
Test Priority (Low, Medium, High): Medium		Test Executed by: Desktop		
Module Name : Warrant Details Session		Test Execution date: 13.11.2022		
Test Title : Warrant details by using owner name, vehicle number				
Description: Test website Admin and Control panel page				
Precondition (If any): Users must have login valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to website 2.Enter Owner name, vehicle number 3.click submit	Owner Name:---- Vehicle No :-----	Warrant details done	As expected,	Pass

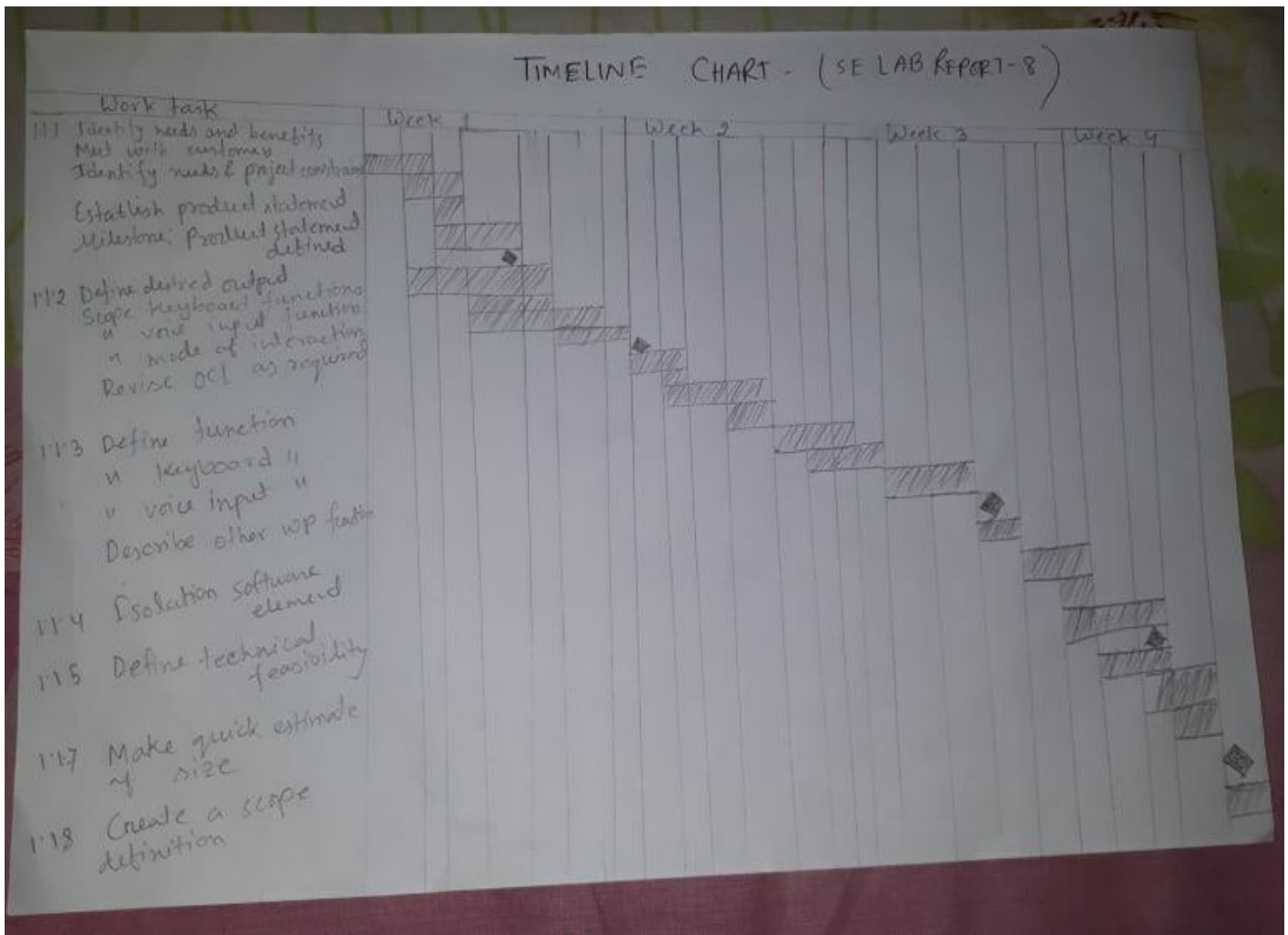
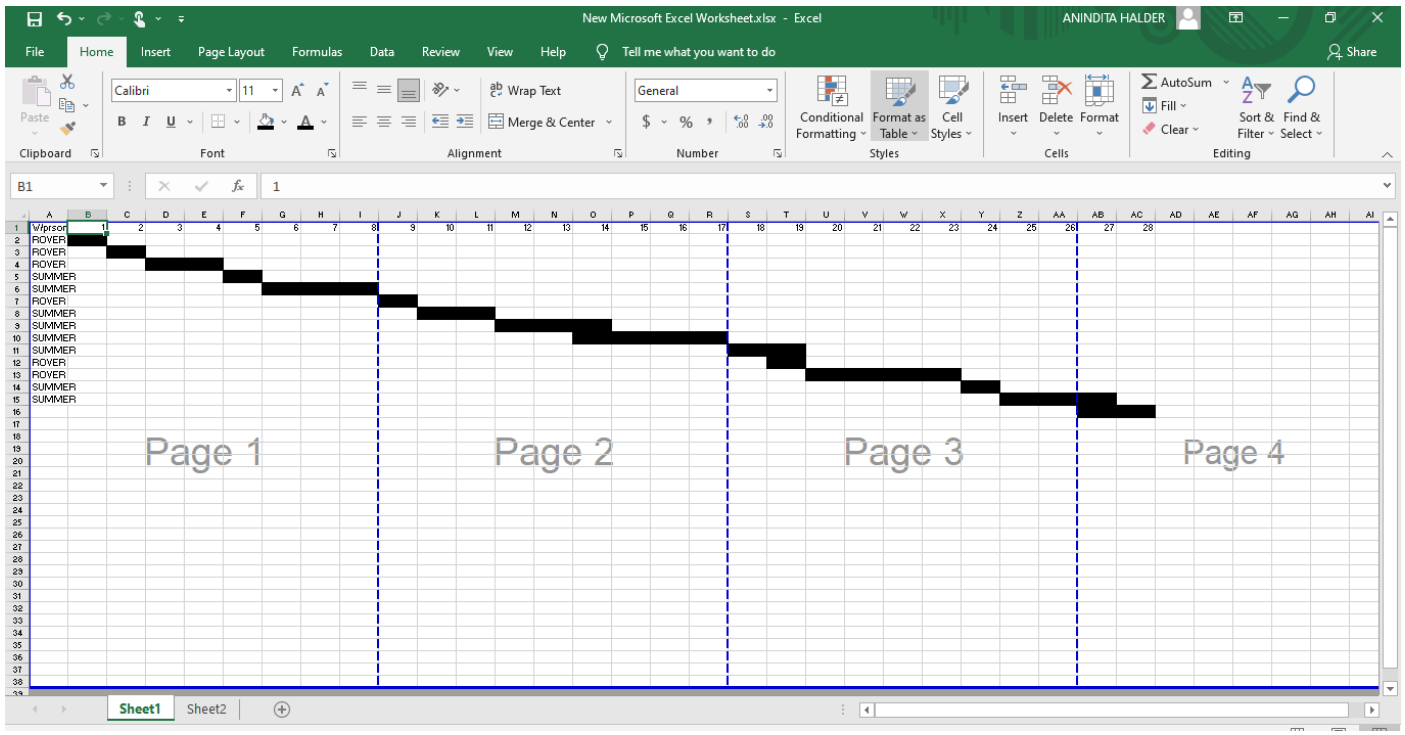


WORK BREAKDOWN STRUCTURE



PROJECT TIMILINE CHART





Function points Metrics

Information Domain Value	Count		Simple	Average	Complex		
(FP unadjusted)							
Number of external inputs (EIs)	12	*	3	4	6	=	48
Number of external outputs (EOs)	30	*	4	5	7	=	150
Number of external inquiries (EQs)	9	*	3	4	6	=	6
Number of internal logical files (ILFs)	6	*	7	10	15	=	60
Number of external interface files (EIFs)	3	*	5	7	10	=	21
						Count	315



COCOMO (Constructive Cost Model)

PM : person-months needed for project (labor working hours)

SLOC : source lines of code

P : project complexity (1.04-1.24)

DM : duration time in months for project (week days)

T : SLOC-dependent coefficient (0.32-0.38)

ST : average staffing necessary

Software Project Type	Coefficient <Effort Factor>	P	T
Organic	2.4	1.05	0.38
Semi-detached	3.0	1.12	0.35
Embedded	3.6	1.20	0.32

- **Effort => PM = Coefficient_{<Effort Factor>} * (SLOC/1000)^P** [100,000 SLOC/1000 = 100k SLOC]

$$= 2.4 * (5000/1000)^{1.05}$$

$$= 13 \text{ months} = 52 \text{ weeks}$$

- **Development time => DM = 2.50 * (PM)^T**

$$= 2.50 * (13)^{0.38}$$

$$= 6.6 = 7 \text{ months} = 28 \text{ weeks} = (28 * 22 \text{ day}) = 616 \text{ Persons_days}$$

- **Required number of people => ST = PM/DM**

$$= 13/7 = 1.8 = 2 \text{ staff}$$



Earned value analysis (EVA)

Task	Planned Effort	Actual Effort
1	8	8.5
2	9.5	9
3	5	5
4	1	2
5	12	15
6	20	18
7	16	17
8	15	14
9	10	10
10	6	6.5
11	13	
12	6	
13	4	
14	7	
15	11	

Budgeted Cost of Work Performed (BCWP) = 84.5

Budgeted Cost of Work Scheduled (BCWS) = 125.5

Actual Cost of Work Performed (ACWP) = 105

Total Task = 38

Effort Estimated = 616 Persons Days

Budget at Completion (BAC) = DM*22 = 28*22 = 616

Schedule Performance Index (SPI) = BCWP/BCWS = 84.5/125.5 = 0.70

Schedule Variance (SV) = BCWP – BCWS = 84.5-125.5 = -41 Persons Days

Cost Performance Index (CPI) = BCWP/ACWP = 84.5/105 = 0.80

Cost variance, CV = BCWP – ACWP = 84.5-105 = -20.5

% Schedule for Completion = BCWS/ BAC = 125.5/616 = 20.37 % of Work

[% of work scheduled to be done at this time]

% Complete = BCWP/ BAC = 84.5/616 = 13.72 %

[% of work completed at this time]



Building Risk Table

Risks	Category	Probability	Impact	RMMM
Estimated size of project	PS	80%	2	
Team members do not work well together	ST	20%	2	
Key personnel are only part-time	ST	20%	4	
The product take more than time expected to design and implement for unfamiliar areas	DE	50%	2	
Lack of needed specialization increases defects and reworks	ST	40%	2	
Development of extra software functions that are not needed	DE	20%	3	
Operations in unfamiliar software environment causes unforeseen problems	TE	25%	4	
Strict requirements for compatibility with existing system	DE	20%	3	
Components developed separately cannot be integrated easily, requiring redesign	DE	30%	3	
Development of the wrong software functions requires redesign and implementation	DE	5%	3	
Finding will be lost	CU	40%	1	
Customer will change requirement	PS	100%	4	
Technology will not meet expectations	TE	30%	1	
Staff inexperienced	ST	30%	2	
Staff turnover will be high	ST	70%	2	

Impacts Value:

1-> Catastrophic || 2-> Critical || 3-> Marginal || 4-> Negligible

