



“BD WHEELERS”

A WEB APPLICATION FOR BANGLADESHI CYCLISTS

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DECLARATION

I hereby declare that, this project has been done by me under the supervision of **Md Fahad Bin Zamal, Senior Lecturer, Department of Software Engineering, Daffodil International University**. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

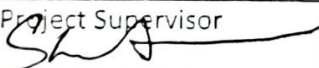


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ACKNOWLEDGEMENT

First of all I express my heartiest thanks and gratefulness to Almighty ALLAH for HIS divine blessing makes me possible to complete the final year project successfully. I really grateful and wish my profound my indebtedness to **Md Fahad Bin Zamal, Assistant Professor, Department of Software Engineering, Daffodil International University**. Deep Knowledge & keen interest of my supervisor in the field of “A web app for Bangladeshi cyclists: BD Wheelers” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

I would like to express my heartiest gratitude to **Pro. Dr. Touhid Bhuiyan, Professor, and Head, Department of SWE**, for his kind help to finish my project and also to other faculty member and the staff of SWE department of Daffodil International University.

I would like to thank my entire course mates in Daffodil International University, who took part in this discuss while completing the course work. Finally, I must acknowledge with due respect the constant support and patients of my parents.

EXECUTIVE SUMMARY

My project titled “BD Wheelers: A Web Application for Online Cycling Community” is a web app for cyclists of Bangladesh. Using this application, cyclists will be able to join event of cycling. At present the cycling system of Bangladesh is running via other web app.

Now-a-days Computer becomes a part of our life. We can’t think a single moment without our Computer. We are more likely to use our Computers for practical purposes in our daily life. Among these Computer OS, Web has majority percentage. For this reason I thought that I should build something in Web that has practical use to the user. I have used Bootstrap, HTML, CSS and Java Script for front-end design and validations and Python programming language with Django Framework for back-end design. I also used SQLite as my main database.

My app will help with all the information about health benefits, bicycle and cycling. This will increase the number of cyclists in Bangladesh and decrease fuel cost and save valuable time of a person. It will also help people to know about the health benefits of cycling and will encourage them to be an athlete. This app is very user friendly. After finishing all the task and test process this application proved to be working effectively.

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CHAPTER 1: INTRODUCTION

1.1 Project Overview:

A Web app can provide the solution by offering the ability to share health benefits and information between cyclists and peoples. The goal of the web app is to create a better relationship between cyclists and people who want to be a cyclist. The BD Wheelers web application is designed to support both cyclists and normal people. Bicycles were introduced in the 19th century and now number approximately one billion worldwide. They are the principal means of transportation in many parts of the world. Cycling is widely regarded as a very effective and efficient mode of transportation optimal for short to moderate distances [1].

1.2 Project Purpose:

The main purpose of your project is to make a community system that helps people to be aware about health benefits, stay healthy and saving fuel for future. Where users can complete registration process easily and join events of group bicycling.

1.2.1 Background:

There are some web application almost similar with my web application but these have many difference with my web application. Some web apps are: BD Cyclists web application: This is an informative web application which provides the information about bicycling events they completed and willing to complete in future [2]. The cyclists of Bangladesh can share group ride by using this web application [3].

bicyclebd.com: The web application allows user to give a review blog post and approximate price of bicycle [4]. But in my web application the user can register with personal information about themselves and also can update it without the approval of Admin. In my web application there is log in page for admin and user. The admin and user can post about health information, share experience of cycling, give a review of bicycle, buy & sell or exchange used or new bicycle and bicycle parts, users also can join in events of cycling.

1.2.2 Benefits:

Without any benefits there are no fulfillments of any system. My system has some unique benefits. They are given below:

- This is a user friendly digitalized system
- People will be encourage to be a cyclist and a great community will be built by this system
- People will be aware of knowledge about cycling and it's benefits
- Using this system user can control obesity and weight also decreases body fat levels by cycling
- User can control cardiovascular disease and cycling increases cardiovascular fitness
- Diabetes is a common disease now-a-days but patients can control sugar level by joining cycling event
- Bone injuries, arthritis, improved joint mobility, improved posture and coordination can be reduce by cycling
- Mental illness, anxiety and depression reduced by cycling

1.2.3 Goals:

I want to make this web application. This web application will have contained these features.

- User can register with personal information
- Users can join event of group cycling
- Users can buy sell or exchange bicycle and bicycle parts
- Users can create post with pictures about various cycling topics
- Users also can give review post with pictures about any bicycle

1.3 Stakeholders:

A system must have some stakeholders. A system has no value without the relation of stakeholders with the system. My system's stakeholders are:

- **User (Cyclist):** Users as cyclists are the main internal stakeholder of my system. Because they will join in cycling event with other cyclists and share their experiences, health tips and many more.
- **Admin:** Admin will be assigned by the system owner. Admin has the authority or power to control the whole system. Admin can create/delete any User. Admin will monitor the system and activity.
- **Bicycle Seller:** Bicycle seller is an actor who has a bicycle shop, bicycle brand, company, or any user who wants to sell or exchange his/her old/new bicycle by my system.

- **People/ Guest user:** A web surfer is a guest user of BD Wheelers. Guest user can view the whole system without registration but can't use any feature without registration.

1.4 Project Schedule:

Full filling the required requirements and complete the project in time we maintain project schedule. We make a project schedule to complete the project properly in time [5].

1.4.1 Gantt Chart:

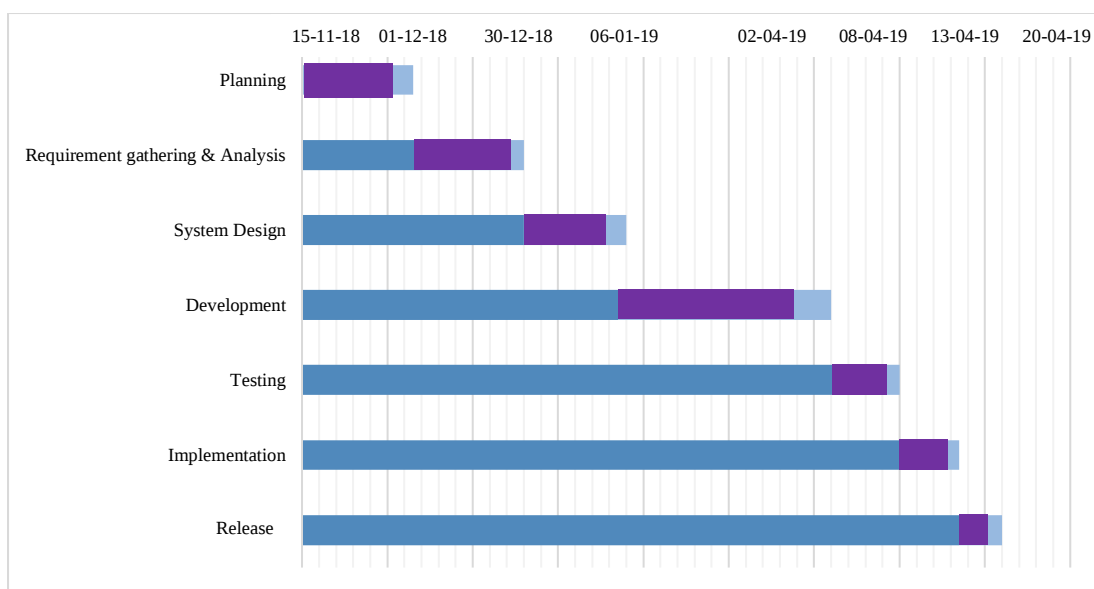


Figure 1.1: Gantt chart

1.4.2 Milestone:

Milestone, it is a time frame of project. That will define the project task. Project milestones are as follows:

Table 1.1: Milestone

Task no.	Task Name	Start Date	End Date	Duration
01	Planning	15.11.2018	01.12.2018	16
02	Requirements Gathering & Analysis	01.12.2018	30.12.2018	30
03	System Design	30.12.2018	06.01.2019	7
04	Development	06.01.2019	02.04.2019	85

05	Testing	02.04.2019	08.04.2019	6
06	Implementation	08.04.2019	13.04.2019	5
07	Release	13.04.2019	20.04.2019	7
	Total			156

CHAPTER 2: SOFTWARE REQUIREMENT SPECIFICATION

Requirement analysis is the process of identifying the user satisfaction in the most important part of project management.

2.1 Functional Requirements:

The functional requirement of the system is given below:

Registration:

Table 2.1: Registration

Fr-01	Registration
Description	Users must have to create profile for using all the features of system.
Stakeholder	Admin, User

Login:

Table 2.2: User Login

Fr-02	Login
Description	Users can log in to the system and can perform his/her definite tasks.
Stakeholder	Admin, User

Event:

Table 2.3: Event

Fr -03	Event for group cycling
Description	Users will create and join in an event of group cycling
Stakeholders	Admin, User

Post:

Table 2.4: Post

Fr -04	Post
Description	Users can create, update and delete a post.
Stakeholders	Admin, User

Buy-Sell Post:

Table 2.5: Buy-Sell Post

Fr -05	Buy-Sell Post
Description	Users can create a buy-sell post for selling, buying or exchange a bicycle.
Stakeholders	Admin, User

Profile:

Table 2.6: Profile

Fr-06	Profile
Description	Users can see their personal information and edit them as users wish.
Stakeholders	Admin, User

2.2 Data requirements:

In this stage, first I have to understand the type of gathering data to enhance my system.

- Connecting with central database.
- Information about Users for being registered.
- Information for manage an event.
- Information about user posts.
- Information about user buy-sell posts.

2.3 Performance Requirements:

It's very necessary to sustain the performance of the project. To assure the better performance, this project has to meet some requirements which will provide the better performance.

2.3.1 Speed and Latency Requirements:

While user will run our project in the browser, system needs a minimum amount of speed to perform the task.

Table 2.7: Speed and Latency Requirements

SLR-01	Processing speed of the system will be faster.
Description	When user will run my system speed will be depended on their internet speed & the server bandwidth speed.
Stakeholders	Users as Cyclists, Bicycle seller, Admin etc.

2.3.2 Accuracy Requirements:

System have to confirm the Legibility and Accuracy of the data.

Table 2.8: Accuracy Requirements

AR-01	Required proper information of every user
Description	The input data should be correct and right pattern data, otherwise the input field show error message, like personal information, phone number, email address, password etc. the input information is not valid, the data never save. Or the input data pattern is not match, then users will not be able to go forward step with the system.
Stakeholders	Users as Cyclists, Bicycle seller, Admin etc.

2.3.3 Capacity Requirements:

The system should maintain all inserting data

Table 2.9: Capacity Requirements

CR-01	Manages all the data in database properly
Description	All data like, User registration data, event data, post data, buy-sell post data etc. are stored in the database.
Stakeholders	Users as Cyclists, Bicycle seller, Admin etc.

2.4 Dependability Requirements:

Dependability means, it measures of a system reliability, availability, robustness, safety etc. Here, dependability means the running time of this project.

2.4.1 Reliability Requirements:

Table 2.10: Reliability Requirements

RR-01	The system is reliable
Description	User information and others information will be safe and secured in my system.
Stakeholder	Users as Cyclists, Bicycle seller, Admin etc.

2.4.2 Availability Requirements:

Table 2.11: Availability Requirements

AR-01	The system will be available 24x7.
Description	It is available 24 hours in a day and 7 days in a week The system will be updated regularly.
Stakeholder	Users as Cyclists, Bicycle seller, Admin etc.

2.4.3 Robustness or Fault Tolerance requirements:

Table 2.12: Availability Requirements

FTR-01	Well robustness of the system
Description	If any problem occurs the system will show error message and the fault tolerance is handled properly.
Stakeholder	Users as Cyclists, Bicycle seller, Admin etc.

2.5 Maintainability and supportability requirements:

Authority would have assign some Admins and specialist for the maintenance of the system and support the system.

2.5.1 Maintenance Requirements:

Authority would have to assign some specialists for maintaining the system. System can produce wrong results and the specialists must be able to reproduce the data flow through the system.

2.5.2 Supportability Requirements:

Authority would have to recruit some admins for supportability of the system.

2.6 Security requirements:

There are two security features as Login as Admin & Login as User to get access to this system or a specific module of the system must provide an authentication mechanism.

2.6.1 Access Requirements:

This system provides accesses the different module, by access in an authentication way to the authentic user.

2.6.2 Integrity Requirements:

Credential information of users' will be kept safe.

2.6.3 Privacy Requirements:

All the passwords and personal information will be kept safe and securely in the system.

2.7 Usability and human-interaction requirements:

This system is very user friendly with simple user-interface.

2.7.1 Ease of Use Requirements:

Users can use the system very easily with satisfaction and efficiency.

2.7.2 Personalization and Internationalization Requirements:

I have developed this system for only Bangladeshi Cyclists. So, there are no internationalization requirements.

2.7.3 Understandability and politeness Requirements:

This system is very easy to use and understand with simple user-interface.

2.7.4 Accessibility Requirements:

This system is very easily accessible for definite user in definite module.

2.7.5 User Documentation Requirements:

All information and records will be stored and kept in the system properly.

2.7.6 Training Requirements:

Authority should provide a training program as a video tutorial for the registered Users because all Users may not familiar with digital system.

2.8 Look and feel requirements

According to user's expectation look means the graphical user interface, design, layout, shapes, colors etc. and feel means the behavior of different elements like menu bar, buttons etc.

2.8.1 Appearance Requirements

Needed knowledge about Python Django Framework, algorithm and HTTP Server.

2.8.2 Style Requirements

Knowledge about CSS, JavaScript, bootstrap and font-awesome.

CHAPTER 3: SYSTEM ANALYSIS

3.1 Use Case Diagram:

Use case Diagram is the simplest way of representing in a graphical representation of a complex system's user interactions among the elements of the system. BD Wheelers's use case diagram is given below:

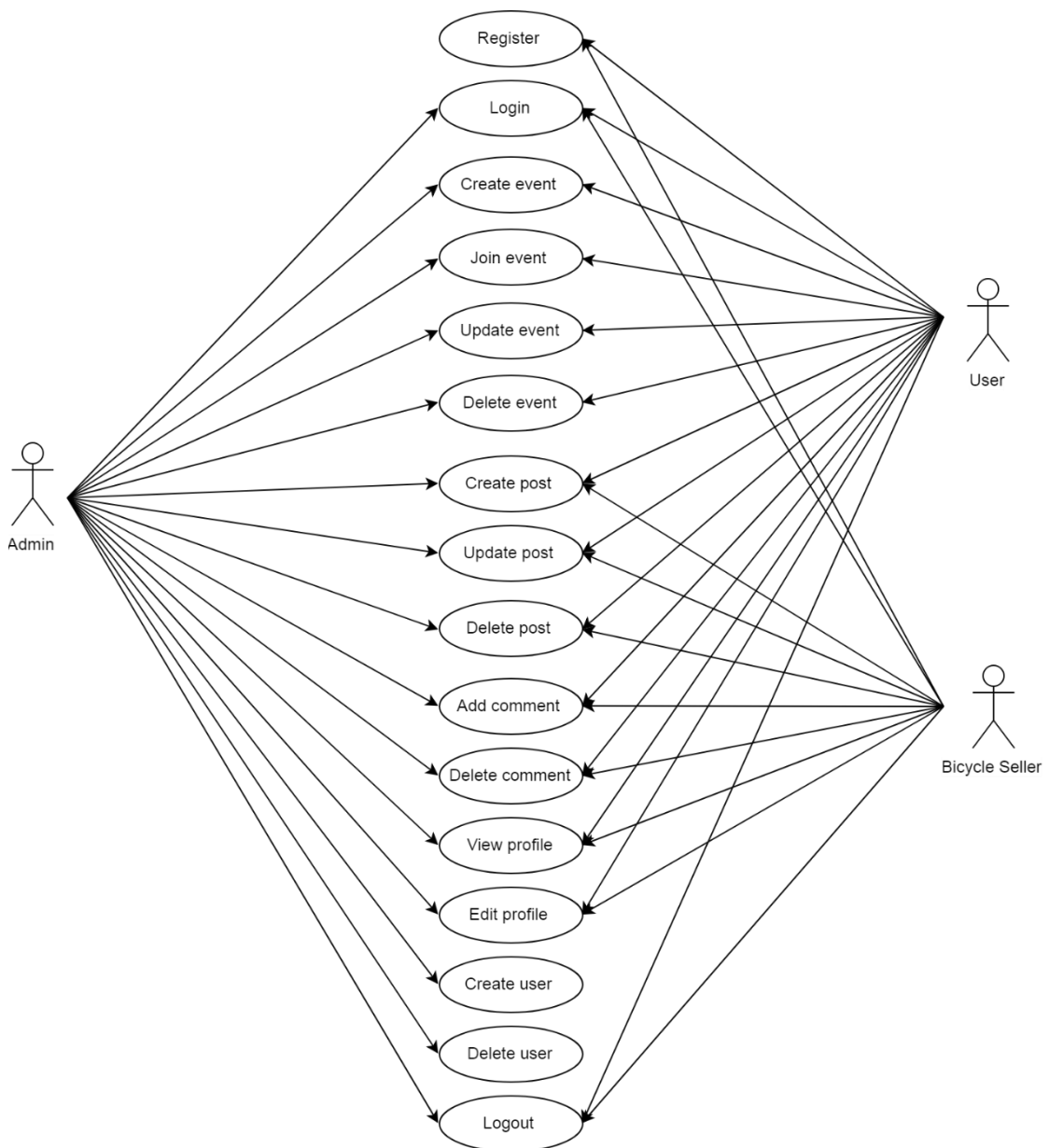


Figure 3.1 Use Case Diagram

3.2 Use Case Description:

In this part there is describing briefly on how the users will execute tasks on the BD Wheelers system.

3.2.1 Authentication:

Table 3.1: Use Case Description of Authentication

Use case name	Authentication	
Scenario	Authentication of user in the system	
Brief description	User have to register in the system to login and do definite tasks. User have to login with valid information that he/she provided during user registration. Admin can create a user and also delete any user of the system.	
Actor	Admin, User (Cyclist, Bicycle seller)	
Preconditions	User must have to register with information like Name, Address, and Mobile Number etc.	
Post conditions	User must have to login with valid information.	
Flow of events	Actor	System
	Enter all field of login or registration with valid information.	Response with displaying proper information.
Failure results	If system not response then show an error message.	

3.2.2 Post:

Table 3.2: Use Case Description of Post

Use case name	Post	
Scenario	Post of user in the system	
Brief description	Registered user/admin can create, update and delete his/her own post. Admin can delete any post of any user.	
Actor	Admin, User (Cyclist, Bicycle seller)	
Preconditions	If any user/admin wants to create a post then he/she must be registered in the system.	
Post conditions	User have to fill the criteria of a post like as title, content, image etc. to create a post.	
Flow of events	Actor	System
	Enter all field of post with valid information.	Response with displaying proper information.
Failure results	If system not response then show an error message.	

3.2.3 Event:

Table 3.3: Use Case Description of Event

Use case name	Event	
Scenario	Event for group cycling	
Brief description	Admin and user can create an event of group cycling with valid date and time. User and admin also can update or delete an event.	
Actor	Admin, User (Cyclist)	
Preconditions	If any user/admin wants to create an event then he/she must be registered in the system.	
Post conditions	A successful message is shown by the system.	
Flow of events	Actor	System
	Enter all field of event for creating an event.	Response with displaying a successful message.
Failure results	If system not response then show an error message.	

3.2.4 Profile:

Table 3.4: Use Case Description of Profile

Use case name	Profile	
Scenario	User profile information	
Brief description	Admin and user will provide valid personal information for creating profile during registration. Admin and user can view and edit profile. Admin can edit any user's profile information.	
Actor	Admin, User (Cyclist, Bicycle seller)	
Preconditions	User/Admin must be registered in the system.	
Post conditions	If the profile information entered correctly then there will show Username, Email, First Name, Last Name, Address, Phone etc.	
Flow of events	Actor	System
	Go to my profile for personal information.	Response with displaying proper information.
Failure results	If system not response then show an error message.	

3.3 Activity Diagram:

Activity diagram is a very important diagram in UML. Basically it is a flow chart. It can describe the flow of the activity in a graphical representation [6].

3.3.1 Activity Diagram for Authentication:

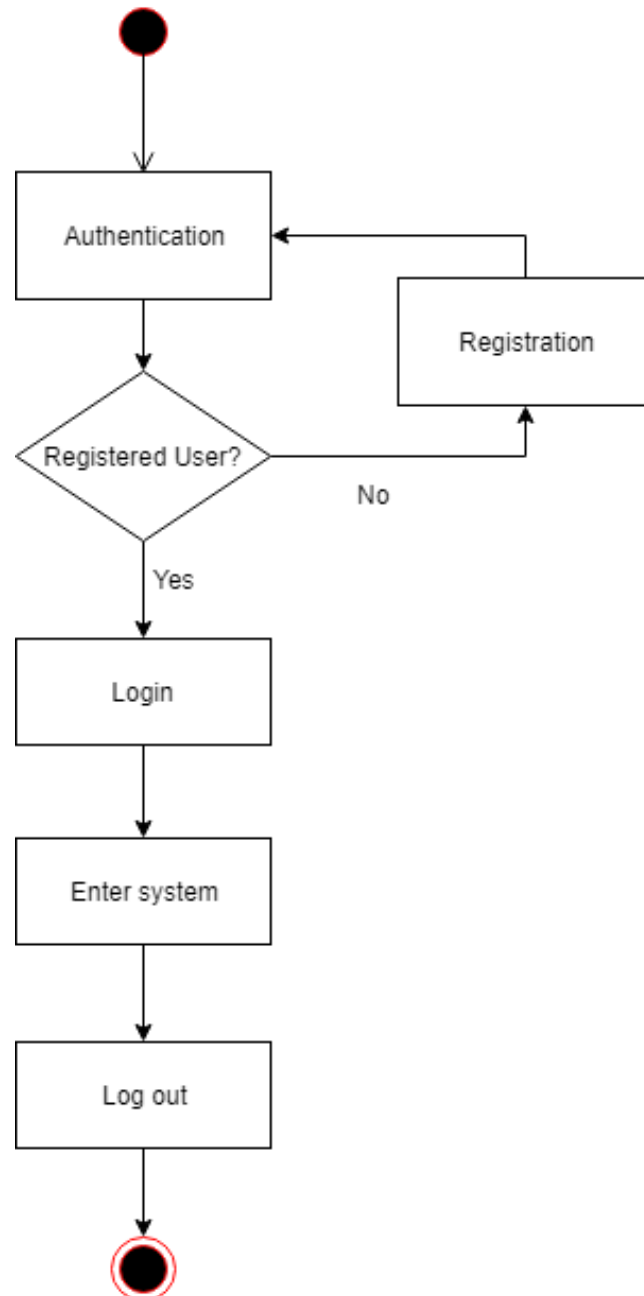


Figure 3.2: Activity Diagram for authentication

3.3.2 Activity Diagram for Post:

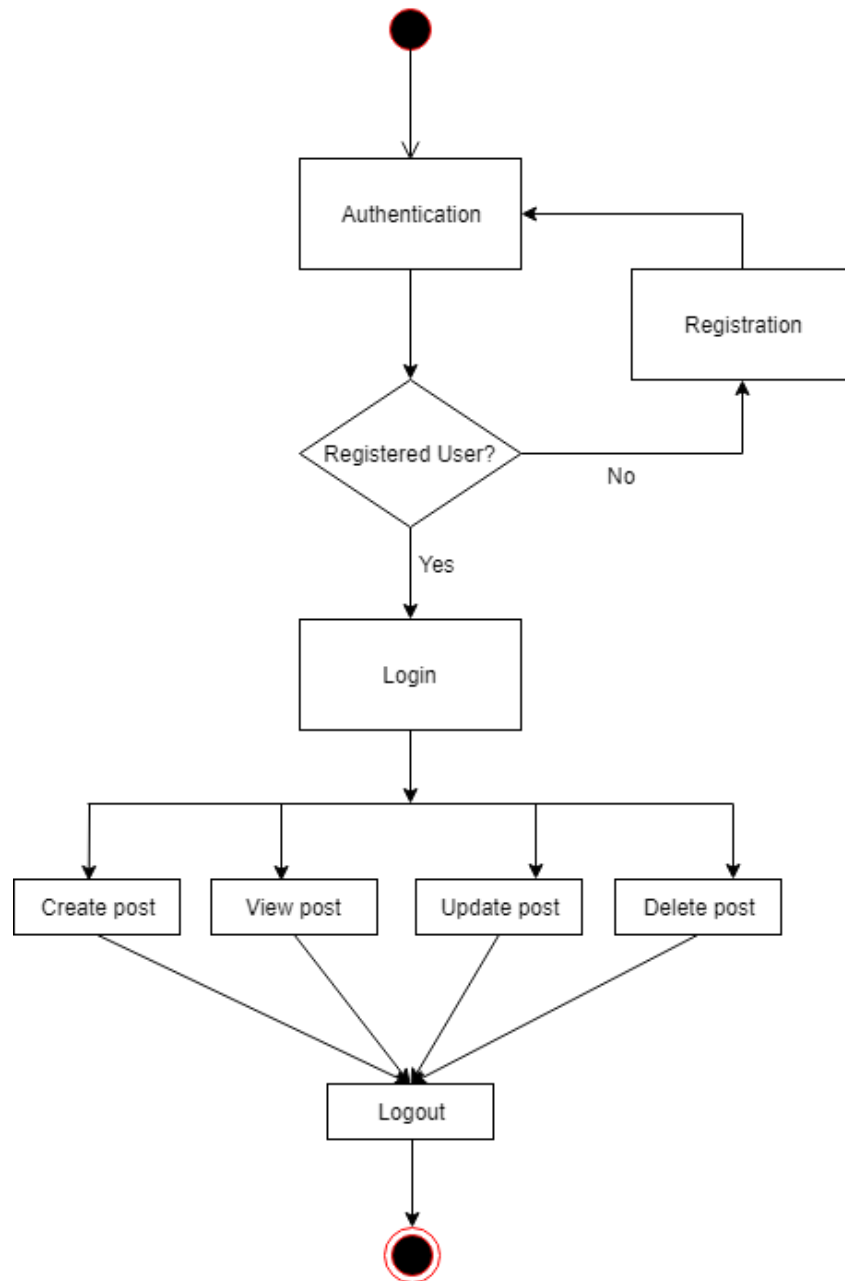


Figure 3.3: Activity Diagram for Post

3.3.3 Activity Diagram for Comment:

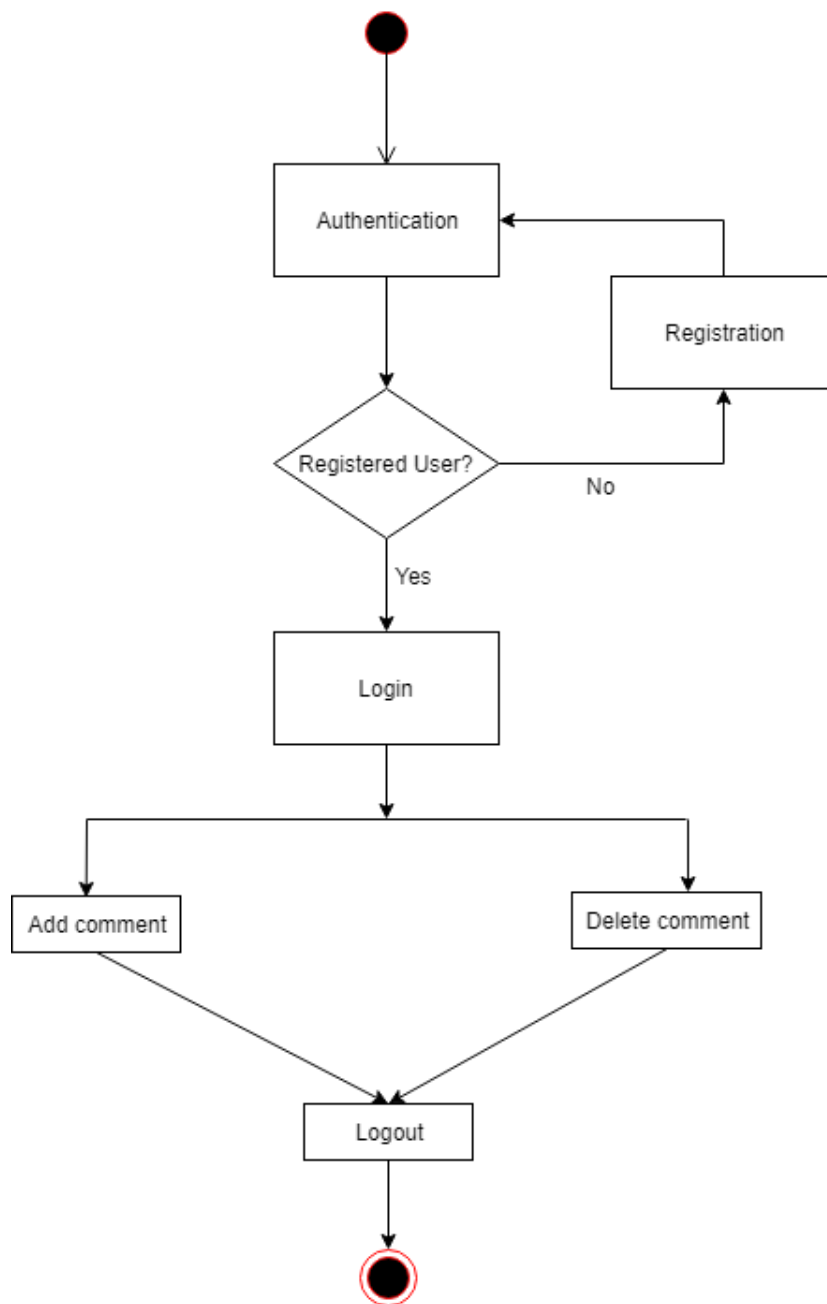


Figure 3.4: Activity Diagram for Comment

3.3.4 Activity Diagram for Event:

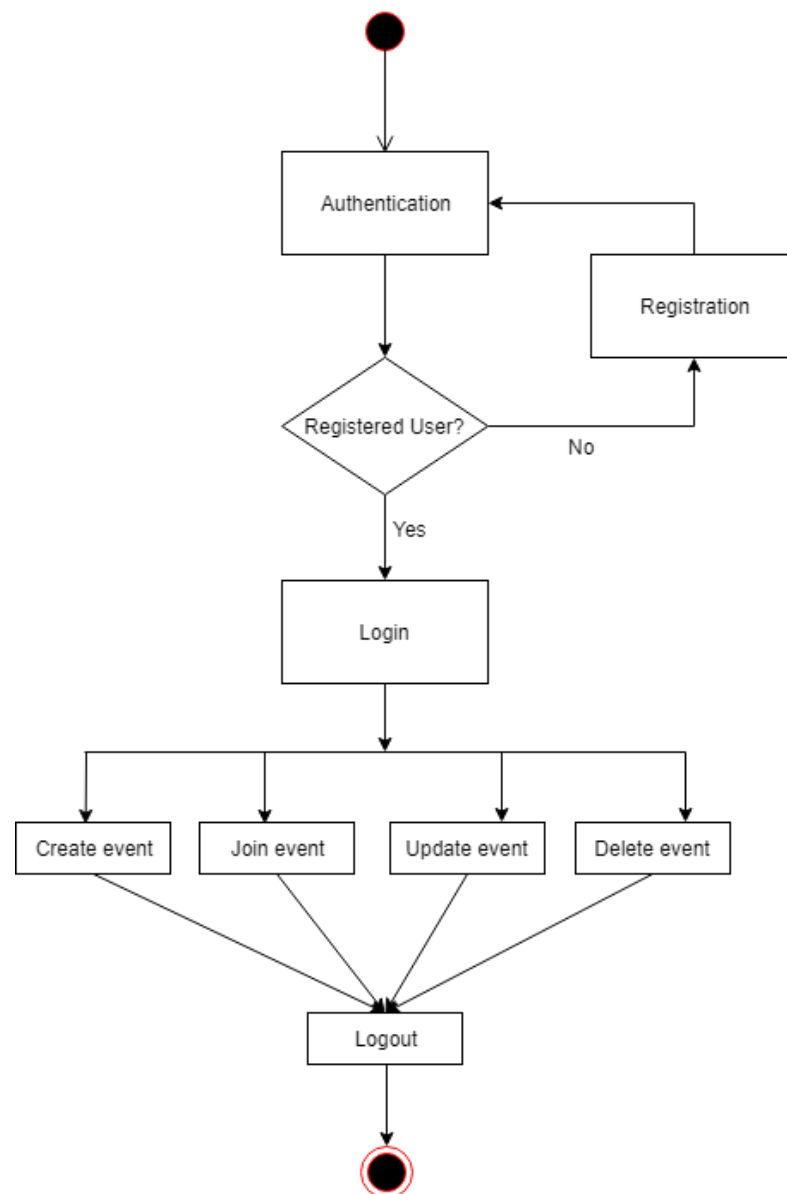


Figure 3.5: Activity Diagram for Event

3.3.5 Activity Diagram for Profile:

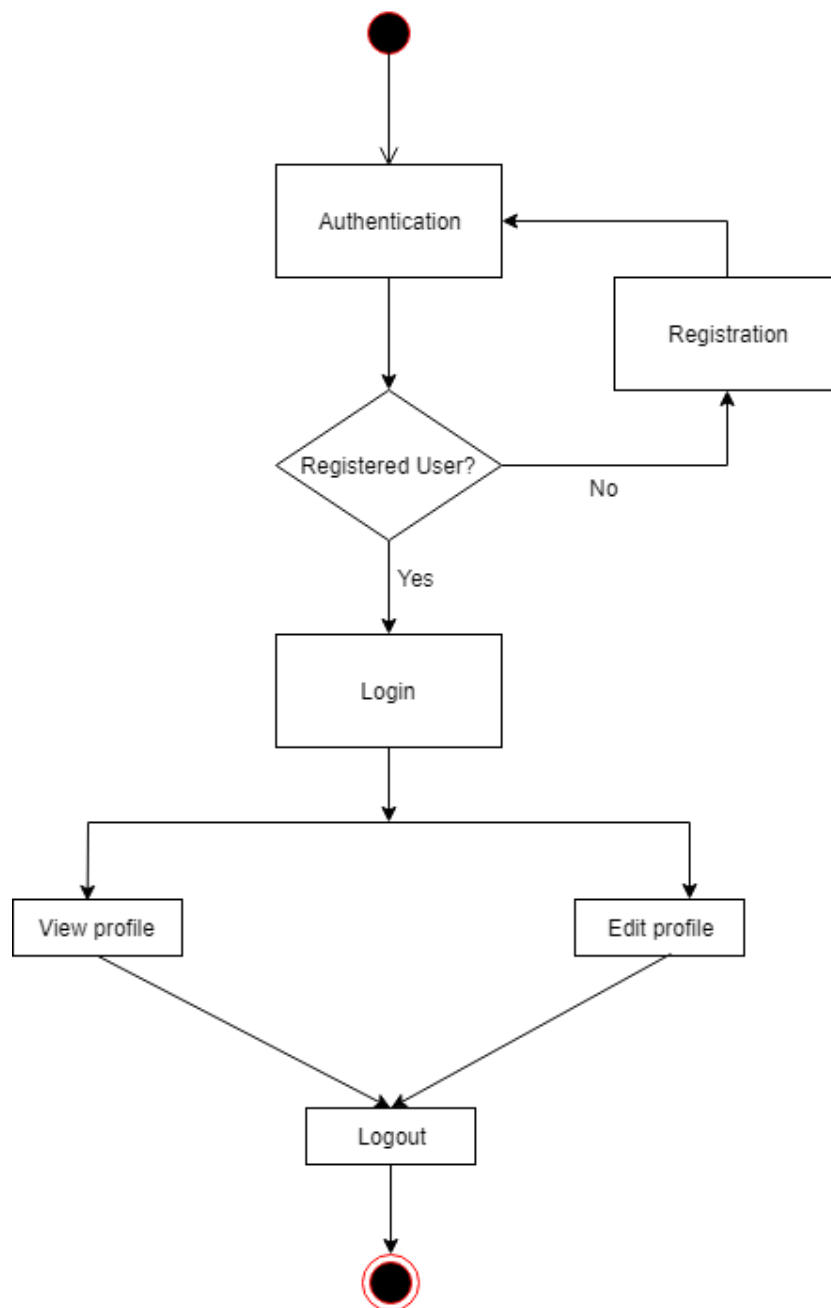


Figure 3.6: Activity Diagram for Profile

3.3.6 Activity Diagram for User Create & Delete:

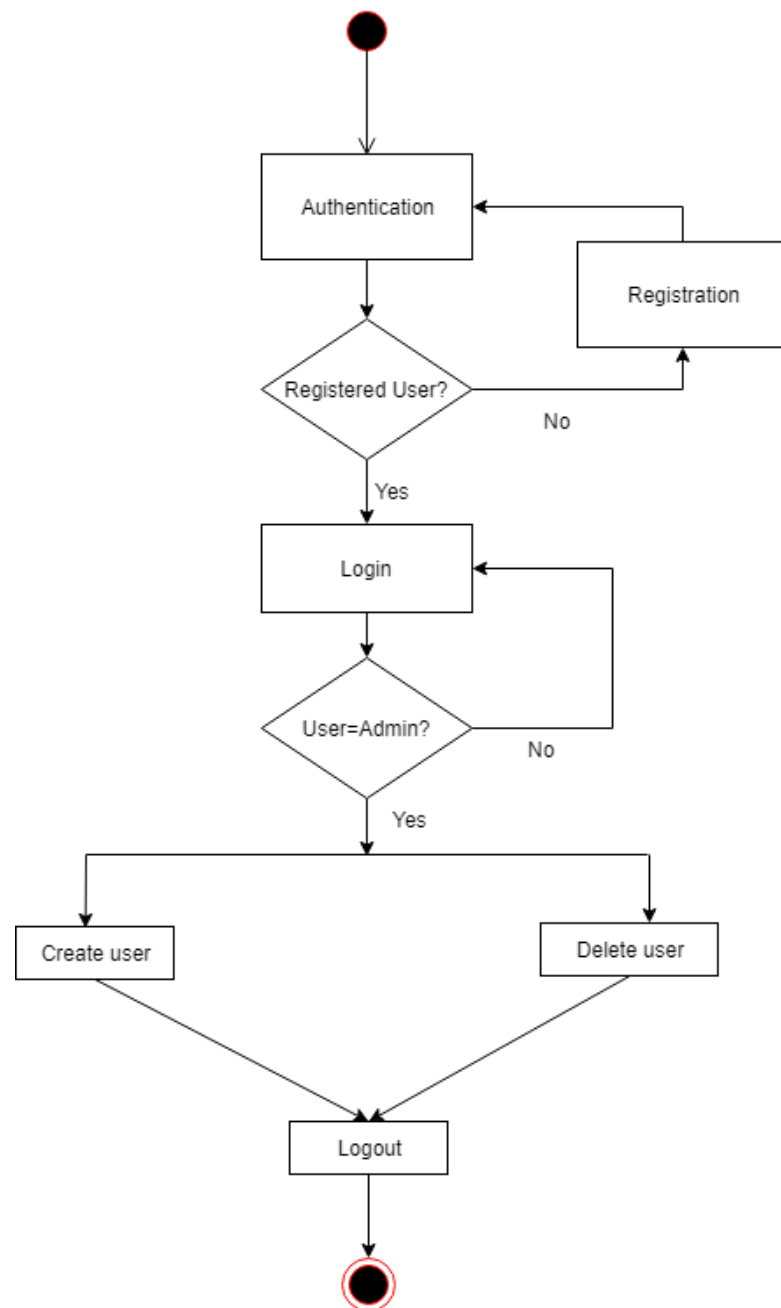


Figure 3.6: Activity Diagram for User Create & Delete

CHAPTER 4: SYSTEM DESIGN SPECIFICATION

4.1 Class Responsibilities Collaboration (CRC) Cards:

It's a brainstorming tool used to design any kind of object-oriented software. Following tables are given below:

Admin:

Table 4.1: Admin Responsibilities and collaboration

Responsibilities	Collaboration
• Monitoring the system • Enquiry about regular tasks	• Create/Delete User • Create/Delete any Post • View/Edit any information of User • Add/Edit/Delete any Comment • Create/Join/Delete any Event

User:

Table 4.2: User Responsibilities and collaboration

Responsibilities	Collaboration
• Log in with proper information. • Creating post with proper information • Creating event with valid information	• View/Edit User's own Profile • Create/Delete own Post • Add/Delete own Comment • Create/Join/Delete own Event

Bicycle Seller:

Table 4.3: Bicycle Seller Responsibilities and collaboration

Responsibilities	Collaboration
• Log in with proper information. • Provide proper information in selling post.	• View/Edit User's own Profile • Create/Delete own Post • Add/Delete own Comment

4.2 Sequence Diagram:

Sequence diagram is another very important UML diagram of a software. Sequence diagram can describes the working process of a system as how it works and what order is following it to complete a process [7].

4.2.1 Sequence Diagram for Authentication:

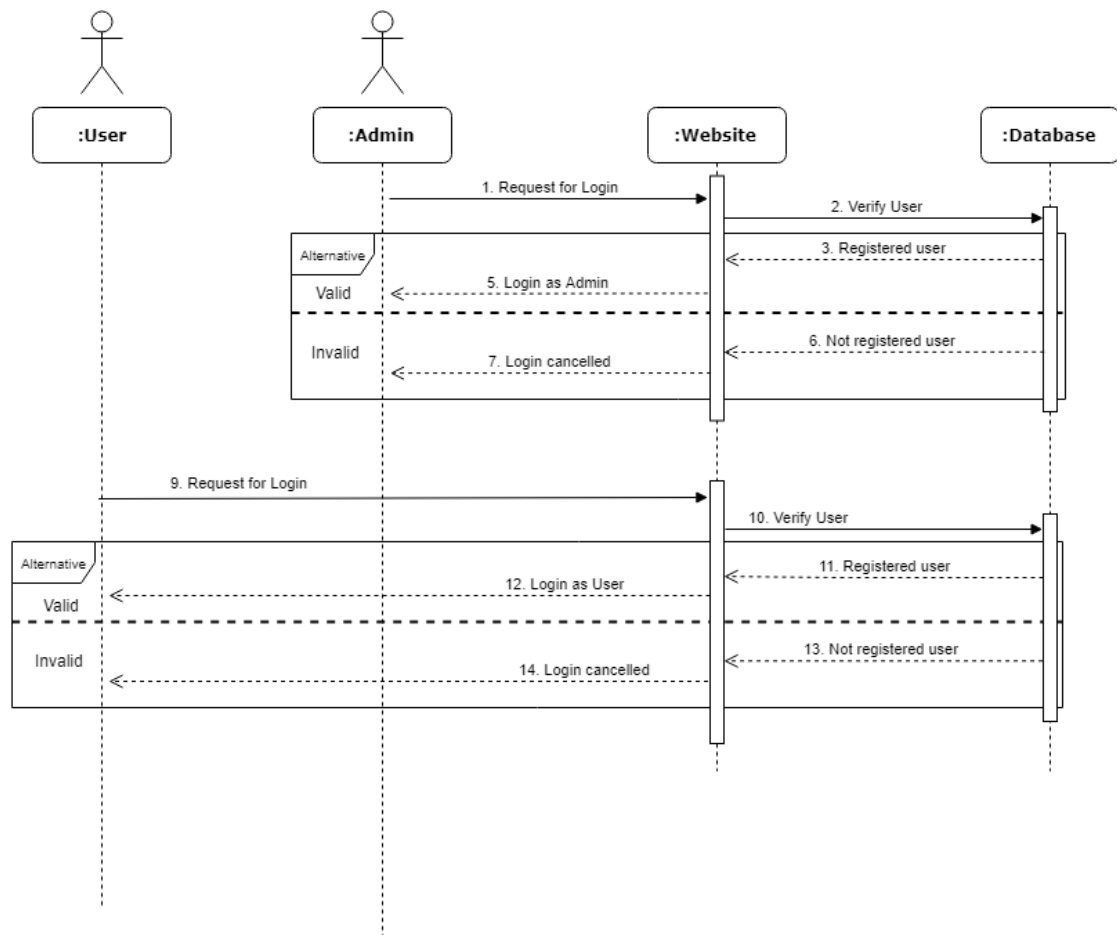


Figure 4.1: Sequence Diagram for Authentication

4.2.2 Sequence Diagram for Post:

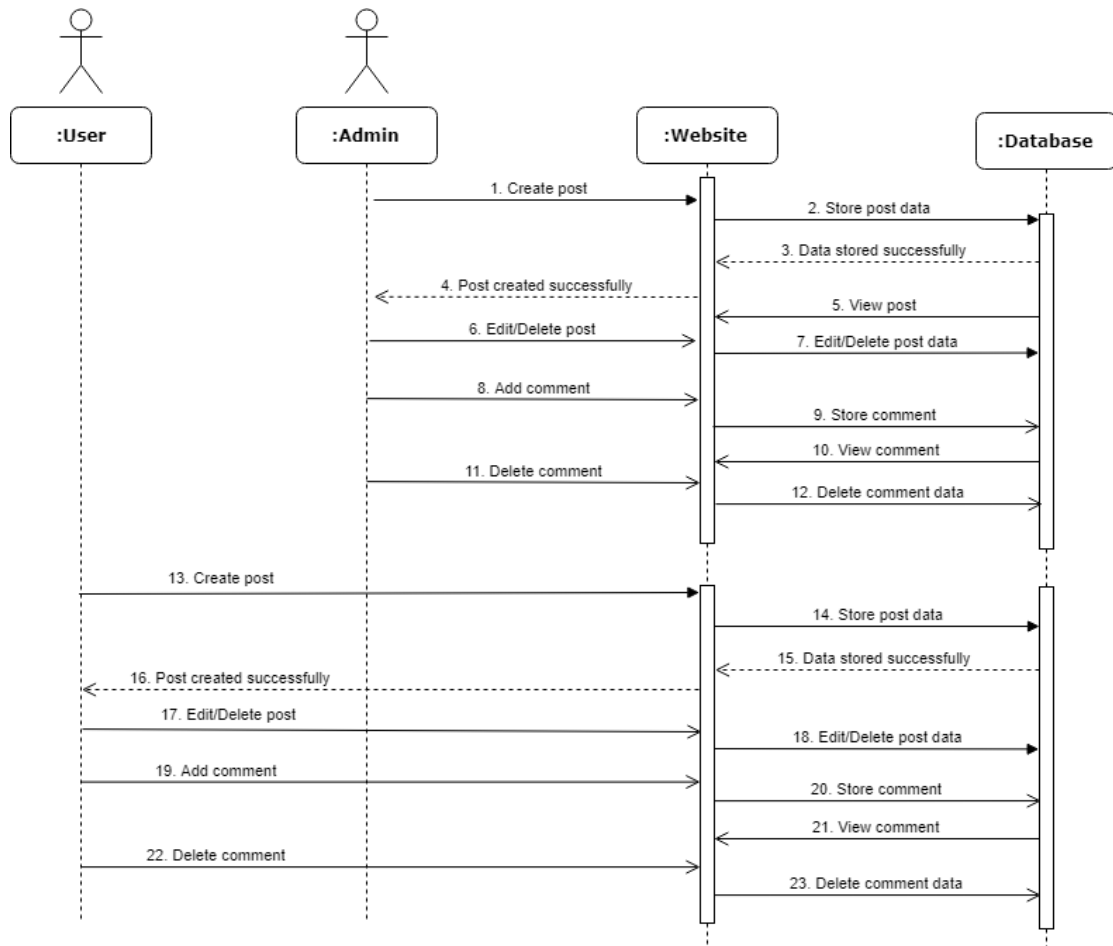


Figure 4.2: Sequence Diagram for Post

4.2.3 Sequence Diagram for Event:

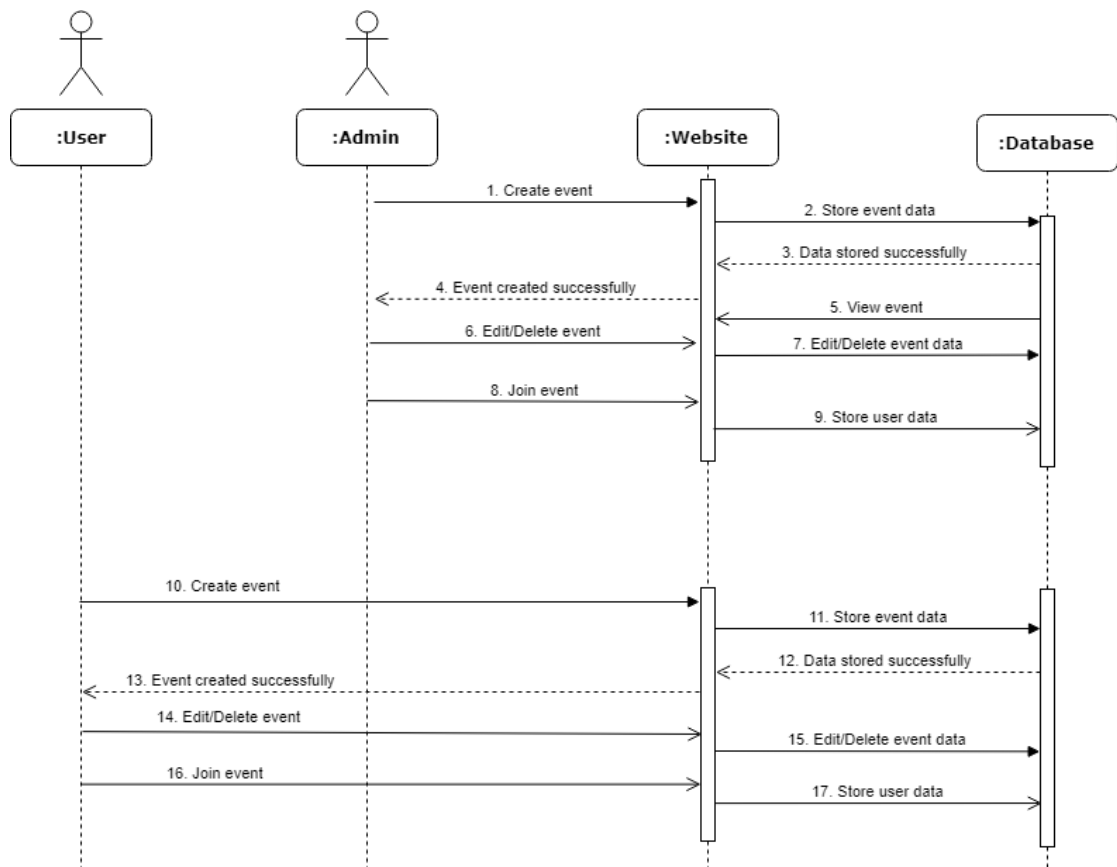


Figure 4.3: Sequence Diagram for Event

4.3 Class Diagram:

Class diagram is one kind of static structure in UML diagrams of software engineering that can describes the structure of a system.

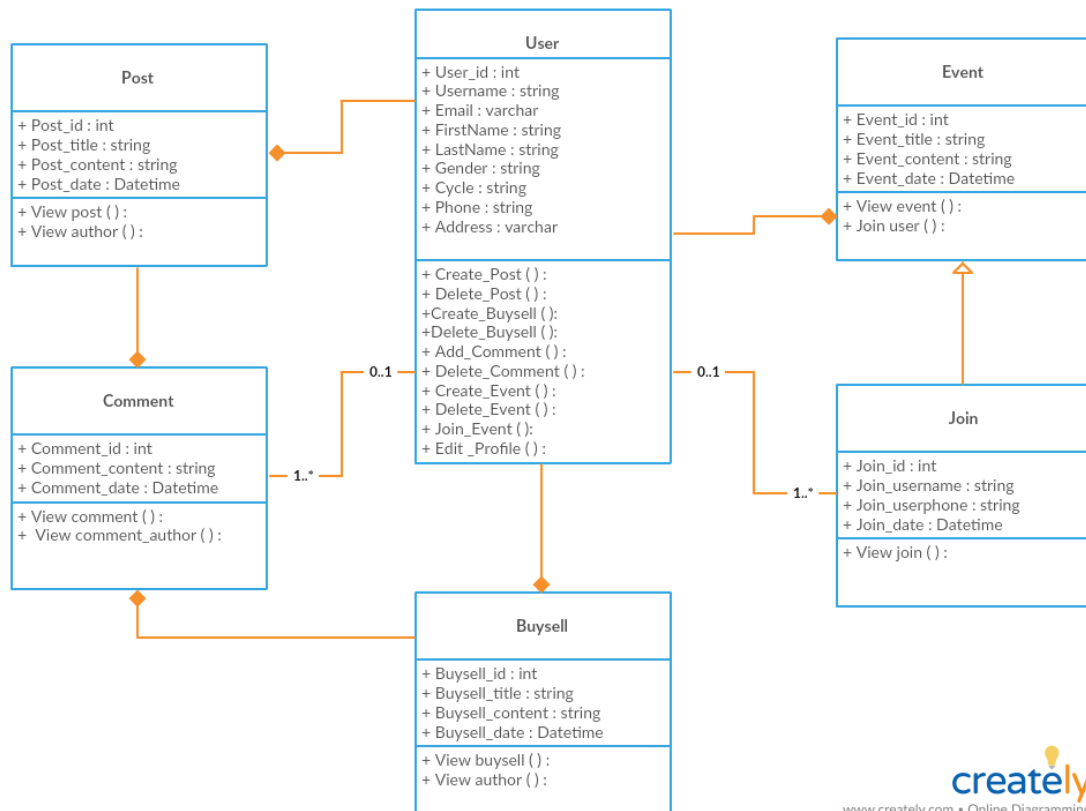


Figure 4.6: Class Diagram

4.4 Data Flow Diagram:

A Data Flow Diagram (DFD) is traditional visual representation of the information flows within a system. My data flow diagram is given below:

4.4.1 DFD Level 0:

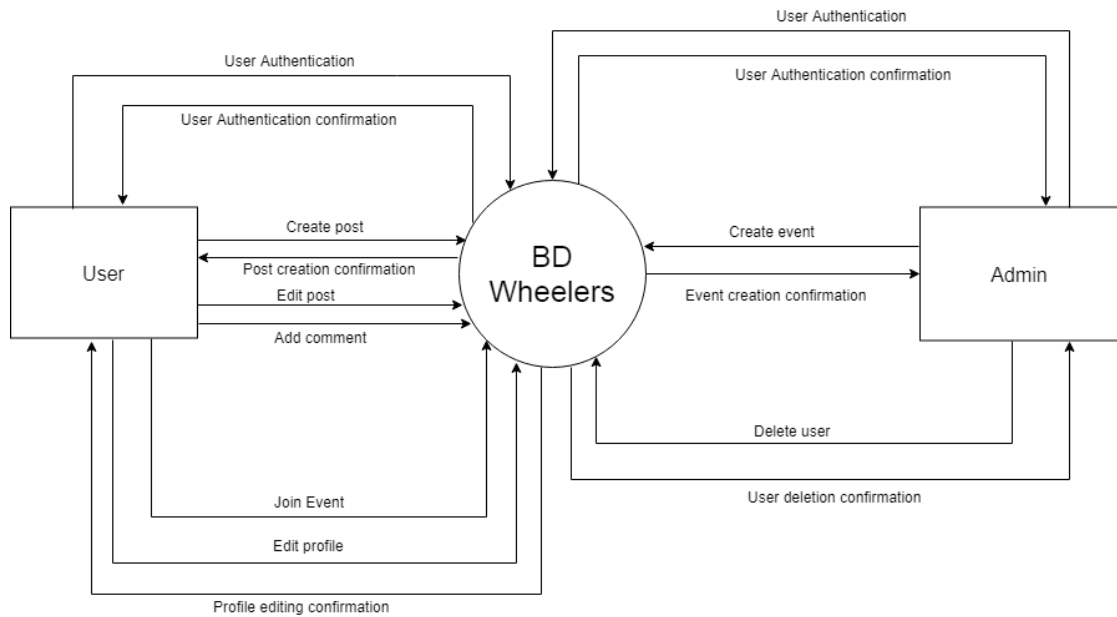


Figure 4.7: Data Flow Diagram Level 0

4.4.2 DFD Level 1:

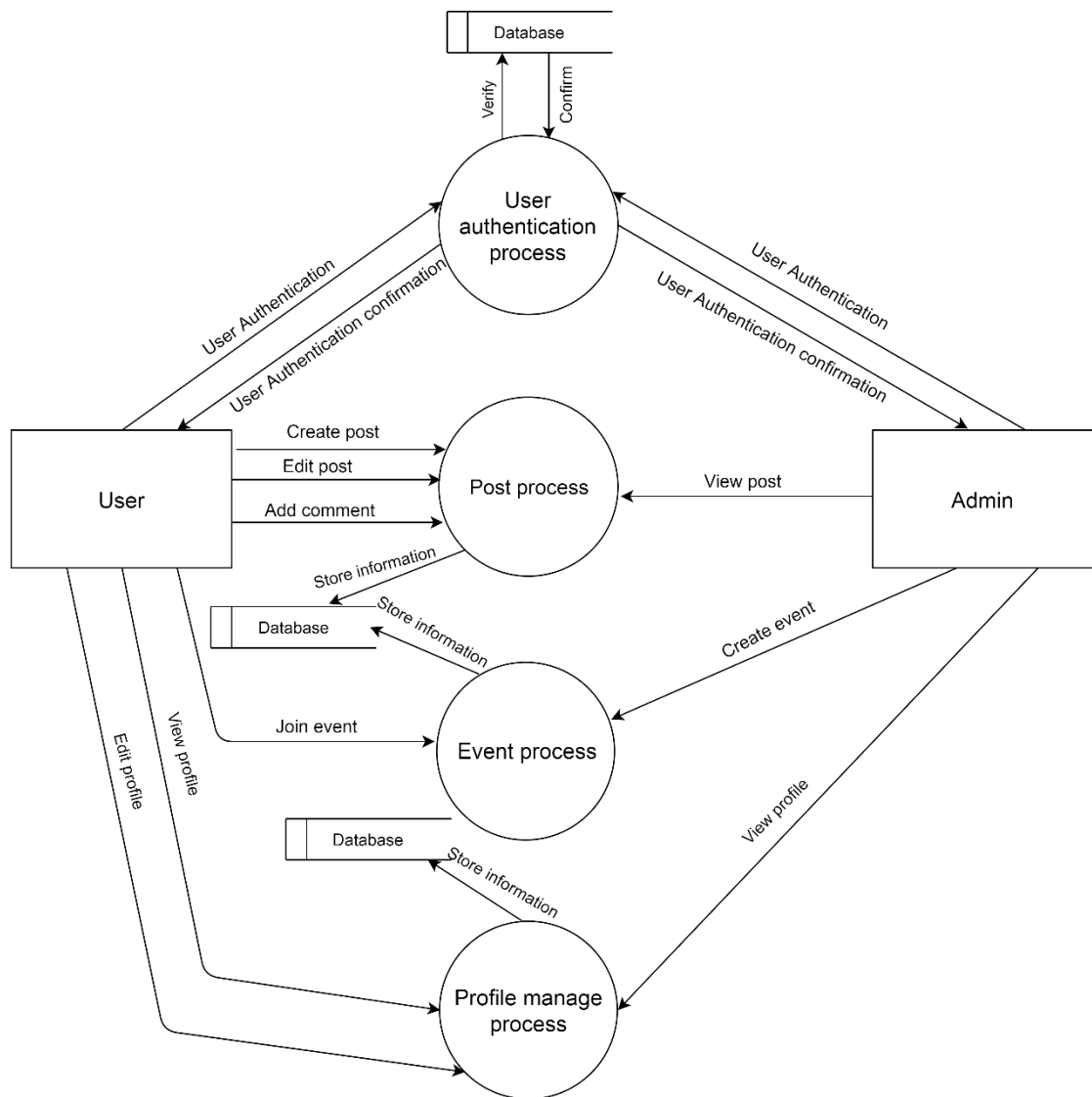


Figure 4.8: Data Flow Diagram Level 1

4.5 Entity Relationship Diagram:

Database is the most important part of any system. I have tried to design a dynamic database for my system [9]. My entity relationship design diagram is given below:

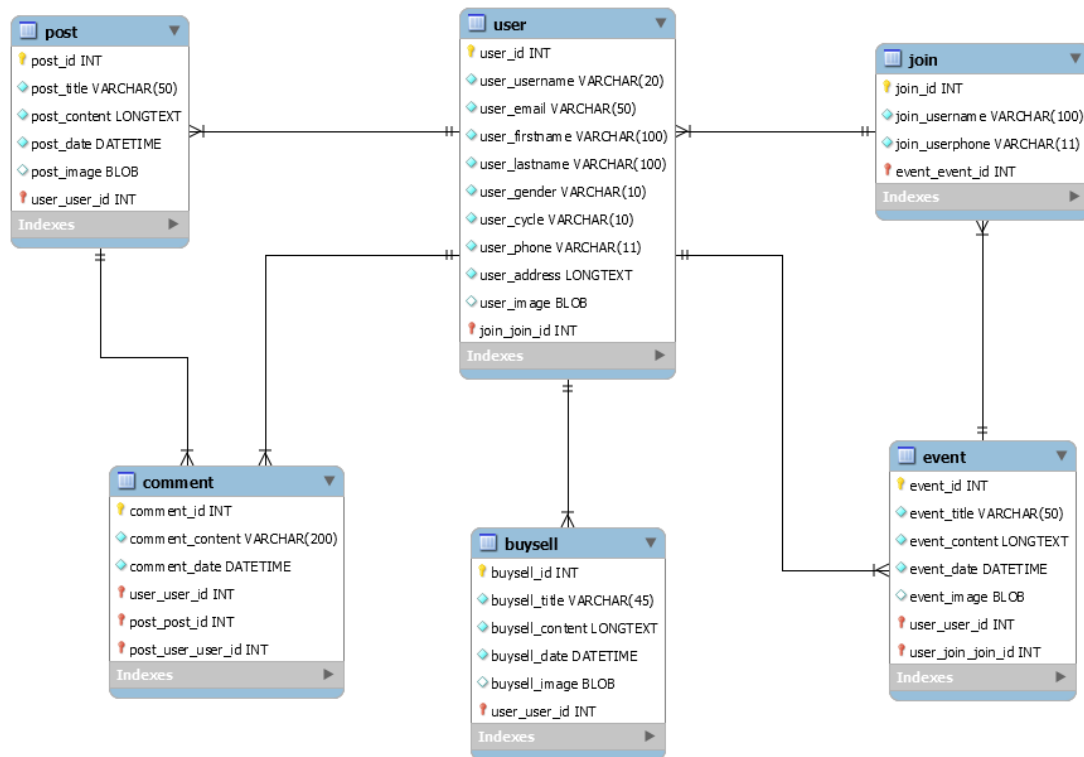


Figure 4.9: Entity Relationship Diagram

4.6 Development Tools & Technology:

For developing a software system, selecting development tools and technology is a vital fact and challenge [9], [10], [11], [12], [13].

Development tools:

- Development IDE: Pycharm
- Server: HTTP Server 1.0
- Database: SQLite 3
- Operating System: Windows 8.1 & Ubuntu

Development technology:

- Programming language: Python
- Pattern: Web Framework
- Framework: Django framework 2.0
- Database: SQLite 3

4.6.1 User Interface Technology:

- HTML
- CSS
- Bootstrap
- Font awesome
- JavaScript

4.6.2 Implementation Tools & Platforms:

Implementation tools:

- Development IDE: Pycharm
- Server: HTTP Server 1.0
- Database: SQLite 3
- Operating System: Windows 8.1 & Ubuntu

Implementation technology:

- Programming language: Python
- Pattern: Web Framework
- Framework: Django framework 2.0
- Database: SQLite 3

CHAPTER 5: SYSTEM TESTING

5.1 Testing Features:

Testing is one of the most important part for checking the functionality of a software or system. Testing every features of a software I can ensure that the software or system is ready to provide its service [8].

5.1.1 Features to be tested:

There is given a list of the features I have tested

- Admin Login
- Registration
- User Login
- Post
- Comment
- Event
- User Profile

5.1.2 Features not to be tested:

I have tested every field of our system.

5.2 Testing strategies:

There is given the strategies of my system or software testing.

- Quality test
- Measure test

5.2.1 Test Approach:

To implementation a project test approach is very important. Test approach has two types of techniques:

- **Proactive** - An approach in which the test design process is initiated as early as possible in order to find and fix the defects before the build is created.
- **Reactive** - An approach in which the testing is not started until after design and coding are completed.

5.2.2 Pass/Fail criteria:

- When the expected result is come after testing then it is called pass
- When unexpected result is come during testing then it is called fail.

5.2.3 Suspension & Resumption:

My system is very smooth and easy to use and maintain. There is no suspension and resumption problem.

5.3 Testing Environment:

- Testing IDE : Pycharm
- Browser : Google chrome
- Server : HTTP Server 1.0
- Database : SQLite 3
- Operating System : Windows 8.1
- Possessor : Core i5

5.4 Test Case Description:

I have tested my system many times. Now I am focusing on that my system will execute properly.

5.4.1 Test Case for Admin Login:

Table 5.1: Test Case for Admin Login

Test Scenario:	Admin Login	Test Case ID:	TC01		
Test Case Description:	Login test case	Test Priority:	High		
Pre-Requisite:	A valid user account	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter correct Email and password	Email: jamil@mail.com Password: *****	Login Successful	Login Successful	Pass

5.4.2 Test Case for Registration:

Table 5.2: Test Case for Registration

Test Scenario:	Registration	Test Case Id:	TC02		
Test Case Description:	User registration test case	Test Priority:	High		
Pre-Requisite:	A guest to be registered with valid information	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter Correct username, Email, First Name, Last Name, Address, Mobile Number etc.	username: cyclist Email: cyclist@mail.com First Name: Demo User Last name: Demo Address: Dhaka Mobile No: 01700000000	Registration Successful	Registration Successful	Pass

5.4.3 Test Case for User Login:

Table 5.3: Test Case for User Login

Test Scenario:	User Login	Test Case ID:	TC03		
Test Case Description:	Login test case	Test Priority:	High		
Pre-Requisite:	A valid user account	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter correct username and password	Username: cyclist Password: *****	Login Successful	Login Successful	Pass

5.4.4 Test Case for Post:

Table 5.4: Test Case for Post

Test Scenario:	Post	Test Case ID:	TC04		
Test Case Description:	User post test case	Test Priority:	High		
Pre-Requisite:	An authenticated User	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter post title, content and image for the post	Title: Test post Content: Test content Image: Blank	Post creation Successful	Investigation Successful	Pass

5.4.5 Test Case for Comment:

Table 5.5: Test Case for Comment

Test Scenario:	Comment	Test Case ID:	TC05		
Test Case Description:	User comment against a post	Test Priority:	High		
Pre-Requisite:	An authenticated User	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Fill the add comment form with proper information	All required information	Successful	Successful	Pass

5.4.6 Test Case for Event:

Table 5.6: Test Case for Event

Test Scenario:	Event	Test Case ID:	TC06		
Test Case Description:	User event test case	Test Priority:	High		
Pre-Requisite:	An authenticated user	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter all information to arrange an event	All required information	Successful	Successful	Pass

5.4.7 Test Case for User Profile:

Table 5.6: Test Case for User Profile

Test Scenario:	User Profile	Test Case ID:	TC06		
Test Case Description:	User profile test case	Test Priority:	High		
Pre-Requisite:	An authenticated User	Post-Requisite:	N/A		
Test Execution Steps:					
SL. No	Action	Inputs	Expected Result	Actual Result	Test Result
01	Enter field that wants to update of an user's profile	Valid information	Successful	Success	Pass

CHAPTER 6: USER MANUAL

6.1 Home Page:

This is my system's home page. Through home page there can be accessed in Sign-in, Register, About, Event, Feeds, Buy&Sell and Search options. A guest user can view the system but if he/she wants to use the feature of the system then he/she must be registered and logged in. There are also have some links (Facebook, YouTube, Instagram, Twitter etc.) to be accessed.

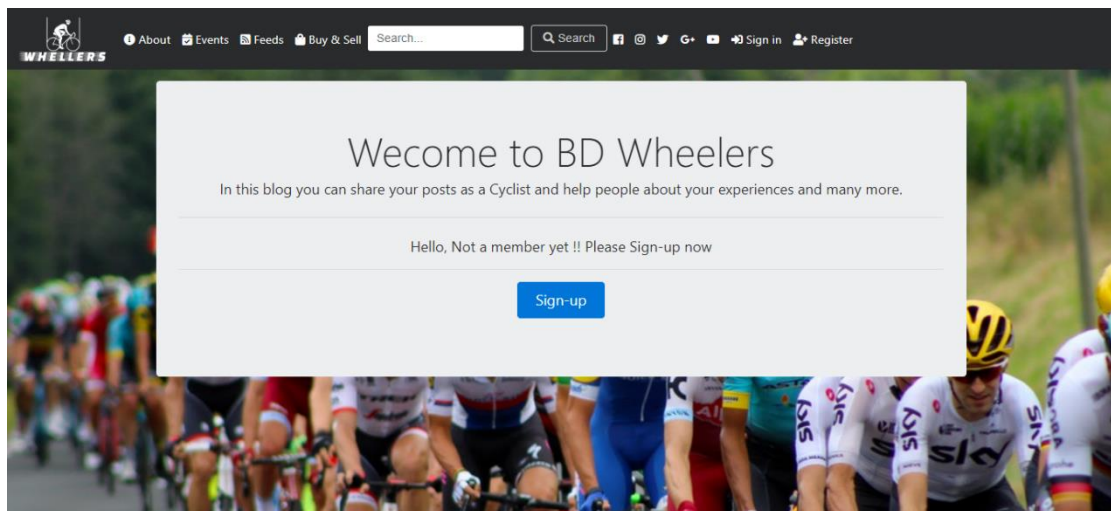
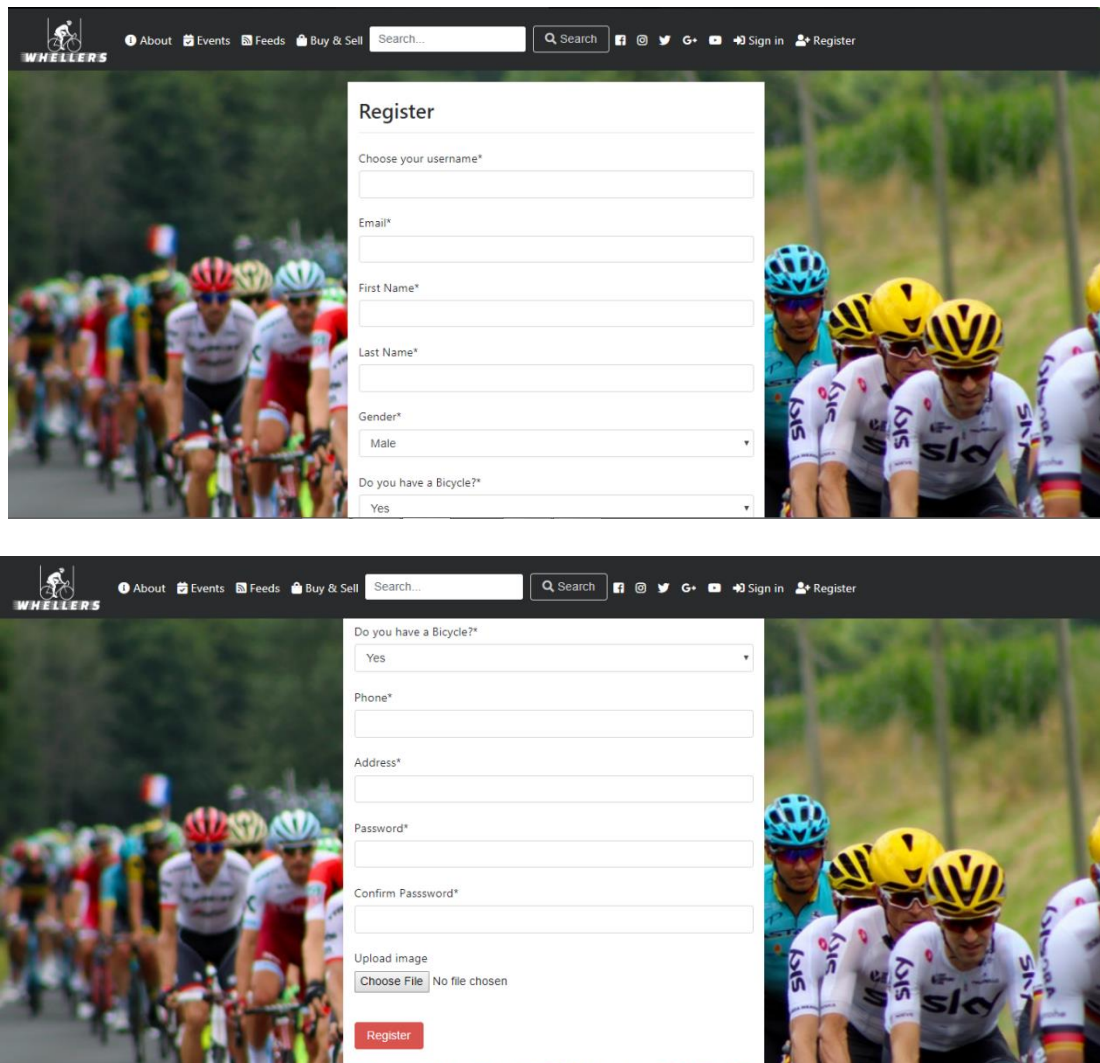


Figure 6.1: Home Page

6.2 Registration:

This is my registration page. User can register from this page.



The image displays two sequential screenshots of a web application's registration page, titled "WHEELERS". The page features a dark header with navigation links (About, Events, Feeds, Buy & Sell), a search bar, and social media icons. The registration form is overlaid on a background image of cyclists.

Top Screenshot (Initial Registration):

- Register** (Section Header)
- Choose your username* (Text input)
- Email* (Text input)
- First Name* (Text input)
- Last Name* (Text input)
- Gender* (Dropdown menu, currently showing "Male")
- Do you have a Bicycle?* (Dropdown menu, currently showing "Yes")

Bottom Screenshot (Continuation of Registration):

- Do you have a Bicycle?* (Dropdown menu, currently showing "Yes")
- Phone* (Text input)
- Address* (Text input)
- Password* (Text input)
- Confirm Passsword* (Text input)
- Upload image (Section Header)
- Choose File (Button) | No file chosen (Text)
- Register** (Red Button)

Figure 6.2: Registration

6.3 Login:

This is my login page. User and admin can login from this page.

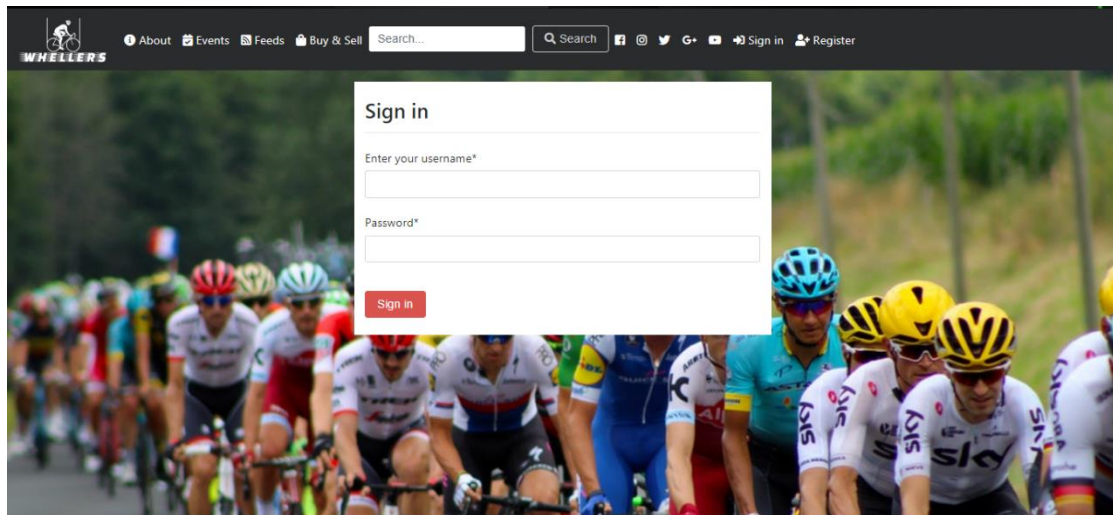


Figure 6.3: Login

6.4 Admin Dashboard:

This is my Admin dashboard. Admin can monitor the whole system. Admin can see the information of users and can edit them and also delete them. Admin can create an user and also delete an user.

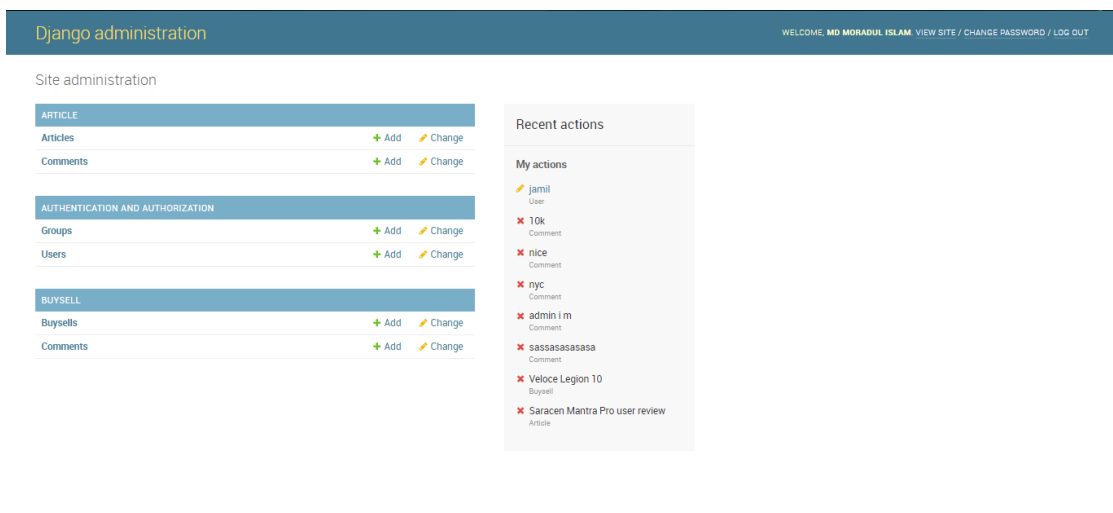


Figure 6.4: Admin Dashboard

6.5 My Profile:

In my BD Wheelers webapp users after authenticated he/she can see my profile option where he/she can see about his/her personal information and edit personal information and also other option like create post, create buy&sell post, create event, view posts he/she done before and also update and delete them.

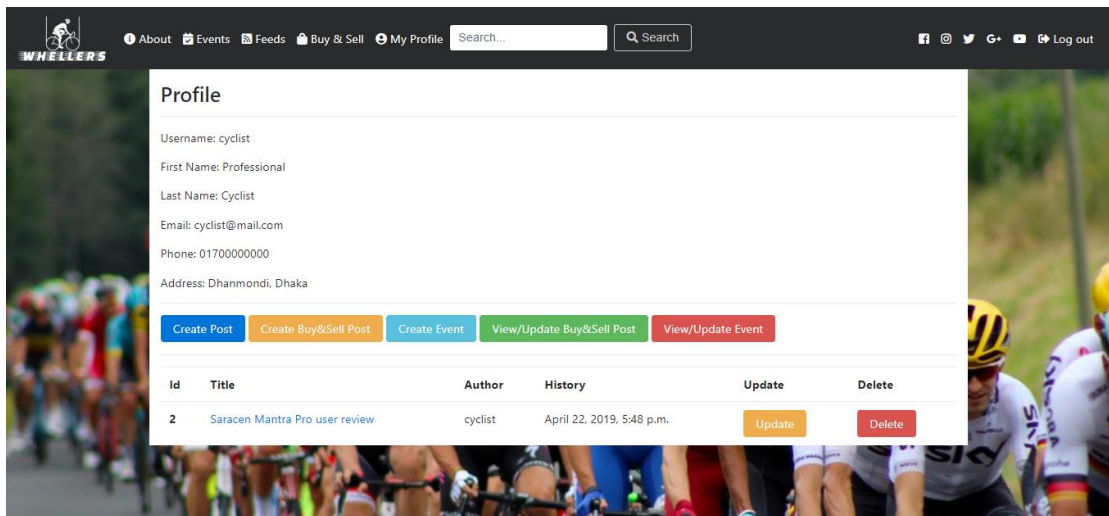


Figure 6.5: My profile

6.5.1 Feeds:

This is my system's Feeds. With clicking on Feeds from home page, User can get accessed in Feeds. Here, User can see all posts about bicycling, bicycle review and health benefits likely information and also he/she can add comment if he/she is authenticated. Guest users also can view post but can't add comment.

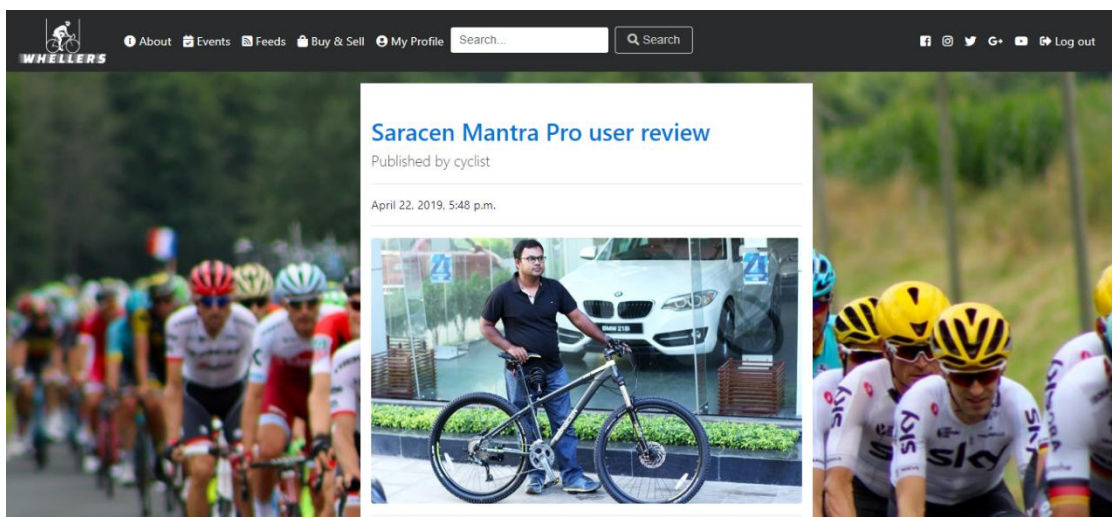


Figure 6.6: Feeds

6.5.2 Buy & Sell:

User when clicks on buy&sell then he/she can see buy&sell posts about buying selling or exchange information of bicycle. User can add comment if he/she is authenticated. Guest users also can view buy&sell post but can't add comment.

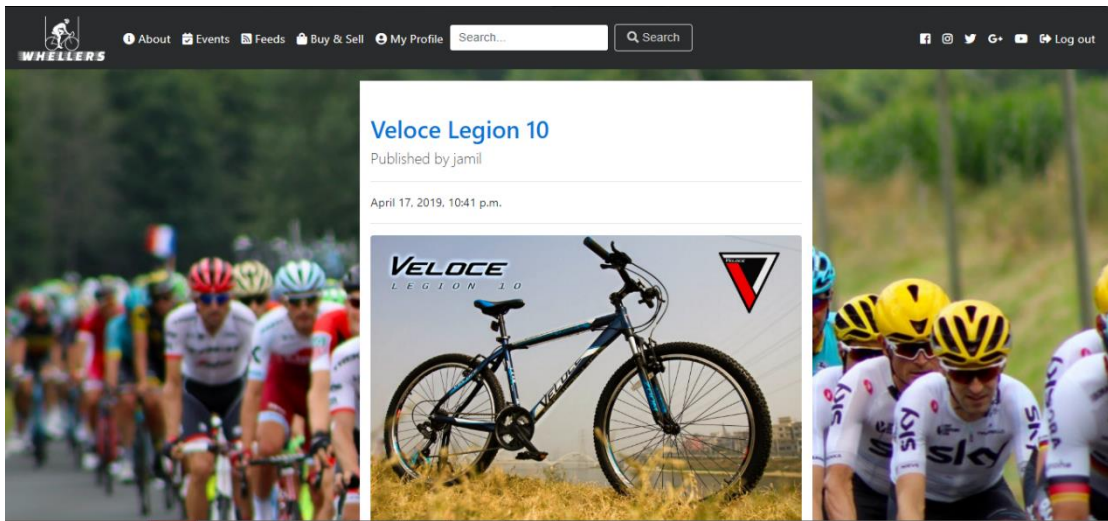


Figure 6.7: Buy&Sell

6.5.3 Create Post:

If any couple want to getting divorced then first User will check the marriage information with the marriage registration number. If the marriage is valid then User can complete the divorce process in front of two witness. Here witness have to provide proper information according to the Marriage Registration system.

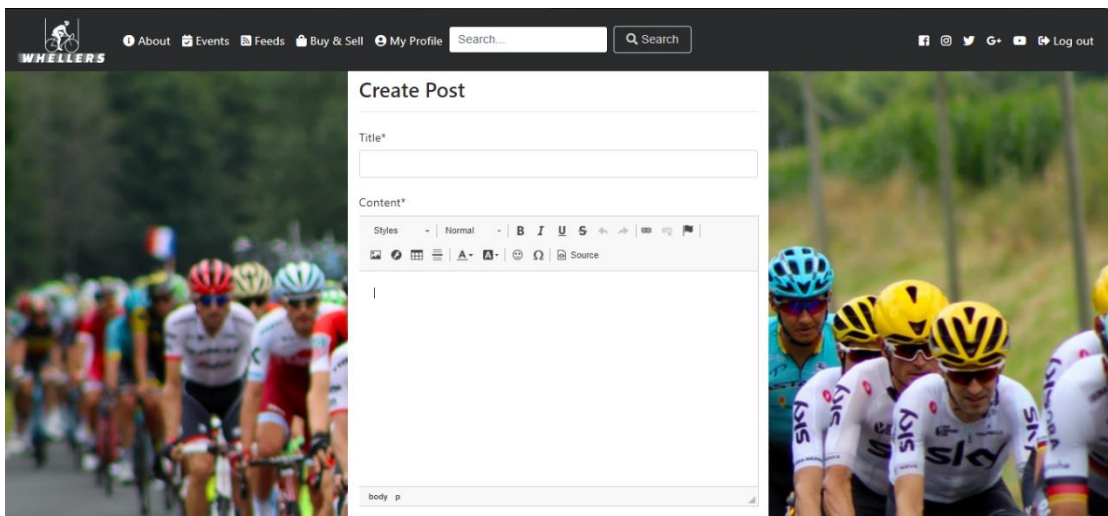


Figure 6.8: Create Post

6.5.4 Create Buy&Sell Post:

User can verify a marriage with marriage registration number and password. After clicking on verify marriage with entering the marriage registration number and password properly then there will appear the marriage information as husband & wife name, address, NID, marriage date and User name.

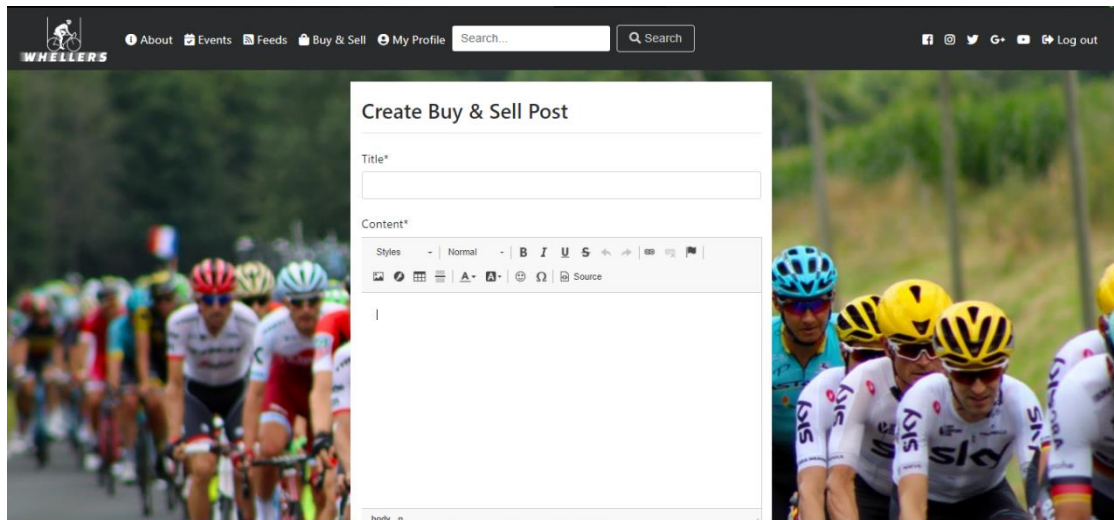


Figure 6.9: Buy&Sell Post

6.5.5 Update Post:

User can update a post by clicking update button from my profile page.

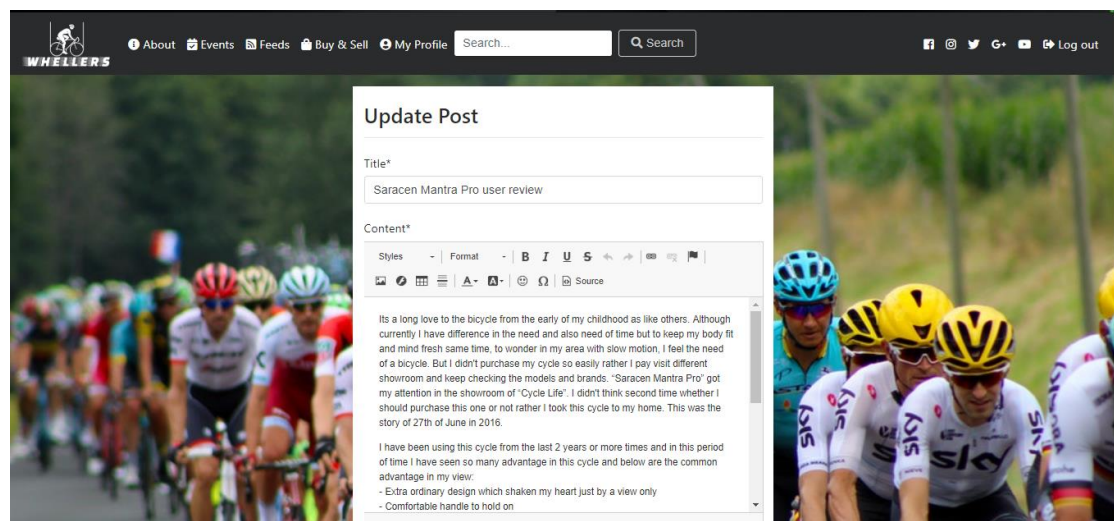


Figure 6.10: Update Post

6.5.6 Update Buy&Sell Post:

User can view buy& sell post by clicking view buy&sell posts and update a buy&sell post by clicking update button from that page.

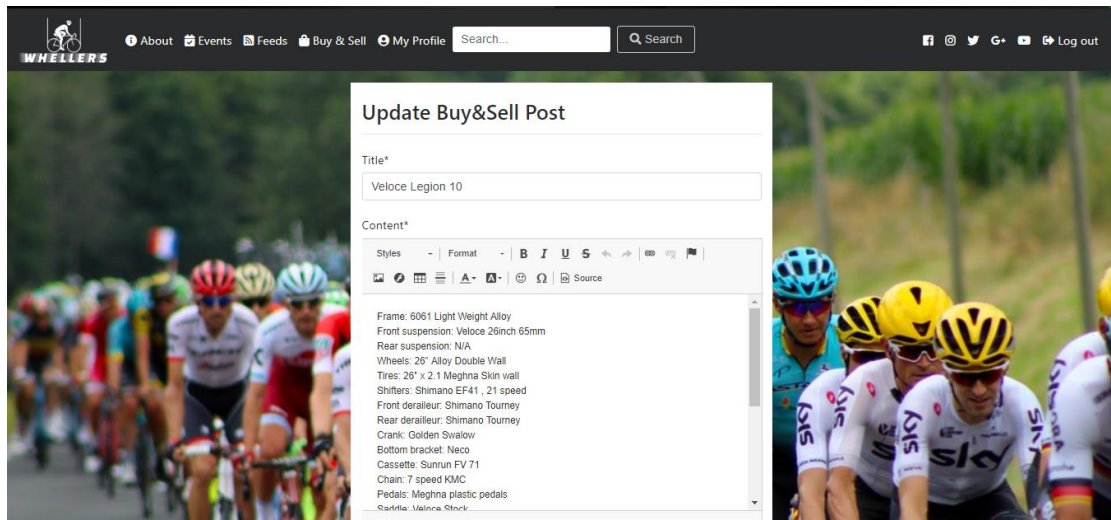


Figure 6.11: Update Buy&Sell Post

6.5.7 Events:

User can create and join in an event by clicking join button and also view events in Events. From my profile user can view events by clicking view/update event button he/she can update/delete an event by clicking update or delete button from that page.

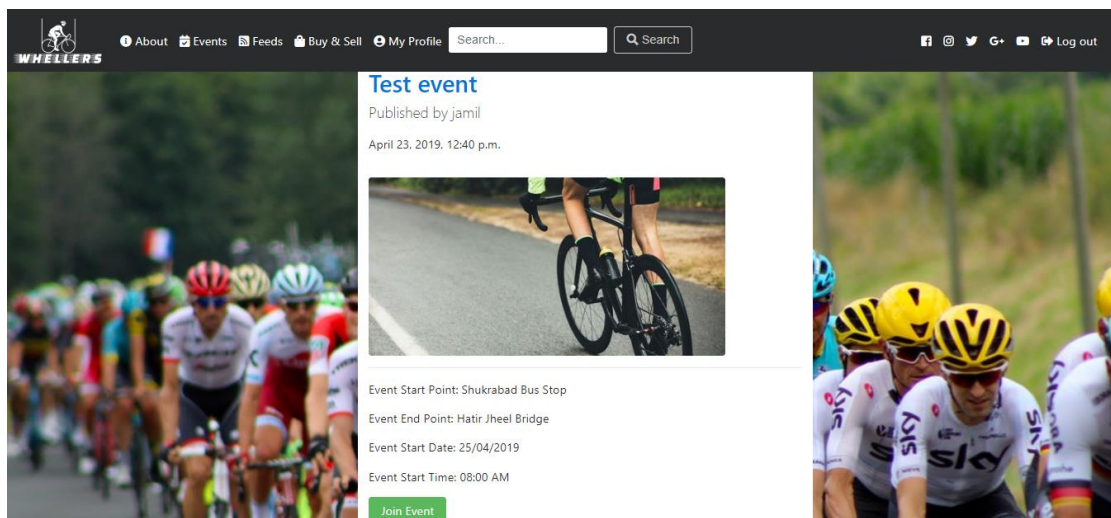


Figure 6.12: Events

6.5.8 Create Event:

User can create an event by clicking create event button and also view events in Events. User can delete event from my profile's view/update event button.

WHEELERS

About

Events

Feeds

Buy & Sell

My Profile

Search...

Search

Log out

Create Event

Title*

Test event

Content*

Styles

Normal

B

I

U

S

Source

Event Start Point: Shukrabad Bus Stop

Event End Point: Hatir Jheel Bridge

Event Start Date: 25/04/2019

Event Start Time: 08:00 AM

Figure 6.13: Create Event

CHAPTER 7: PROJECT SUMMARY

7.1 GitHub Link:

7.2 Critical Evolution:

Requirement engineering was a challenge for us because many Cyclists were not willing to meet and share information. My system is not suitable for people who don't want to be cyclists till now.

7.3 Limitations:

Every system has some limitations. Because a system is not built for all services or not for all over the world. Like that my system has some limitations given below.

- My project is based on Bangladeshi perspective, rules and regulations.
- My project is only for Cyclists till now.
- This is a beta version.

7.4 Obstacles & Achievements:

I have to take challenge to think or do something new. Because I have to face some difficulties as obstacles to do something new. When I can complete the new thing then I can learn something new and can overcome the obstacles then these is my achievements.

- Collecting requirements was a great challenge and obstacle.
- Implementing all the requirements in time were also an obstacle for me.
- After completing this project I have learned so many things.

7.5 Future Scope:

I cannot implement some feature in my app. But my exertion won't be stop. I want to add some more features that will bring benefit to the BD Wheelers and the cyclists. The main field user of our app is the cyclists and the people who wants to stay healthy. This app also gives service to them for communication. I want to add chat option in my application. The app will also keep a record of the database. I am concern to implement a feature where a cyclist can add another cyclist as friend. In future I will work for all international cyclists in my system. I will try to update my system gradually. I want to make available my system internationally.

7.6 Discussion and Conclusion:

Now-a-days maintain security in an area is a big problem. To maintain security the government should have the information about the people of an area. My webapp is implemented to maintain bicycling information about the people. So it will render a great effort to the government and the people of an area. In the age of computer science analog system for maintaining information is an old process. People can serve their personal information by using their android phone. It will also save their time. Using my webapp admin can easily maintain all the information at a time in a single database.

If the user fills free to use my app and accept my work in a cordial heart then the implementation of the application will successful.

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