UNIVERSITY OF SUNDERLAND

ASSIGNMENT COVERSHEET

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<tr><td>Student ID : 219570044</td><td>Student Name/ Names of all group members:
Bisesh Shrestha</td></tr>
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CET333 Product Development</td></tr>
<tr><td>Module Leader/ Module Tutor:
SHUBHAM DHUNGANA</td><td>Due Date: October 12 2022
Hand in Date: October 12 2022</td></tr>
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Bisesh Shrestha

Reg ID: 219570044

CET333 Product Development

1. Requirement Specification Document

Requirements Specification Document

Name:	Bisesh Shrestha
Programme:	BSc. Hons Computer Systems Engineering

Overview

The Fun Olympics is a four-year international sporting competition. The Fun Olympics had to be postponed due to a global epidemic. The Fun Olympic committee, which is ultimately in charge of planning and overseeing the whole event, made the decision to hold the games clandestinely as a result. For the purpose of creating an online infrastructure to host the game, the committee recruited me as an IT consultant. A consumer from anywhere in the world will be able to watch their preferred game by using the internet technologies to subscribe to channels. This will enable the administrator to broadcast the live game via the various channels across the world.

Product to be delivered to client

The final item that must be delivered to the customer is an internet streaming system that enables administrators to broadcast live games on numerous channels across the world and allows registered customers to watch a game of their choosing by subscribing to the channels.

Client Requirements

The demands of the customer, which are divided into functional and non-functional requirements, are determined during the client interview. The following two groupings are listed:

Functional

FOR ADMIN

1. The system must allow admin to register account.
2. The system must allow admin to login and log out.
3. The system must allow admin to reset password.
4. The system must allow admin to make selections of broadcast they wish to watch.
5. The system must allow admin to view user list and block users.
6. The system must allow admin to change location of games events on a map.
7. The system must allow admin to change list.
8. The system must allow admin to play live events schedule.

FOR USERS

1. The system must allow user to register account.
2. The system must allow user to login and log out.
3. The system must allow user to edit profile.
4. The system must allow user to view selections of broadcast they wish to watch.
5. The system must allow admin to view game list.
6. The system must allow admin to view live events schedule.

Non-Functional

1. The system should be fully responsive.
2. The system UI should be clean and simple to use.
3. The system should not give permission to unauthorized user.
4. The system should be easy to maintain.

Constraints

1. Many features need to be included, and the product must be submitted in a short amount of time.
2. If there is flexibility in the budget, the system can be better in terms of the number of resources used within allocated budget.
3. Due to financial constraints, the system will only be housed on one server, which will cause issues if more users sign up.

Resources

Consultant: Self
Designer: Self

Hardware

A Laptop with the following tech specs:
1.Intel i7 processor
2.Ubuntu operating system
3.8GB RAM
4.1TB Hard Drive

Software

1. MySQL is used for relational database management
2. Sublime Text 3 is used for writing code, testing and debugging the proposed system.
3. DrawSQL is used for creating entity relationship diagrams.

Programming Language

Front-end: HTML,CSS
Back-end: PHP
Database: MySQL

Evaluation

Evaluation is required at every stage of product development in the current day to guarantee that the system satisfies all customer requirements while maintaining the product's quality. Clients need to be engaged at every stage of the development process in order to build a good system and meet consumer expectations. Additionally, multiple tests including front-end, database, and unit testing will be done.

Client Sign-off

Signature:	Ms.Shubham Dhungana
Date:	September 14,2022

2. Client Meeting Record Sheet

2.1 Client Meeting 1

Tutorial Preparation (Academic)

What degree are you studying at University of Sunderland?
I am studying BSC[HONS] Computing System Engineering
Which scenario have you chosen?
I have chosen "scenario - Computer Systems Engineering" You must provide an online registration system for users to access the proposed broadcast platform, per the committee's request. The system must allow users to register, login and logout when using it, and make selections of broadcasts they wish to watch. There should be admin and client side to the system. A system admin user should be able to see user interactions, change passwords, and other functions. Although it is not necessary to include payment security measures at prototypical stage, the prototype solution must provide the key functionality.
How do you feel that this scenario matches your current skillset?
I have learned web development and programming and have worked on similar project on level 4 and 5 so it will make me comfortable to work on this scenario.
Are there any areas of your skillset that you aim to improve through completion of this project?
I aim to improve interpersonal skill and project management skill of mine. I also aims to improve my coding skills
What technologies/frameworks/programming languages do you intend to use to complete this project and how experienced are you with them?
I have intended to use PHP alongside with HTML/CSS because I have already used them on my previous similar projects.
Are there any parts of this project or module that you think you will find particularly exciting/interesting/fun?
Client meeting, UI development for fun Olympics and learning different aspect of product development is exciting because it is more challenging for developing online streaming platform
Are there any parts of this project or module that you are particularly worried about or feel that you are weak in?
I am worried about overall project management because I am bit weak at troubleshooting coding.

Tutorial Preparation (Client)

Do you have any questions for the Client?
1) Can you please provide the short description of requirements? 2) Can you give us detail about your Long term project plans? 3) Who are the targeted audiences for project? 4) How quickly can you provided feedback?(at the time of meeting or in next meeting) 5) Let us know about the budget and deadline? 6) Can you please provide us some Suggestion/ features to be added on this project?
Preliminary Ideas/Designs/Solutions

Tutorial (Client)

Client Meeting Notes
Meeting : 1st meeting Date and Time:9th August 2022- 7am to 9am Venue: ISMT college premises Reporting: Budget: £75000 Features: User login, registration, dashboard, admin dashboard, live video streaming, logout, Deadline: should be completed in 7th October Targeted audiences: all the people who enjoy watching/ enjoy games Next meeting: 17th August 2022

Tutor Signature:	MS.Shubham Dhungana
Date:	8/9/2022

2.2 Client Meeting 2

Tutorial Template: Client Meetings

Tutorial Preparation (Academic)

Tutorial Number:	2

How do you feel your project is progressing?

Project Schedule	On Schedule	5	4	3	2	1	Behind Schedule
Requirements Specification	Complete	5	4	3	2	1	Started
Planning Documentation	Complete	5	4	3	2	1	Started
Methodology	Complete	5	4	3	2	1	Started
Solution Design Documentation	Complete	5	4	3	2	1	Started
Testing	Complete	5	4	3	2	1	Started
Technical Deployment	Complete	5	4	3	2	1	Started
Evaluation and Critical Reflection	Complete	5	4	3	2	1	Started

Your Comments:

After our 1st interview I have understand the client few requirements so I have looked for the references from other video streaming websites.

Tutorial (Academic):

Module Tutor Comments:

Bisesh, has done some research but he has to speed up, as he has limited time to complete the project.

Tutorial Preparation (Client):

Do you have anything related to your product you wish to demonstrate to the Client?

After some research I have found some similar websites like:

1. https://www.gosugamers.net/streams
2. https://dlive.tv

Tutorial (Client):

Client Comments

Second Meeting: -
Date: August 18, 2022, from 7 AM to 9 AM
Location: ISMT College surroundings

Reporting: -
It went well on the second client meeting. I thoroughly went through all of the requirements with the customer. I am now ready to start into the designing stage.

After finishing the project's wireframe, the following meeting will be held.

Tutor Signature:	MS.Shubham Dhungana
Date:	August 18, 2022

2.3 Client Meeting 3

Tutorial Template: Client Meetings

Tutorial Preparation (Academic)

Tutorial Number:	*3*

How do you feel your project is progressing?

Project Schedule	On Schedule	5	4	3	2	1	Behind Schedule
Requirements Specification	Complete	5	4	3	2	1	Started
Planning Documentation	Complete	5	4	3	2	1	Started
Methodology	Complete	5	4	3	2	1	Started
Solution Design Documentation	Complete	5	4	3	2	1	Started
Testing	Complete	5	4	3	2	1	Started
Technical Deployment	Complete	5	4	3	2	1	Started
Evaluation and Critical Reflection	Complete	5	4	3	2	1	Started

Your Comments:

In our second meeting I have shown and describe my project detail about website pages and some security detail. After our 2st interview I have and design wireframe and flowchart.

Tutorial (Academic):

Module Tutor Comments:

Design was demonstrated to the client. He has limited time, he should be starting with other phases now.

Tutorial Preparation (Client):

Do you have anything related to your product you wish to demonstrate to the Client?

I would like to demonstrate:

1. Flow chart
2. Wireframe
3. logo

Tutorial (Client):

Client Comments

Third Meeting: -
Date: September 7, 2022, from 7 AM to 9 AM
Location: ISMT College surroundings

Reporting: -
It went well on the third client meeting. I thoroughly went through all of the requirements with the customer and demonstrated wireframe, flowchart and logo. I am now ready to start into the coding.

Tutor Signature:	MS.Shubham Dhungana
Date:	September 7, 2022

3. PRACTITIONER STATEMENT

INTRODUCTION

This last product development module utilized the information and practices from the previous semester, which was the conclusion of the previous semester's two and a half years of study. For instance, during my first year at the Foundation, software engineering taught me how to create schedules, test plans, wireframe design drawings, and data flow diagram. HTML, CSS and PHP was taught in my pervious semesters through which I was able to do assignments and some projects related to those programming languages. A product development module in third year module, to produce the final result for the client, all of the learned skills and knowledge are enhanced. This practitioner's statement describes the many methods and software alternatives accessible, as well as the decision and explanation for selecting them.

3.1 Planning Documentation

To complete the projects development project task is necessary to be enlisted. Different tasks are defined as major work, subdividing tasks, determining task outcomes, and estimating the amount of time that may be spent on each activity. For creating schedule and Gantt chart I have used Microsoft word document because I have used them in previous similar projects and gained a lot of experience from it.

3.2 Methodology

To begin, an analysis of the project's work sequence was required in order to establish a strategy for working on this project. This is referred to as the software development life cycle (SDLC for short). I have chosen an Agile Software Development Methodology because client involvement is given top attention throughout the whole development cycle according to the agile methodology. The goal is to include the client throughout the entire process so that they finish up with a satisfied product. Because the client evaluates and approves the product at every stage of development, this strategy helps the client save money and time. During development cycles, adjustments can be made to address any errors or problems. Because they do not test as frequently, traditional project management approaches would not identify errors as early. Errors that are not found at the various phases of development can typically (in conventional techniques of production) make their way into the finished product. This might lead to higher overhead costs and client dissatisfaction.

3.3 Use of the Software

Different software is required to execute the work that was scheduled to conclude the project. As I previously said, Microsoft word is used for schedule and Gantt chart. As Microsoft word is used for scheduling and Gantt chart more other software are required for completing project. First thing to do is to design wireframe of website. Many software and online website such as paint, visio, adobe illustrator, wireframe.cc etc. As a result, I used an online site to develop wireframes because it is quicker to use and all of the functions are already present.

Different software is available for coding, but I choose sublime text 3 since it has been used in previous projects, making it easy for me to use. All the functions are well known and files can be saved in appropriate formats (HTML, CSS, or PHP). Its pertinent color coding of text indicative of the programming language used makes it very simple to utilize. I also used the bootstrap tool to layout the website because it makes coding and designing easier. After designing, I used XAMPP, a relational online database program, to connect the website to the database. To connect the webpage to the database, SQL scripts were built.

3.4 System Testing

When the system build is finished, the testing phase may begin. Consider the outcomes of my prior modules and my experience with them. We'll go through this in further depth in the report's Tests and Ratings section, but the most recent test technique we utilized was a simple way to running a website made in a web browser (in this case Google Chrome). Website functions and database connections are examples of web server components (via XAMPP).

It is then sent to a test table, where the test is divided into the functionality of each website to be tested. Each test explains the method to be tested, the input needed to run the method, the expected results, the status of the result, and any additional information about the tested method. The exam table is stored in Microsoft Word for ease of usage.

Conclusion

Finally, once you've chosen all of the techniques, software is required to manage any constraints or challenges that you may have discovered or may encounter while constructing the product. When creating a website using simple tools such as HTML, PHP, and CSS, you must be creative. If you create a prototype website and use the MySQL Database management system, the prototype

website will still be significantly reliant on the aforementioned system's constant stability to function. Yes, web pages are hosted on the host system and may be read offline; nevertheless, you will still utilize these pages if a database connection or capability is unavailable, such as if the XAMPP Apache server is down.4. Schedule and Gantt chart

4.1 Schedule

ID	Description	Hour	Planned Start date	Planned End Date	Actual Start Date	Actual End Date	Deliverable
1	Presentation to client	10	01/08/2022	08/08/2022	01/08/2022	08/08/2022	Presenting to client
1.1	Research	2.5	01/08/2022	03/08/2022	01/08/2022	03/08/2022	
1.2	Build sample homepage	2	04/08/2022	05/08/2022	04/08/2022	05/08/2022	
1.3	Prepare presentation slides	2.5	06/08/2022	07/08/2022	06/08/2022	07/08/2022	
1.4	Presentation	3	08/08/2022	09/08/2022	08/08/2022	08/08/2022	Detailed information on each team member's education, training, and previous projects
2	Requirement specification	20	10/08/2022	14/09/2022	09/08/2022	14/09/2022	
2.1	Reviewing notes from presentation	5	10/08/2022	10/08/2022	09/08/2022	10/08/2022	Review of comment
2.2	Design requirement specification	10	11/08/2022	12/08/2022	11/08/2022	12/08/2022	Design
2.3	Consult with client about requirements specification	5	13/08/2022	14/09/2022	13/08/2022	14/09/2022	Decisions

3	Build project schedule	20	15/09/2022	17/08/2022	15/09/2022	17/08/2022	
3.1	List the task	5	15/08/2022	15/08/2022	15/08/2022	15/08/2022	
3.2	Breaking down of the task	5	15/08/2022	15/08/2022	15/08/2022	15/08/2022	
3.3	Schedule template with task list breakdowns	5	16/08/2022	16/08/2022	16/08/2022	16/08/2022	
3.4	Reviewing schedule with client	5	17/08/2022	17/08/2022	17/08/2022	17/08/2022	
4	Development	106	18/08/2022	14/09/2022	18/08/2022	14/09/2022	
4.1	Create sample web pages	5	18/08/2022	18/08/2022	18/08/2022	18/08/2022	Design sample
4.2	Create web pages with various menu positions.	10	19/08/2022	20/08/2022	19/08/2022	20/08/2022	
4.3	Make a simple home page and discussing with client	5	21/08/2022	21/08/2022	21/08/2022	21/08/2022	
4.4	Plan a website design	3	22/08/2022	23/08/2022	22/08/2022	23/08/2022	Planning
4.5	Create new web pages	5	24/08/2022	29/08/2022	24/08/2022	29/08/2022	Designing web pages
4.6	Discussing web page design idea with client	12	30/08/2022	30/08/2022	30/08/2022	30/08/2022	
4.7	Reviewing client meeting notes	3	31/08/2022	31/08/2022	31/08/2022	31/08/2022	
4.8	Alter design as per client	20	01/09/2022	04/09/2022	01/09/2022	04/09/2022	Design as per client
4.9	Design logo and wireframe	15	05/09/2022	06/09/2022	05/09/2022	06/09/2022	Creating logo

4.10	Discussing design idea with client	5	06/09/2022	07/09/2022	06/09/2022	07/09/2022	
4.11	Reviewing client meeting notes	3	08/09/2022	09/09/2022	08/09/2022	09/09/2022	
4.12	Alter design as per require specification of client	20	10/09/2022	14/09/2022	10/09/2022	14/09/2022	Alter as per client
5	Building prototype website	10	14/09/2022	17/09/2022	14/09/2022	17/09/2022	
5.1	Looking over design documentation	2	14/09/2022	14/09/2022	14/09/2022	14/09/2022	
5.2	Building a website framework	2	14/09/2022	14/09/2022	14/09/2022	14/09/2022	
5.3	Back-end code for the home page and GUI template	2	15/09/2022	15/09/2022	15/09/2022	15/09/2022	
5.4	Html & CSS back end code for other web pages	2	16/09/2022	16/09/2022	16/09/2022	16/09/2022	
5.5	Discussing and adjusting framework as per client	2	17/09/2022	17/09/2022	17/09/2022	17/09/2022	
6	**Develop PHP content**	17	17/09/2022	18/09/2022	17/09/2022	18/09/2022	
6.1	Normalization and ERD development	2	17/09/2022	17/09/2022	17/09/2022	17/09/2022	
6.2	Designing and building SQL code on the database server	4	17/09/2022	17/09/2022	17/09/2022	17/09/2022	
6.3	Writing PHP code for important website pages	5	17/09/2022	17/09/2022	17/09/2022	17/09/2022	
6.4	Uploading web pages to temporary network server	2	18/09/2022	18/09/2022	18/09/2022	18/09/2022	
6.5	Linking webpage to database server	4	18/09/2022	18/09/2022	18/09/2022	18/09/2022	

7	Testing	7	19/09/2022	28/09/2022	19/09/2022	28/09/2022	
7.1	Testing website	5	19/09/2022	24/09/2022	19/09/2022	24/09/2022	Testing of final website
7.2	Evaluating test result	2	24/09/2022	28/09/2022	24/09/2022	28/09/2022	
8	Final	10	29/09/2022	07/10/2022	29/09/2022	07/10/2022	
8.1	Gathering all document	5	29/09/2022	03/10/2022	29/09/2022	03/10/2022	
8.2	Presenting final website to client	5	04/10/2022	07/10/2022	04/10/2022	07/10/2022	
	Total	200					

4.2 Gantt Chart

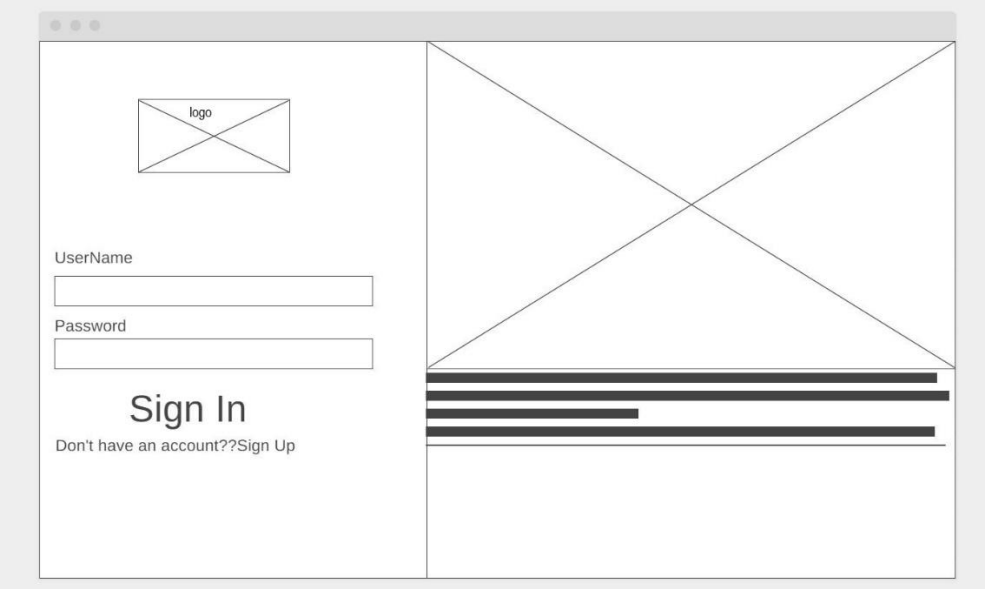
ID	Description	Hour	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
1	Presentation to client	10												
1.1	Research	2.5	2.5											
1.2	Build sample homepage	2	2											
1.3	Prepare presentation slides	2.5	2.5											
1.4	Presentation	3	3											

2	Requirement specification	20												
2.1	Reviewing notes from presentation	5		5										
2.2	Design requirement specification	10		10										
2.3	Consult with client about requirements specification	5		5										
3	Build project schedule	20												
3.1	List the task	5			5									
3.2	Breaking down of the task	5			5									
3.3	Schedule template with task list breakdowns	5			5									
3.4	Reviewing schedule with client	5			5									
4	Development	106												
4.1	Create sample web pages	5				5								
4.2	Create web pages with various menu positions.	10				10								
4.3	Make a simple home page and discussing with client	5				5								
4.4	Plan a website design	3				3								
4.5	Create new web pages	5				2	3							
4.6	Discussing web page design idea with client	12					12							
4.7	Reviewing client meeting notes	3					3							
4.8	Alter design as per client	20					15	5						
4.9	Design logo and wireframe	15						15						
4.10	Discussing design idea with client	5						5						
4.11	Reviewing client meeting notes	3						3						
4.12	Alter design as per require specification of client	20						20						

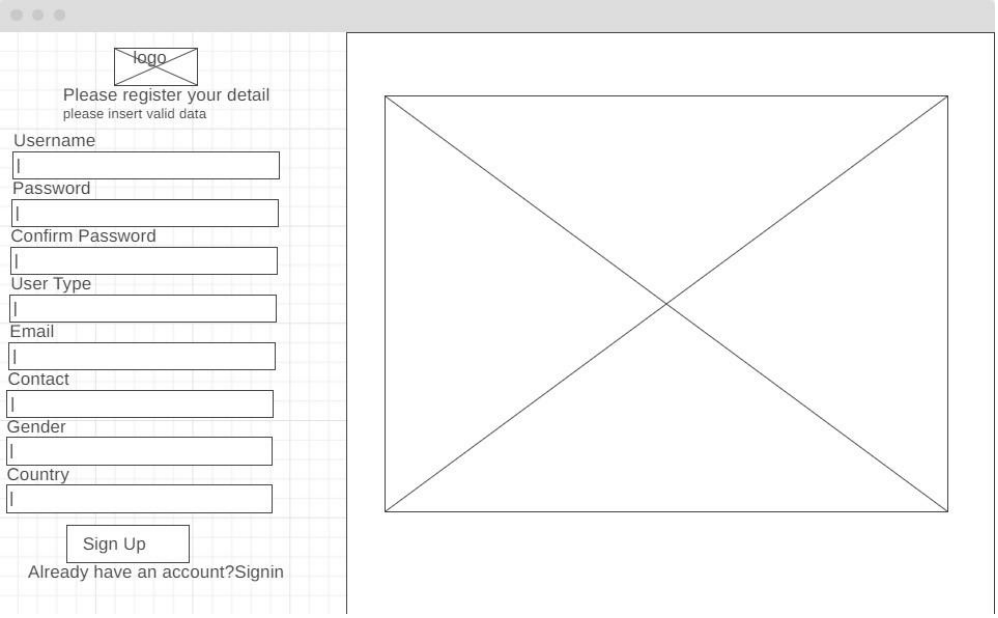
5	Building prototype website	10												
5.1	Looking over design documentation	2							2					
5.2	Building a website framework	2							2					
5.3	Back-end code for the home page and GUI template	2							2					
5.4	Html & CSS back end code for other web pages	2							2					
5.5	Discussing and adjusting framework as per client	2							2					
6	Develop PHP content	17												
6.1	Normalization and ERD development	2								2				
6.2	Designing and building SQL code on the database server	4								4				
6.3	Writing PHP code for important website pages	5								5				
6.4	Uploading web pages to temporary network server	2								2				
6.5	Linking webpage to database server	4								4				
7	Testing	7												
7.1	Testing website	5									5			
7.2	Evaluating test result	2									2			
8	Final	10												
8.1	Gathering all document	5										5		
8.2	Presenting final website to client	5										5		
	Total	200	10	20	20	25	33	48	10	17	7	10		

5. Wireframe

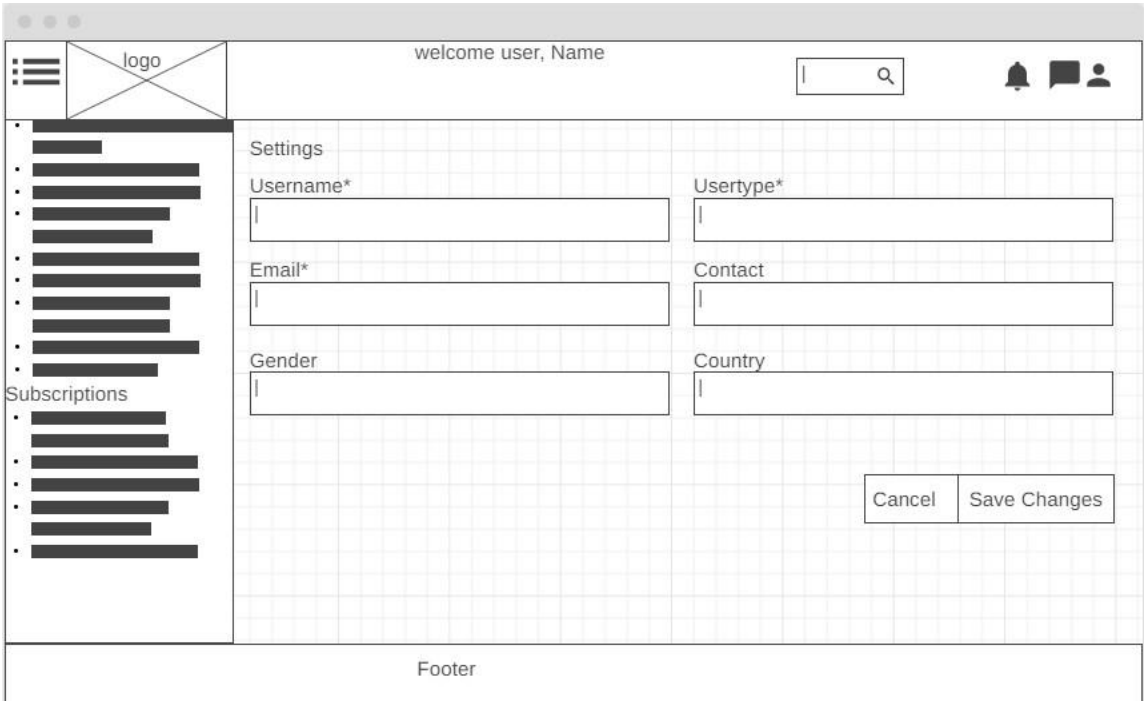
5.1 Login Page



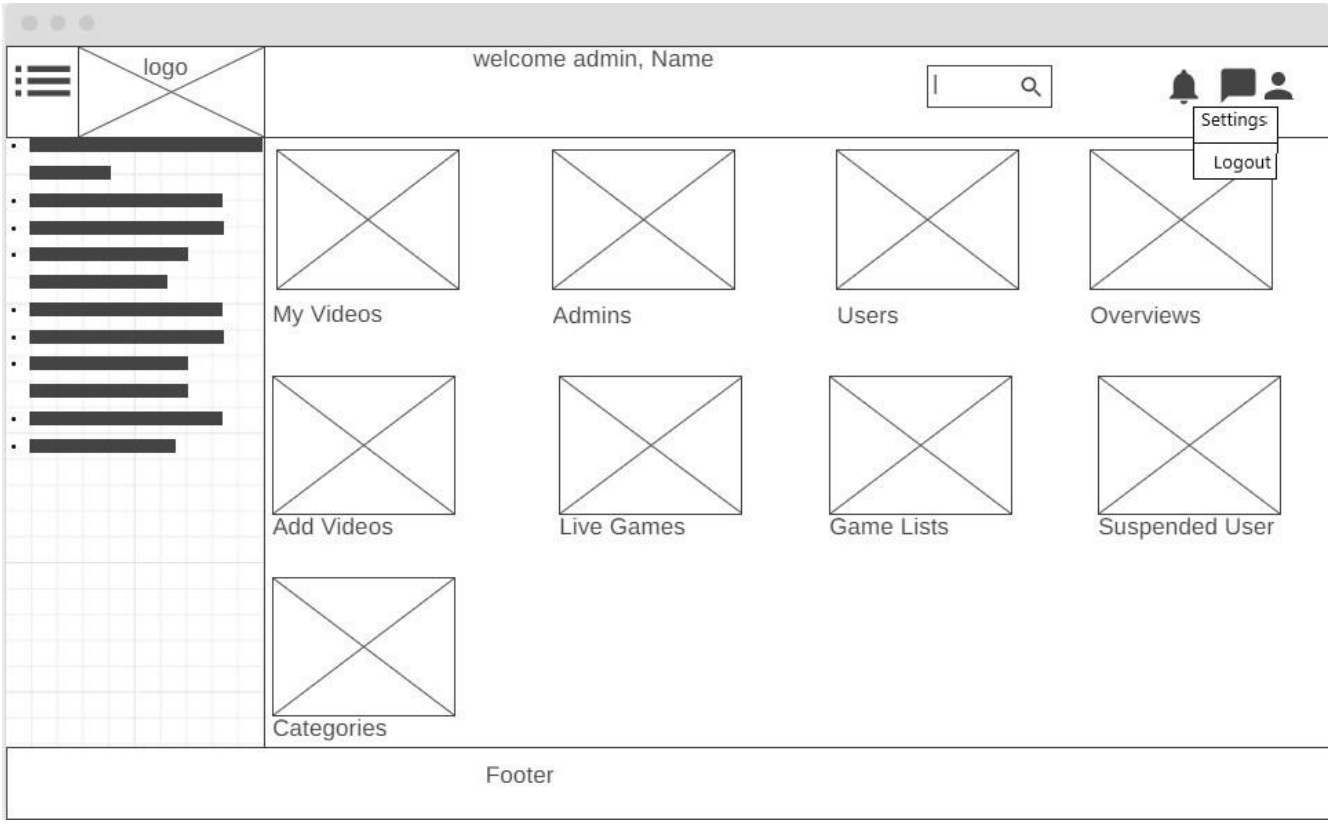
5.2 Registration page



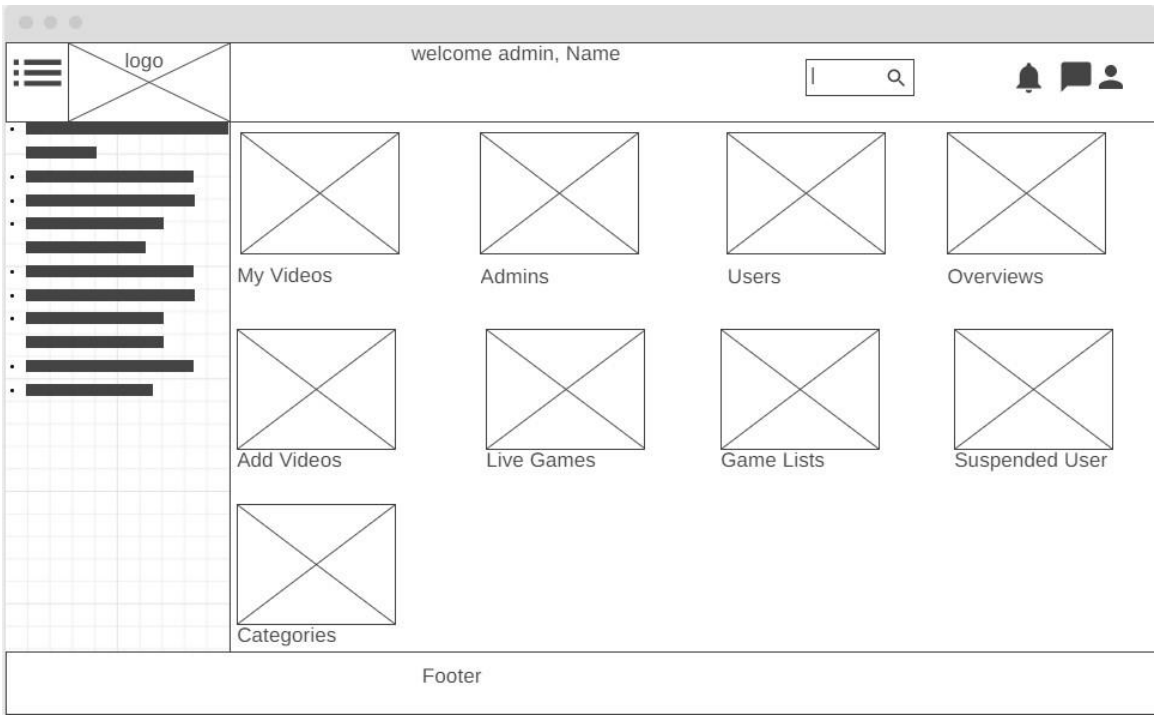
5.3 User detail edit/Update page



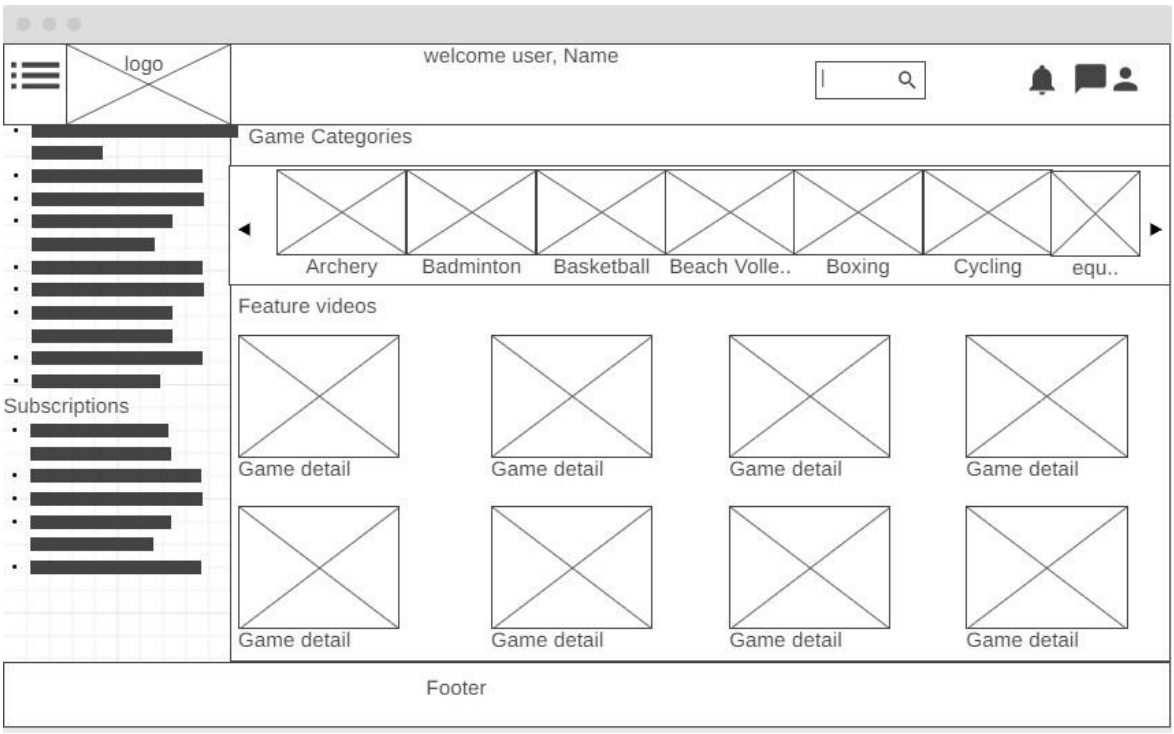
5.4 Log out button



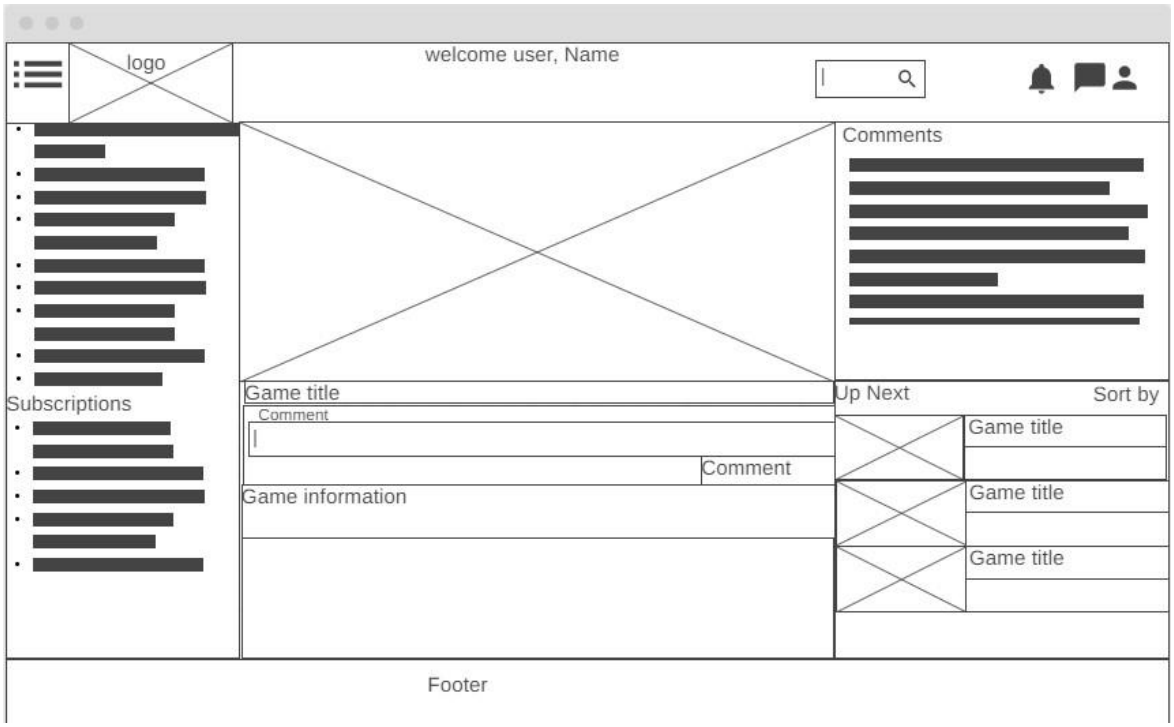
5.5 Admin dashboard



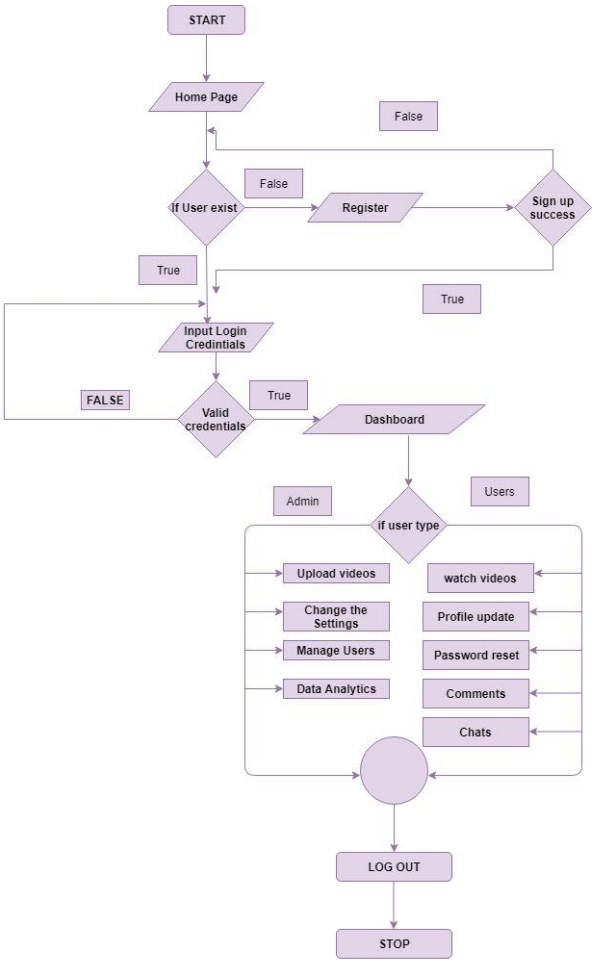
5.6 User dashboard

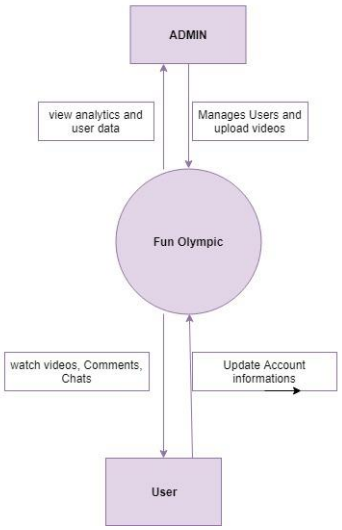


5.7 Game video page



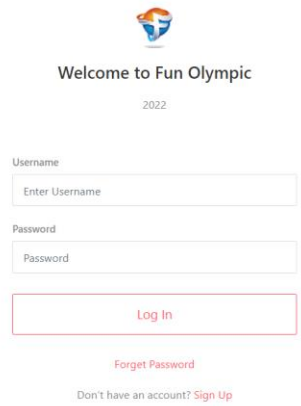
6. Flow Chart and Data Flow diagram

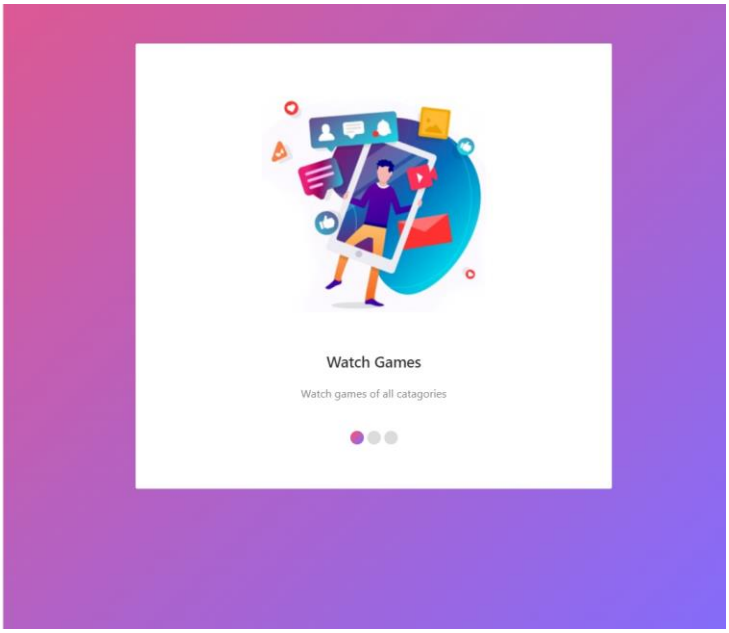




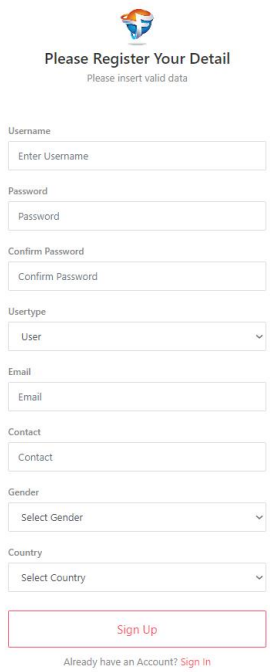
7. Website Screenshot

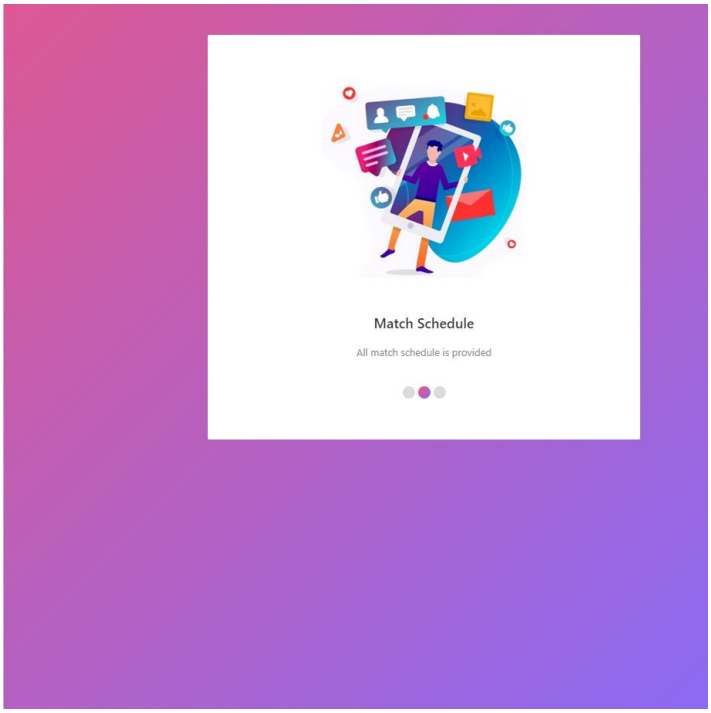
7.1 Login page



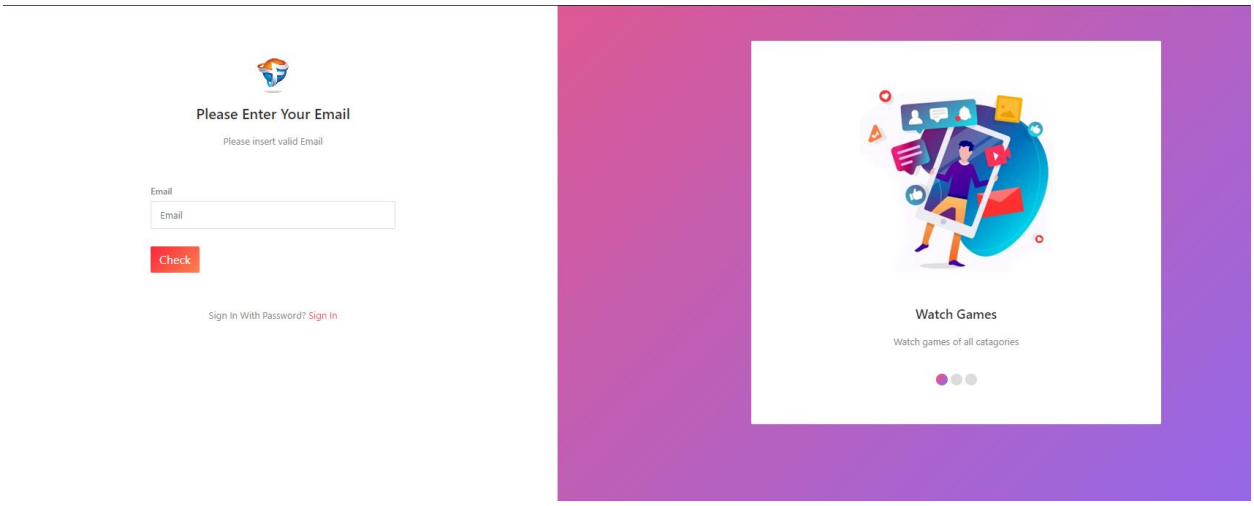


7.2 Registration page

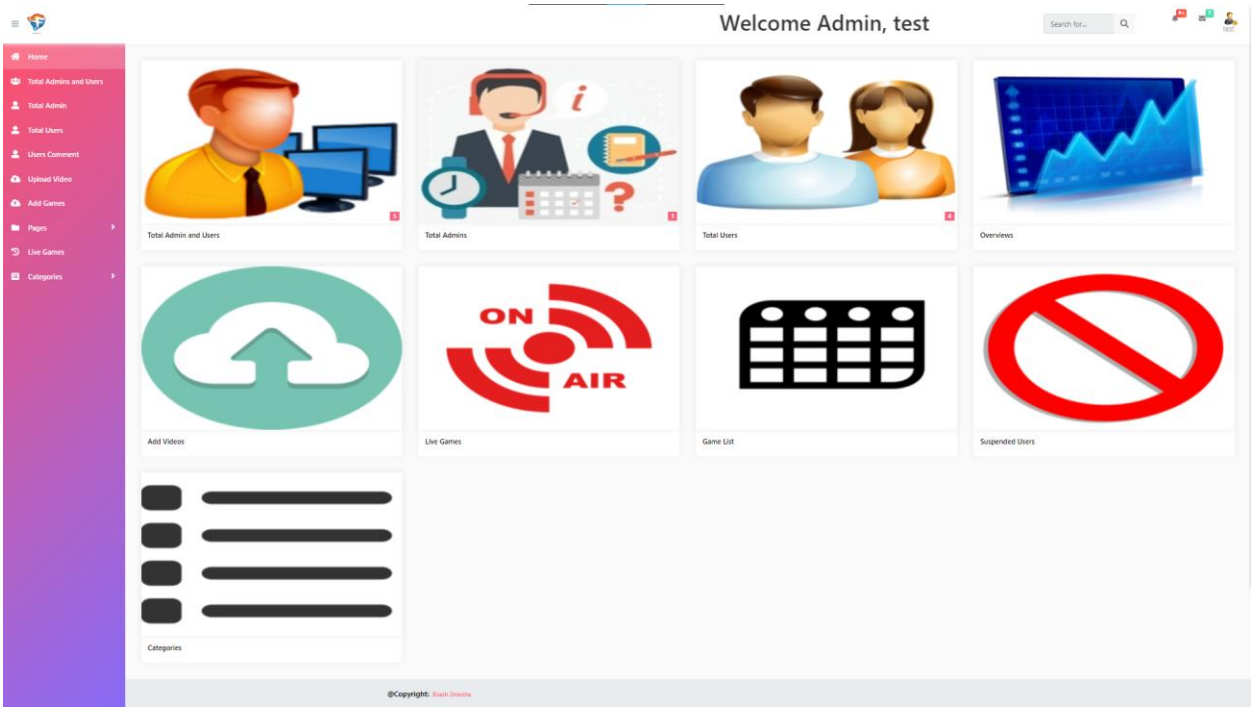




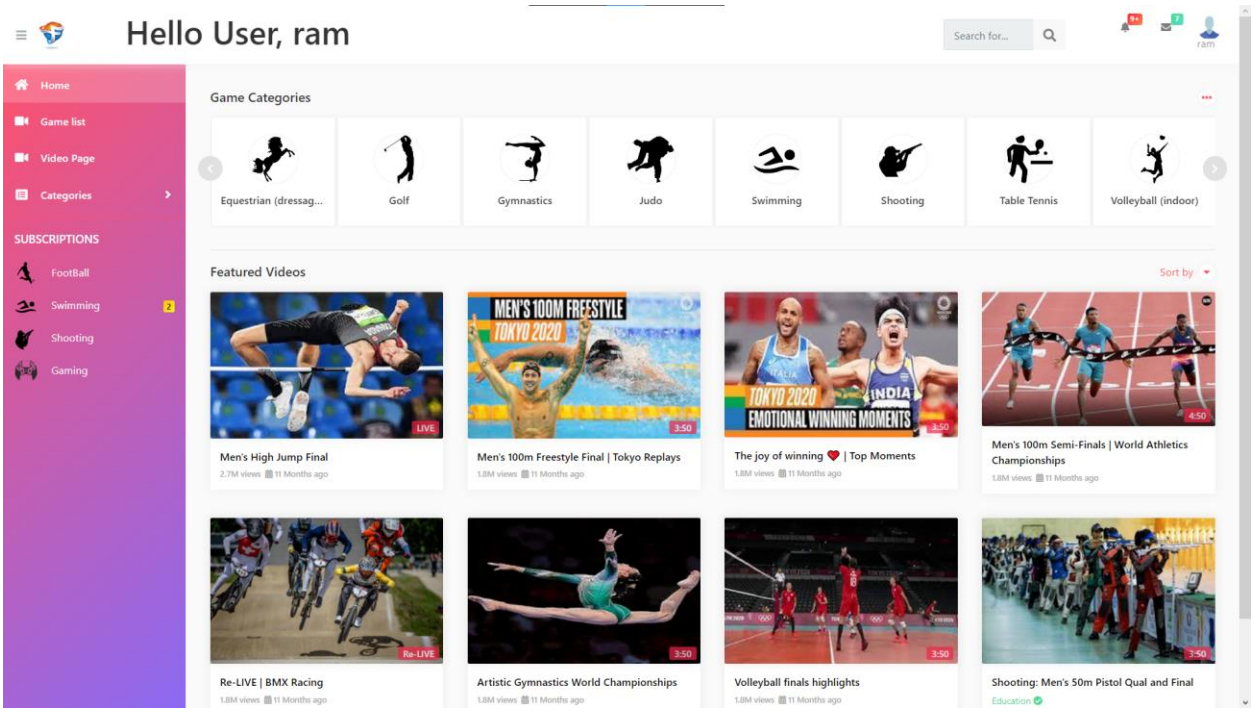
7.3 Forget Password Page



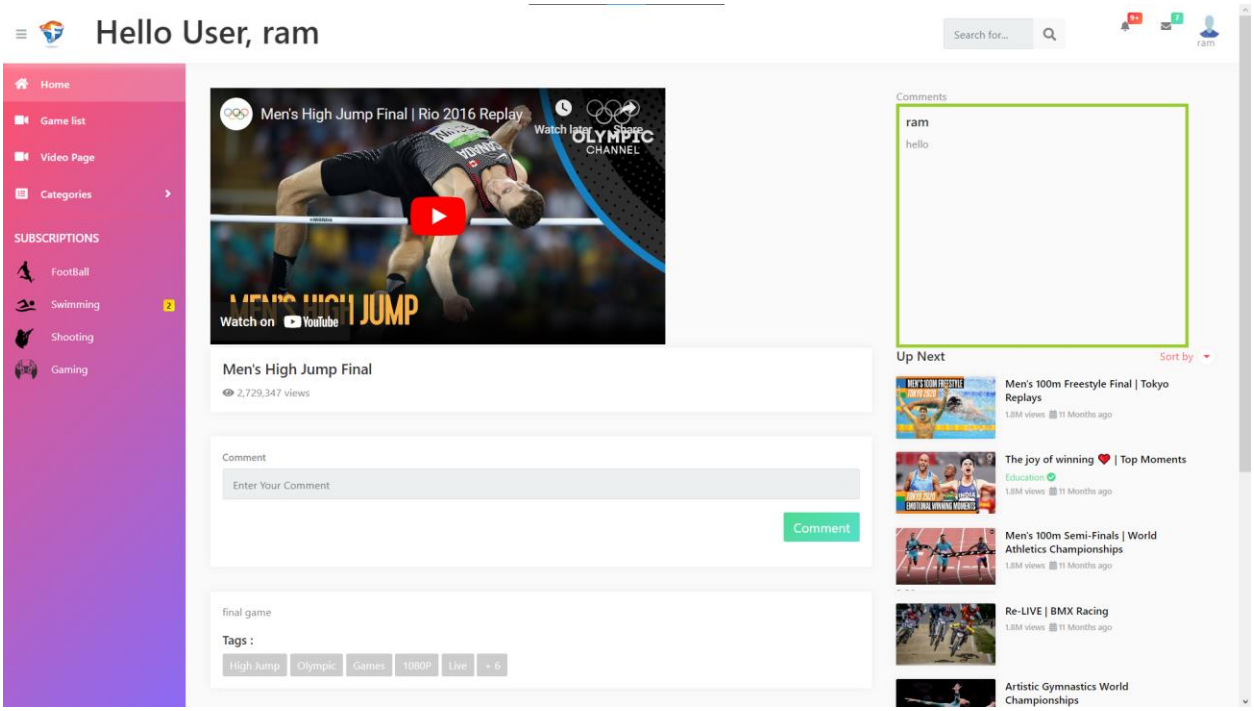
7.4 Admin Dashboard



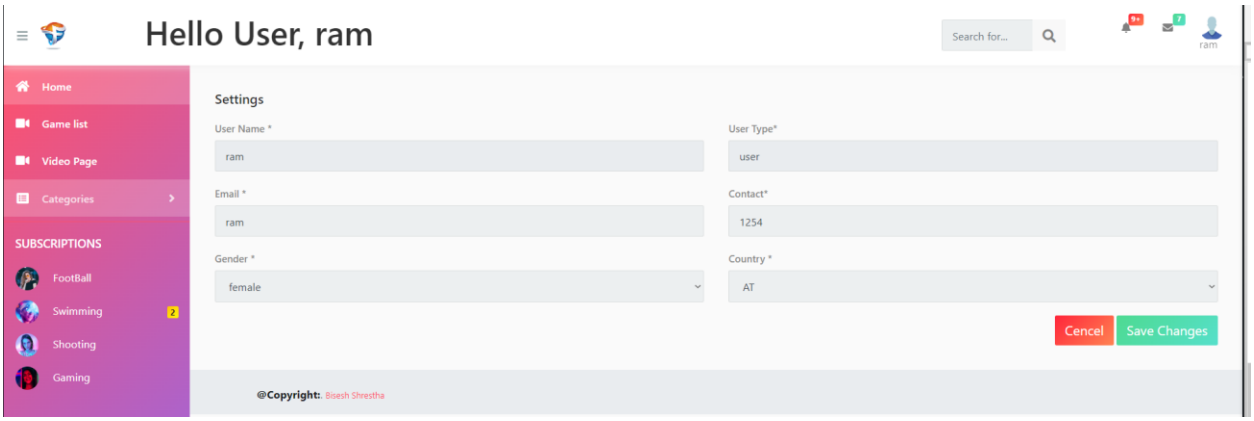
7.5 User Dashboard



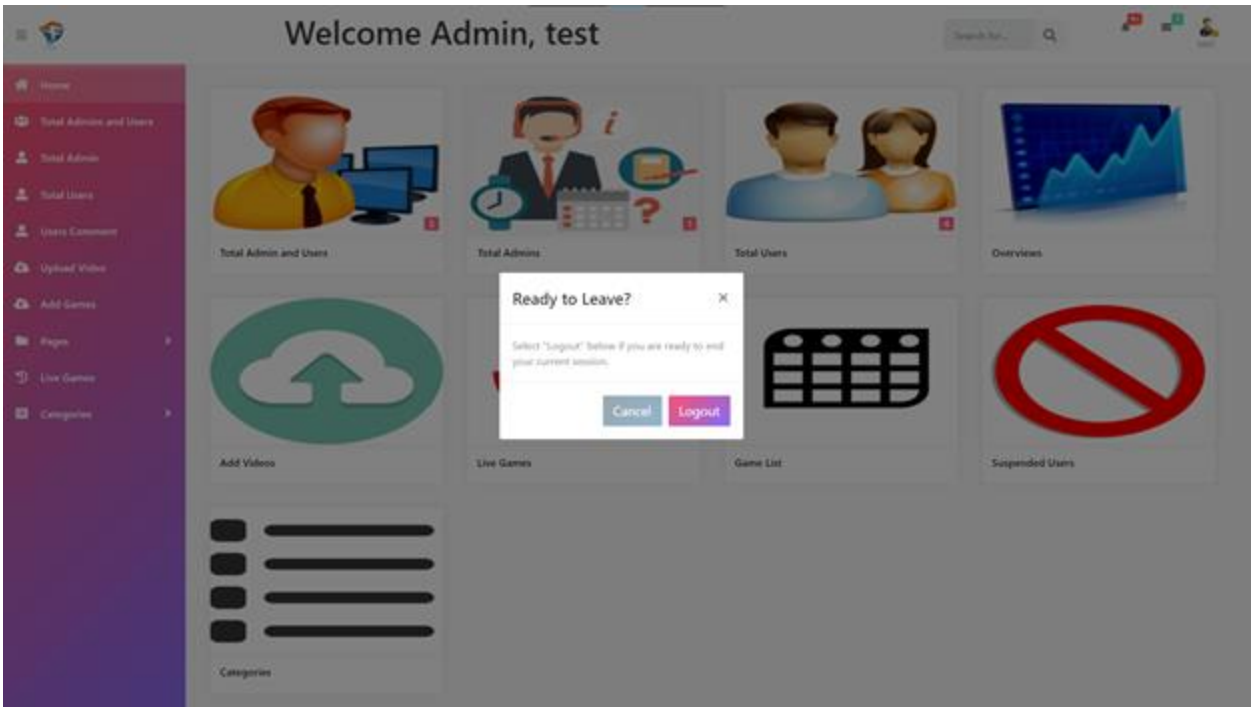
7.6 Video page



7.7 User edit/update page



7.8 Logout



8. Client Evaluation Form – Parts 1 & 2

CET333 Product Development: Client Evaluation Form – Parts 1 & 2

Student Name [CAPITALS]	BISESH SHRESTHA
Client Name [CAPITALS]	MS. SHUBHAM DHUNGANA

Clients are required to evaluate the student's artefact using the two page Client Evaluation Form.

Part 1. Functional and Non-Functional Requirements

Evaluation of functional and non-functional requirements agreed with the client, specified and signed off in the Terms of Reference document.

Please enter an "X" in the box as appropriate.

Achievement of Functional Requirements	In full	In part	Absent
FOR ADMIN			
1. The system must allow ~~admin to register account~~ to change user type	X		
2. The system must allow admin to login and logout.	X		
3. The system must allow admin to reset password.	X		
4. The system must allow admin to make selections of broadcast they wish to watch.	X		
5. The system must allow admin to view user list and block users.		X	
6. The system must allow admin to change location of games events on a map.	X		
7. The system must allow admin to change list (Game list)	X		
8. The system must allow admin to play live events schedule.	X		
FOR USERS			
1. The system must allow user to register account.	X		
2. The system must allow user to login and log out.	X		
3. The system must allow user to edit profile.	X		
4. The system must allow user to view selections of broadcast they wish to watch.	X		
5. The system must allow admin to view game list.	X		
6. The system must allow admin to view live events schedule.	X		

Achievement of Non Functional Requirements	In full	In part	Absent
1. The system should be fully responsive.	X	X	

1

2. The system UI should be clean and simple to use.	X		
3. The system should not give permission to unauthorized user.	X		
4. The system should be easy to maintain.	X		

Client Signature		Date:	28/09/2022
Student Signature		Date:	28/09/2022

Client Comments & Feedback
Bisesh, demonstrated the application the application to the client. The application is fully functional and it meets almost all the requirement set by the client. He showed his technical skills by demonstrating/explaining the features and programming language used in the application. ~~Overall~~ Overall a good application.

Client Signature		Date:	28/09/2022
Student Signature		Date:	28/09/2022

9. Technical Deployment of the Solution

In summary, The XAMPP application was used to host the prototypes' deployment on a server, appropriate permissions and temporary URLs enabled to allow web browser access to the website from anywhere. The website was created using Sublime text 3, a small software package that adds color annotations to code if the file is saved in a specified format

Link of E-Portfolios

https://canvas.sunderland.ac.uk/eportfolios/8271?verifier=aWz6gJdj5InVgD1OiNK6SK41aSIH1al3zY9re0iL

This temporary URL and MySQL, the relational database management system utilized, may be used to visit the created website. To address the SQL code issue, the database for the website was moved to the server and generated with a SQL script changed on the site.

10. Potential for Full Deployment

During the presenting and testing procedure, we discovered issues and flaws that could not be corrected in time. Despite these issues, the prototype website and supporting materials were created with the goal of ensuring a seamless transition to full development. This is due to the fact that the site file is produced in a simple editor such as Sublime Text 3 and saved in HTML, CSS, and PHP file formats. These may simply be exported to professional web development software for additional development as needed.

The website must be hosted somewhere other than on the ISMT University server. Blue Host, HostGator, Webhosting Buzz, GoDaddy, A2 Hosting, and GreenGeeks are some of the less expensive alternatives. If quoted, all mentioned web hosting companies include low-cost web hosting packages and the most extensive low-end choices.

11. Testing Case Suite

Test Case Suite- Fun Olympic Game	Number of Test
Website URL	

Test Case 1		**Tested Home Page**				**Total test 4**	
SN	Action	Input	Expected Output	Actual Output	Browser Test	Test Result	Test Comment
1.1	Lunch website	http://localhost/login/login.php	Login Page	Login Page	Google Chrome	Pass	0.83 second load time in 3G/4G network Load Period-1.85 sec
1.2	Lunch website	http://localhost/login/login.php	Login Page	Login Page	Opera Browser	Pass	0.80 second load time in 3G/4G network Load Period-1.10 sec
1.3	Lunch website	http://localhost/login/login.php	Login Page	Login Page	Microsoft edge	Pass	0.70 second load time in 3G/4G network Load Period-1.10 sec
1.4	Lunch website	http://localhost/login/login.php	Login Page	Login Page	Mozilla firefox	Pass	1 second load time in 3G/4G network Load Period-2.02 sec

Test Case 2		**Tested Menu Bar**				**Total test 4**	
SN	Action	Input	Expected Output	Actual Output	Browser Test	Test Result	Test Comment
2.1	Login page Leading User to Relevant Page (User Register)	User clicks sign up	Registration page	Registration page	Opera Browser	Pass	Registration page appears
2.2	Login page Leading User to	User enter admin username and	Admin Page	Admin Page	Opera Browser	Pass	Admin page appears

	Relevant Page (User Register)	password and clicked login					
2.3	Login page Leading User to Relevant Page (User Register)	User enter user username and password and clicked login	User Page	User Page	Opera Browser	Pass	User page appears
2.4	Login page Leading User to Relevant Page (User Register)	User enter wrong username and password	Display error	Display error	Opera Browser	Pass	Error is displayed
2.5	Login page Leading User to Relevant Page (User Register)	User clicks on forget password	Forget password page	Forget password page	Opera Browser	Pass	Forget password page appears

Test Case 3		**Admin Dashboard Testing**				**Total test 8**	
SN	Action	Input	Expected Output	Actual Output	Browser Test	Test Result	Test Comment
3.1	Sidebar navbar link leading to relevant page	Admin clicks 'Total admin and users'	Total Admin and Users page	Total Admin and Users page	Opera Browser	Pass	Total Admin and Users page where total numbers of admins and users are displayed.
3.2	Sidebar navbar link leading to relevant page	Admin clicks 'Total admin'	Total Admin page	Total Admin page	Opera Browser	Pass	Total Admin page is appeared where total admins are displayed.
3.3	Sidebar navbar link leading to relevant page	Admin clicks 'Total users'	Total Users page	Total Users page	Opera Browser	Pass	Total User page is appeared where total User are displayed.

3.4	Sidebar navbar link leading to relevant page	Admin clicks 'Users comment'	Users comment page	Users comment page	Opera Browser	Pass	User Comment page is appeared where all comments of users are displayed
3.5	Sidebar navbar link leading to relevant page	Admin clicks 'Upload video'	Upload video page	Upload video page	Opera Browser	Pass	Video uploading page is appeared where admin can upload videos
3.6	Sidebar navbar link leading to relevant page	Admin clicks 'Add Game'	Add game page	Add game page	Opera Browser	Pass	Add game page is papered where admin add game lists
3.7	Sidebar navbar link leading to relevant page	Admin click 'Setting'	Setting page	Setting page	Opera Browser	Pass	Setting page is appeared where admin can edit their information
3.8	Sidebar navbar link leading to relevant page	Admin clicks 'logout'	Log out	logout	Opera Browser	Pass	admin will be logout

Test Case 4		**User Dashboard Testing**				**Total test 6**	
SN	Action	Input	Expected Output	Actual Output	Browser Test	Test Result	Test Comment
4.1	Sidebar navbar link leading to relevant page	User clicks 'Game list'	Game list page	Game list	Opera Browser	Pass	Game list page is appeared and all game list is displayed
4.2	Sidebar navbar link leading to relevant page	User clicks 'video page'	Video page	Video page	Opera Browser	Pass	Video page is appeared where all video live game is shown
4.3	Sidebar navbar link leading to relevant page	user clicks 'Home'	User page	User page	Opera Browser	Pass	Home page is appeared

4.4	Sidebar navbar link leading to relevant page	User click 'Setting'	Setting page	Setting page	Opera Browser	Pass	Setting page is appeared where user can edit their information
4.5	Sidebar navbar link leading to relevant page	User clicks 'logout'	Log out	logout	Opera Browser	Pass	User will be logout
4.6	Sidebar navbar link leading to relevant page	User clicks on live game list	Video page	Video page	Opera Browser	Pass	Video page will be shown where user can see live games
Test Case 5		**User video page Testing**				**Total test 5**	
SN	Action	Input	Expected Output	Actual Output	Browser Test	Test Result	Test Comment
5.1	Video page link leading to relevant page	User clicks 'play video'	Need to play video	Video is played	Opera Browser	Pass	Game video is played
5.2	Video page link leading to relevant page	User enters comment and clicks 'Comment'	Comment post	Comment is posted	Opera Browser	Pass	Comment is posted and is shown in comment section in video page
5.3	Video page link leading to relevant page	User clicks 'Up Next list'	Video of the list should be played	Video should be played from list	Opera Browser	Pass	Video list video is played
5.4	Video page link leading to relevant page	User click 'Setting'	Setting page	Setting page	Opera Browser	Pass	Setting page is appeared where user can edit their information
5.5	Video page link leading to relevant page	User clicks 'logout'	Log out	logout	Opera Browser	Pass	User will be logout

12. Testing Protocol Details

A test suite is a group of tests that are run consecutively until certain outage criteria are met. Getting the test suite ready requires methodical development as well as the assignment of test cases based on the specific testing approach are used. The final product must go through different testing method to meet most of the client requirement.

The initial phase is to make sure your website is operational on your preferred network server. In this scenario, ensure that all files are relocated to the appropriate network drive using the XAMPP application and that the proper file permissions are established. To access the website, use a temporary URL. It is also essential to make sure whether MySQL as well as its components remain operating.

13. Methods Tools

After the website is released, the primary method for evaluating is to display it in a web browser (such as Chrome Browser, Microsoft Edge, or Opera) and validate its functionality in a mobile browser. It is one of the most common browsers known to today's clients; therefore, verify that your website works on those browsers. Check that the temporary URL given by the network can visit the website as well. Otherwise, no internet browser will be able to view the webpage. This type of testing provides a live user experience without examining the system's critical processes. HTML and PHP programming are available, allowing users to test your website's full functionality.

14. The Test Table

Each testing is recorded in table that holds the outcomes as well as other exam-related information. Each web page's test table is divided into sections, and that each test is assigned a number. Every test is listed in table below a category.

- Case number: Test number that are done.
- Action: To be done.
- Input: User giving/ clicking button.
- Expected output: After user give input, expected output is written.

- Actual output: Is output is appeared as per expected output then actual output is written.
- Browser test: In which browser is the test done.
- Test result: Is test result is pass or fail is written.
- Test comment: comment is written after test is done.

15. Efficiency Testing

While analyzing your website, keep other factors in the test table in mind. Well how is it done? This capability has been added to the test table. One feature of effective websites, For instance, they load rapidly. Load time is a term that is commonly used when discussing computers, particularly in the context of live television. In this circumstance, you wouldn't need a page that takes a lengthy time to open since people who locate your website will find it difficult to access. A timer is used to measure the first load time of the webpage. This is noted in the test table comments for the initial load of the website. To be clear, the tests were carried out on all three web browsers stated above: Chrome Browser, Edge, and Apple Safari IOS. Increase.

16. Conclusion

Finally, testing is essential in the production of digital or physical goods, in addition to the webpage/ Customers should be given accurate information regarding not just items / solutions, but also the necessity for repairs.

17. Critical Reflection

OVERALL PERCEPTION OF PROGRESS

Following an agile work strategy, we believe that the design and development project is progressing well. Throughout this process, I was continuously reflecting on myself, not merely to ensure that I delivered the greatest quality things possible, but also to allow the submitted projects to optimize my talents. The second drawback has been that I was not able to correct a mistake in the presentation today. Despite the fact that the customer was present throughout the presentation, after discussing these faults and what I believe was the source of the problems, I am able to resolve the problem. The product is simple and easy to update and if needed it can be used by other developer also.

EFFECTIVENESS OF TOOLS USED

Earlier expertise with the tools has undoubtedly aided the growth of the project in previous sections. Uni server involves creating website (HTML, CSS, PHP), MySQL database management system, SQL script generation that serves as the basis for such databases itself, XAMPP servers for file uploading. You have been moved to, and remote access rights have been set up. Microsoft word is used to build the schedule and test tables. Therefore I'm looking for simplicity as well as speedier design and testing procedures.

18. Lesson Learned For Future

This endeavor has taught a lot. The major goal was to inspire myself to complete my tasks as near to the completion of the project as feasible. As the project goes, the closer you are to finishing each job, the happy you will be. It will undoubtedly be utilized as an incentive in the completion of future projects.

Link of E-Portfolios

https://canvas.sunderland.ac.uk/eportfolios/8271?verifier=aWz6gJdj5InVgD1OiNK6SK41aSIH1al3zY9re0iL