Planning Documentation

Any project or task require planning before completing them. It helps us to identify our objective clearly with right number of resources. Here is the project schedule of my project.

Task to complete	Time (Hrs)	Evaluated Start-Date	Evaluated End Date	Actual Start Date	Actual End Date	Deliverable
Project scope	20					
Discussion	5	7/1/2022	7/6/2022	7/2/2022	7/6/2022	Initial discussion and research of the project/website .
Proposal	10	7/6/2022	7/10/2022	7/7/2022	7/10/2022	Preparation of Proposal on the website.
Agreement	5	7/10/2022	7/15/2022	7/10/2022	7/15/2022	Agreement of the project was completed with the client.
Designed phase	30					
Initial deigned idea	10	7/15/2022	7/19/2022	7/16/2022	7/19/2022	Discussion of designing the website

						(Flowchart and Wireframes) and its tools
Client requirement	10	7/19/2022	7/25/2022	7/19/2022	7/24/2022	Discussed functional and non-functional requirements from the client
Deigned revisions	5	7/25/2022	7/29/2022	7/27/2022	7/29/2022	Revised all the rough design and started preparing.
Final deigned approval	5	8/1/2022	8/4/2022	8/1/2022	8/5/2022	Completed Wireframe and Flowchart
Coding phase	80					
Designed wireframe	10	8/4/2022	8/10/2022	8/6/2022	8/10/2022	Working on WordPress accordingly to Wireframes.
Database collection	10	8/10/2022	8/15/2022	8/10/2022	8/15/2022	Required data and information for website was collected.
Code	10	8/15/2022	8/20/2022	8/15/2022	8/20/2022	Validating the

validation						system.
Cross browser testing	10	8/20/2022	8/25/2022	8/20/2022	8/25/2022	Tested if the website worked on every browser.
Developme nt	30	8/25/2022	9/5/2022	8/26/2022	9/6/2022	Developing of website started (Importing plugins, themes, etc)
Shown to client	10	9/5/2022	9/8/2022	9/6/2022	9/8/2022	Prepared for client meeting.
Content build phase	20					
Site content pages	10	9/8/2022	9/14/2022	9/8/2022	9/13/2022	Different content of site was built up gradually.
Navigation structure	10	9/14/2022	9/18/2022	9/14/2022	9/16/2022	Shown how different pages on site were organized and connected to one another.

User experienc e phase	20					
Final developmen t	15	9/18/2022	9/25/2022	9/17/2022	9/24/2022	Finishing of the site.
Testing	5	9/25/2022	9/28/2022	9/25/2022	9/29/2022	Testing the website for final review.
Presentati on phase	20					
Review and testing	10	9/28/2022	9/30/2022	9/29/2022	10/01/202	Review and final testing were completed
Final weeks	5	9/30/2022	10/5/2022	10/01/202	10/6/2022	
Shown to client	5	10/5/2022	10/08/202	10/6/2022	10/10/202	Final product shown to the client. Evaluation of the project.
Completi on and	10	10/08/202	10/10/202	10/10/202	10/12/202	Launching the website

launch			(Domain
			name, Web
			Hosting, etc.)

Agile Method

Introduction

One of the newest development methodologies is the Agile Method. Due to the work-based technology, adaptability, and flexibility of this model—where developers are not needed to record their work—many developers find it to be stress-free. In this development model, the client will also be one of the members, therefore developers regard the consumer as one. As a result, member development is more rapid and effective than in other models. It combines a gradual and iterative procedure. (Hamilton, 2022) As a result, it constantly emphasizes flexibility and client pleasure while completing tasks quickly. In this strategy, consumers receive some minor builds in each iteration and the model is ready to use in one to three weeks. The crossfunctional team collaborates on several topics during each iteration such as:

- ✓ Planning
- ✓ Requirements Analysis
- ✓ Design
- ✓ Coding
- ✓ Unit testing
- ✓ Acceptance testing

Process of agile model

The process of agile model is given below:

i. Requirements gathering

In the agile approach, the team first gathers all the requirements via careful planning, maps out the documents for the specifications, determines the software or hardware requirements, and also gets ready for the subsequent phases of the cycle. It is the most crucial phase when adopting an agile development strategy to create any kind of

application.

ii. Design

After the needs are acquired, the planned stage takes place, during which the technical specifications that will be used are determined. At this point, the software's layout is appropriately created. The development step of software cannot be completed without adequate design.

iii. Development

This is the third phase of the agile model's software development process. The software development stage starts when the layout of the program has been successfully designed. According to the software's requirements and design, the programmer begins writing code. Additionally, it is the pivotal step in the agile approach.

iv. Testing

The testing phase of the software development cycle is started after the program has been created in order to find and track down any potential defects or problems. Testing is a crucial step after software creation since it identifies flaws and faults that may be repaired before the product is released to the public or made available to clients.

v. Deploy

The most crucial stage—implementation—begins after the testing phase. All planning, specification, and design papers created up to this point have been incorporated into the project's initial iteration.

vi. Review

The review step starts once the program has been put into use. Sometimes there may be glitches or defects in the program that are not caught during testing. When such an issue arises, the customer will submit an evaluation of the program, which is crucial for future reference. Program review allows us to upgrade the software by correcting bugs and problems that have appeared in it.

Justification for Decision

As, I have been following Agile Methodology for my project/website. It helped me with the speed and agility as it is iterative nature. The product was high-quality at the end which was quite impressive. I had to change project requirements during the development process, as agile method is flexible, I was able to resolve this issue on the fly. Another

benefit of Agile method is that the client was fully aware of the project progress time to time. Clients were not kept in dark. Using Agile method, I was able to complete my project on time and under the budget. Quick feedback is the plus point of Agile method on every section of the process.

Use case for the agile model:

- ✓ User needs to be up-to-date dynamically.
- ✓ Low pricing for the changes because of the many iterations.
- ✓ No documentation requires like waterfall model, it requires only initial planning to start the project.

Conclusion

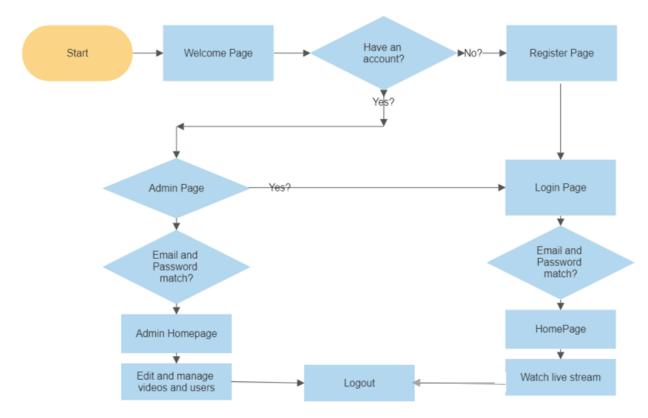
Therefore, I am learning to use Agile Project Management methodology more effectively.

However, Agile method helped me to be more flexible, reduce risks, improve productivity and similarly, reduce costs of the project.

Solution Design Documentation

Here are the **Flowchart** and **Wireframes** of my website.

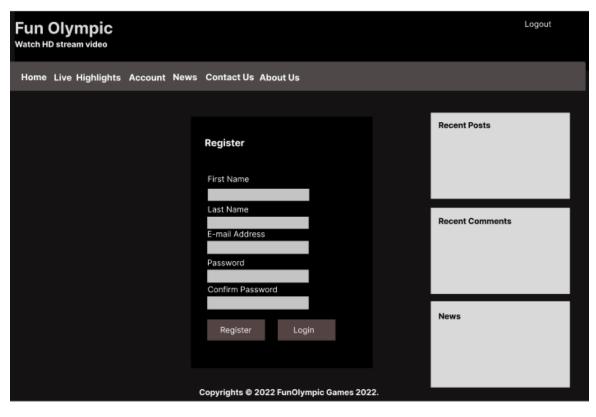
Flowchart

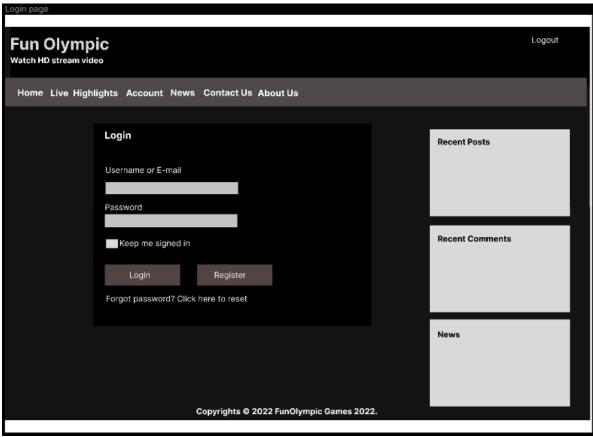


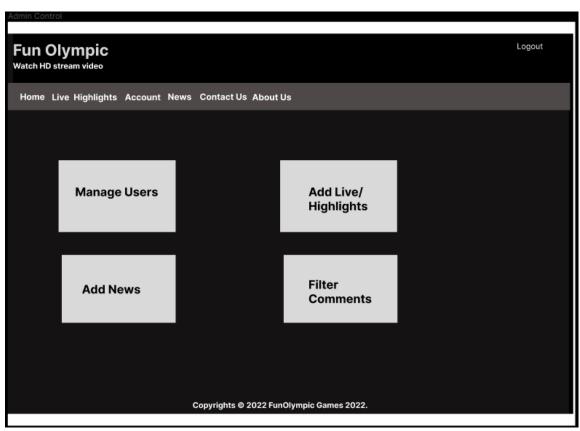
Wireframes

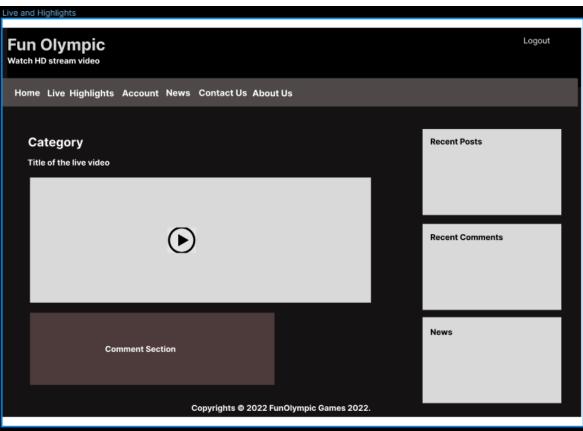
1) Wireframe

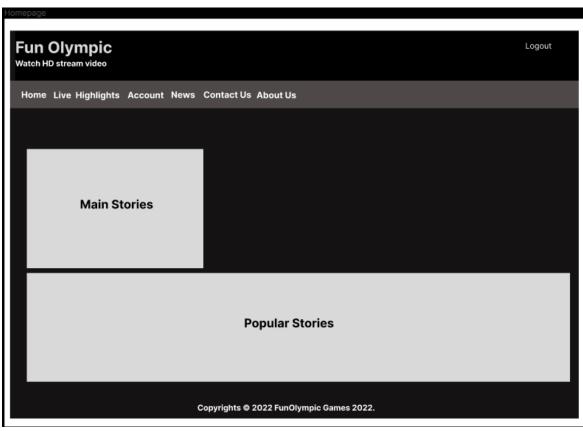
a) Register page where users can register their account. These fields are validate with different validation such as users cannot register with blank fields, Email should be

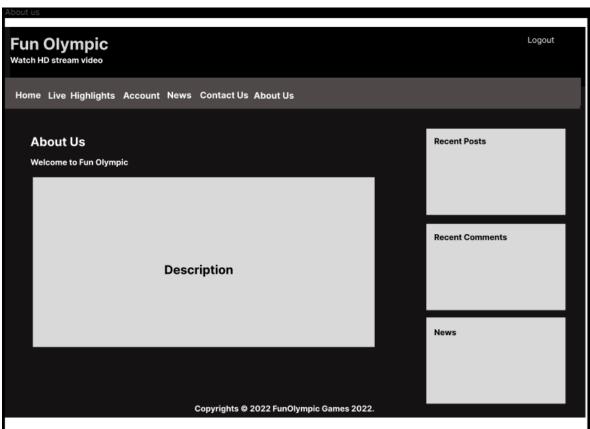


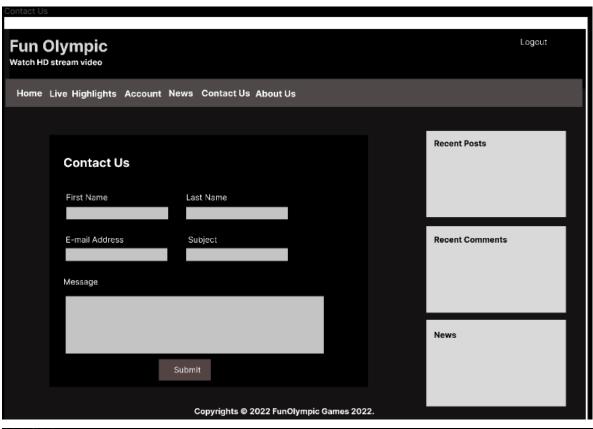


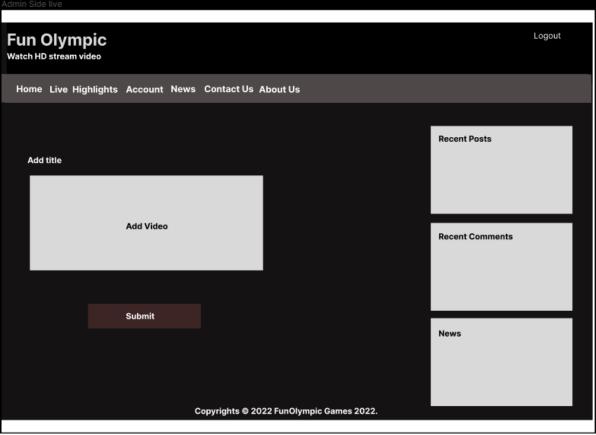


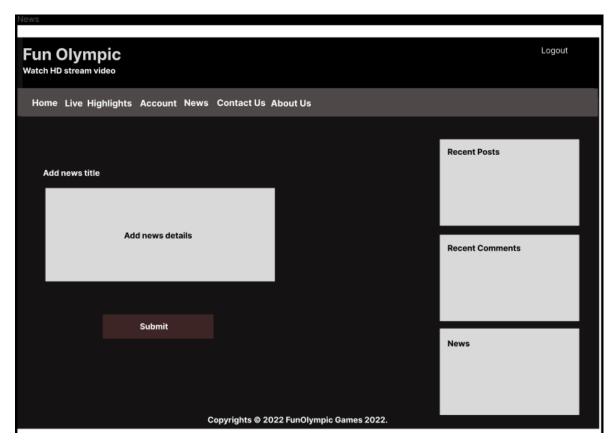












6. Testing:

No.	Test Description	Expected Result	Performed	If no, what happened?
			as	(Fixed/ Unfixed)
			expected?	
1.	Checking if the database is	Database named	Yes	
	working fine.	'productdev' will be		
		created by the admin		
		and all the tables will		
		create automatically.		
2.	Verify if user filled all	Error message will top	Yes	
	mandatory fields before	up informing user to		
	submitting a form	fill the required fields.		

3.	Verity if admin and user	Users are redirected to	Yes				
	member type are working	respective pages so is					
	correctly.	admin.					
4.	Regression Testing	Every Functional and	Yes				
	Performed after module has	some non-functional					
	completed.	works as expected.					
	-	-					
5.	Random user trying to view	Error message will pop	Partial	Visitors are allowed to			
	the content by entering	up warning them.		see the recent comments			
	URL specifically			section but cannot			
				access them			
6.	Logged In users allow to	Only logged in user are	Yes				
	watch stream.	allowed to watch it.					
		Admin View					
	A11	1	T * 7				
1.	Allow to add/edit/delete	Admin are allowed to	Yes				
	live and highlight	do so.					
	streaming.						
2.	Check if admin can	Admin can delete and	Yes				
	Update/Delete users and	update user's account.					
	their account.						
3.	Are admin allowed to	Admin can easily	Yes				
	delete bad comments and	remove comment and					
	block the respective user?	block the user.					
4.	Can Admin also watch the	Admin can even watch	Yes				
	videos?	the stream					
		User View					

1.	Logged out user attempt to	Error message will	Yes	
	view content.	display and content		
		will be hidden.		
2.	Logged in user attempt to	Logged in user can	Yes	
	view content	view the content but		
		cannot edit or delete.		
3.	Allow to comment on live	Users are allowed to	Partial	User cannot like their
	and highlight videos.	comment and even like		own comment.
		the other user's		
		comment.		
4.	Video like and dislike	Users can like and	Yes	
	button.	dislike videos.		
5.	Add personal information	Any Logged In users	Yes	
	and profile pictures of your	can add their personal		
	won.	information and profile		
		pictures.		
6.	User allow to hide profile	Users can hide their	Yes	
	from public directory.	profile.		
7.	User allow to Request Data	Every user can Request	Yes	
	and Request data erase.	all their Data and		
		Request to erase the		
		data.		
8.	Delete account.	Users can delete their	Yes	
		account. (They need to		
		enter password before		
		deleting)		
L			J	

9.	Change language of their	Every international	Yes
	nationality.	user can change view	
		to their respective	
		language.	
		Register Page	
1.	Tried to register with blank	Error message shows	Yes
	fields.	up informing the user	
		to fill every fields.	
2.	Tried to register with	Error message shows	Yes
	invalid Email. (Example:	up informing the user	
	gaurav@.com)	to enter valid Email	
2	Tried to recister with week	Eman massass shows	V
3.	Tried to register with weak	Error message shows	Yes
	password. (Example: 1234,	up saying 'Your	
	abcd)	Password must contain	
		at least 8 characters, at	
		least one lowercase	
		letter, one capital letter	
		and one number'	
4.	Tried to register with no	Registered the user	Yes
	blank fields and all valid		
	information.		
		Login Page	
		Logiii I age	
1.	Tried to login inserting	He/she cannot login	Yes
	incorrect username and	and error message is	
	password	shown up.	

2.	Tried to log in inserting	He/she cannot login	Yes	
	incorrect username and	and error message is		
	correct password	shown up saying "input		
		valid credentials"		
3.	Tried to log in inserting	He/she will finally be	Yes	
	valid username and	logged in and redirect		
	password	to the homepage based		
		on his/her member type		
		(Admin/User)		
4.	Clicks 'Forgot your	User will be redirect to	Yes	
4.	Clicks Forgot your		ies	
	password?'	Password Reset page		
		and be able to reset		
		his/her password		

7. Technical Deployment of the Solution:

Technical Requirements

- 1. **Mobile Responsive Design:** Well Responsive Design is said when your website runs smoothly on different devices such as mobile phone, tablet (tab), laptop and desktop.
- 2. SSL Certificate: Websites can switch from HTTP to HTTPS, which is more secure, thanks to SSL certificates. A data file called an SSL certificate is kept on the origin server of a website. The public key and identity of the website, as well as other pertinent data, are both contained in SSL certificates, which enable SSL/TLS encryption. In order to retrieve the public key and confirm the server's legitimacy, devices attempting to interact with the origin server will consult this file. The private key is secured and kept confidential.
- **3. Website Hosting Service:** The online service of web hosting makes the content of your website available to internet users. When you buy a hosting package, you are renting space on a real server to keep all the files and information for the website. Web hosts

offer the resources and hosting technologies needed for your website to run efficiently and securely. They are in charge of maintaining the server's functionality, putting security measures in place, and making sure that information like texts, pictures, and other files are correctly delivered to the visitors' browsers.

- 4. Create and submit XML Sitemap: A website's key pages are listed in an XML sitemap file so that Google can easily identify and index them all. Additionally, it aids in the structure-understanding of search engines. You want Google to index all of your website's key pages. However, occasionally pages are created without internal links connecting to them, making it difficult to discover them. The finding of material can be sped up with a sitemap.
- 5. Browser Capacity: Browser capacity refers to a website, web application, script, or HTML design's capacity or flexibility to work on various market-available web browsers. The advantage of designing a website with browser capacity is that it expands its audience and reduces performance loss. Browser compatibility is also the ability of a web browser to effectively render HTML code and execute scripts on online sites.
- **6. Website Page Load Time:** Page load time, put simply, is the length of time it typically takes for a page to appear on your screen. It is determined from the point of inception (when you click on a page link or enter a Web URL) to the point of completion (when the page is fully loaded in the browser).

Development Environment

WordPress is not just blogging tool; it is a powerful website builder and a content management system (CMS). It is easy and flexible enough to use and navigate. Therefore, I will be using WordPress for my website development. It is perfect for everyone with Windows, Linux and Unix-like OS. As I have been using this tool, I found that it provides different Themes and Plugins that changes and adds different kind of colors and features.

Similarly, WordPress uses MySQL for its database, which is open-source software. I also used www.figma.com for my design.

Platform Environment

I have used XAMPP which includes PHP, MySQL, Apache Server, etc for hosting the

website for instance in my PC. System requirements defines the configuration that a system must have for a hardware or software, application to run smoothly and efficiently. Incase these requirements are not met, there might be failure of installing the software or performance problems. Performance can differ from different computers, laptops according to their System.

Recommended Hardware Requirements for WordPress are:

Disk Space: 1GB+

Web Server: Apache or Nginx.

Database: MySQL version 5.0. 15 or greater or any version of MariaDB.

RAM: 512MB+

PHP: Version 7.3 or greater.

Processor: 1.0GHz+

Note: Always use computers on which there is NTFs file format. It is most secured file system. Also, use windows 8 or above for better performance.

Website Deployment (Anon., n.d.)

It is the final process where website is moved from local environment (local host) to live servers from where anyone in the world can access the website. Here are the steps to **deploy a website:**

- 1. Prepare
- 2. Set up DNS Records
- 3. Set up Live Testing Site
- 4. Set up Email Accounts
- 5. Backup, and go live

Step I: Prepare

Preparation is the initial stage of website deployment. Depending on the type of deployment you are carrying out, there are a few factors you should take into account at this point. Typically, there are three possible outcomes when deploying a website:

• Client's first website and starting website from zero: Because you get to start over, the first scenario is the simplest. All you have to do is purchase or offer web hosting and register their domain name.

• If the client currently hosts their website, you will either move it to their server or deploy it there: The deployment step will be more engaged in these scenarios due to their complexity and involvement. To manage DNS records, we need to get information on domain management from the current web-host.

Step II: DNS Records

Second phase applies to create DNS records. A DNS record is a database entry that links an IP address to a URL. DNS servers hold DNS records, which are used to assist users in connecting their websites to the outside world. The URL is passed to the DNS servers and then directed to the particular Web server when it is typed into the browser and searched. The requested website specified in the URL is subsequently served by this Web server, or the user is instead sent to an email server that handles incoming mail.

Step III: Set Up a Live Testing Site

This is the most important part where the purpose is to determine whether the website functions properly on a live server.

Step IV: Set Up Email Accounts

Setting up email is a task that many web developers frequently forget. It is frequently, nonetheless, of utmost importance to your customer.

Step V: Backup, and Go Live!

Last but not least, always remember to back up any databases on the previous web-server or website. You never know when anything could come in handy. You are now prepared to go live! Simply go back to the previous webpage and do some testing if you discover a problem.