MINI PROJECT (2021-22)

"Smart Study Planner"

Project Report



Institute of Engineering & Technology

Submitted By -

Vidhan Sharma (2115990024) Mayank kumar Shrivastva (2115990010) Shakya Vaibhav Ajay kumar (201500639) Afzal Khan (201500043)

Under the Supervision Of

Mrs. Mayank Saxena

Technical Trainer

Department of Computer Engineering & Applications



Department of Computer Engineering and Applications

GLA University, 17 km. Stone NH#2, Mathura-Delhi Road,

Chaumuha, Mathura – 281406 U.P (India)



Department of computer Engineering and Applications GLA University, Mathura

17 km. Stone NH#2, Mathura-Delhi Road, P.O. - Chaumuha, Mathura - 281406

Declaration

We hereby declare that the work which is being presented in the Mini Project-I "Self Study Planner", in partial fulfillment of the requirements for Mini Project-I viva voce, is an authentic record of our own work carried by the team members under the supervision of our mentor Mr. Mayank Saxena.

Group Members: Vidhan Sharma (2115990024)

Mayank Kumar Shrivastva (2115990010) Shakya

Vaibhav AjayKumar (201500639)

Afzal Khan (201500043)

Course: B.Tech (Computer Science and Engineering) Year:

3rd

Semester: 5th

Supervised By:

Mr. Mayank Saxena, Technical Trainer

GLA University, Department of Computer Engineering & Application



Department of computer Engineering and Applications GLA University, Mathura

17 km. Stone NH#2,Mathura-Delhi Road,P.O. - Chaumuha, Mathura - 281406

CERTIFICATE

This	is to	certify	that the	above	statements	s made	by the	candidates	are	correct	to
the b	est of	f my/oı	ır knowl	edge a	nd belief.						

SUPERVISOR

Mr. Mayank Saxena

Technical Trainer

Dept of CEA, GLA University

Program Coordinator

(Mr. Shashi Shekar)

Acknowledgement

We thank the almighty for giving us the courage and perseverance in completing the project. This project itself is an acknowledgement for all those people who have given us their heartfelt co-operation in making this project a grand success. We extend our sincere thanks to Mr. Mayank Saxena, Technical Trainer at "GLA University, Mathura" for providing her valuable guidance at every stage of this project work. We are profoundly grateful towards the unmatched services rendered by her. And last but not least, we would like to express our deep sense of gratitude and earnest thanks giving to our dear parents for their moral support and heartfelt cooperation in doing the main project.

Contents

Acknowledgment

1.Introduction:	
Introduction to HTML, CSS, JAVASCRIPT,	09-11
Prerequisites	11
2. Technologies Used:	
Bootstrap	12
VS code	13 14
MySQL	15-16
3. About	16-20
4. List of Figures	21-24
5. Software Testing	25
6. Conclusion	26
7. Bibliography	26

06

Chapter 1

Introduction

HTML-

HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages.

Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.

As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

HTML is the *language* for publishing web pages on the WWW (World-Wide Web).

HTML is a *Document Description Language* (aka *Document Markup Language*). HTML is NOT a programming language like C/C++/C#/Java, which is used to implement programming algorithm.

You need a web browser to view the HTML pages. The web browsers do not display the HTML tags, but uses the tags to interpret the content of the web pages.

An HTML document is a text document, and it is human-readable.

HTML was originally developed by Tim Berners-Lee in 1990. He is also known as the father of the web. In 1996, the World Wide Web Consortium (W3C) became the authority to maintain the HTML specifications. HTML also became an international standard (ISO) in 2000.

CSS-

CSS is short for Cascading Style Sheets, and is the preferred way for setting the look and feel of a website. Cascading Style Sheets (CSS) is a markup language responsible for how your web pages will look like. It controls the colors, fonts, and layouts of your website elements

This style sheet language also allows you to add effects or animations to your website. You can use it to display some CSS animations like click button effects, spinners or loaders, and animated backgrounds. Without CSS, your website will appear as a plain HTML page.

The cascading means that a style applied to a parent element will also apply to all children elements within the parent. For example, setting the color of body text will mean all headings and paragraphs within the body will also be the same color.

JAVASCRIPT-

JavaScript is a client-side scripting language of web developed by Netscape in 1995 with the name LiveScript. JavaScript is used to build interactive websites with dynamic features and to validate form data. JavaScript is high-level, dynamic and browser interpreted programming language, supported by all modern web browsers. Apart from web browser, JavaScript is also used to build scalable web applications using Node JS. JavaScript is also being used widely in game development and Mobile application development.

JavaScript is also known as the Programming Language of web as it is the only programming language for Web browsers. JavaScript is an object based scripting language which is lightweight and cross-platform. The programs in this language are called scripts. They can be written right in a web page's HTML and run automatically as the page loads. Scripts are provided and executed as plain text. They don't need special preparation or compilation to run. The browser has an embedded engine sometimes called a "JavaScript virtual machine"

JavaScript is the widely used programming language, all over the world. It has the largest open-source package repository in the world (npm). Every type of software uses JavaScript, including the server code (Node.js), productivity apps, 30 games, robots, **IoT devices.** JavaScript has achieved the goal, set by Java a long time ago: write once, run anywhere. There are various JavaScript uses in different segments.

JavaScript History

WWW was formed in 1990. Initially, it was a bunch of web-pages linked together. But soon people want more interactive websites. So on-demand of Netscape, **Brenden Eich**, *(inventor of JavaScript)* in 1995 invented a prototype based *(Classless)* language for their Navigator Browser. Initially, it was called **"Live Script"**, but later on renamed as " **JavaScript**".

In today's world, **JavaScript** is the Topmost demanding technology as it can handle both front end and Back-end.

Pre-requisite

Hands-on knowledge of JavaScript, HTML, PHP and CSS is essential before working on the concepts for making of webpages. Make sure that you have the browser or chrome installed and running before opening website.

Chapter 2

Technologies Used

BOOTSTRAP: -

Bootstrap is an HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking.

Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent Q.YII quotes, and text with a highlight.

Bootstrap also comes with several JavaScript components in the form of jQuery plugins. They provide additional user interface elements such as <u>dialog boxes</u>, tooltips, and carousels. Each Bootstrap component consists of an HTML structure, CSS declarations, and in some cases accompanying JavaScript code. They also extend the functionality of some existing interface elements, including for example an auto-complete function for input fields.

VS CODE:-

Visual Studio Code is a source-code editor that can be used with a variety of programming languages,

including Java, <u>JavaScript</u>, Go, Node.js, Python and <u>C++</u>. It is based on the <u>Electron</u> framework, which is used to develop <u>Node.js</u> Web <u>applications</u> that run on the <u>Blink layout engine</u>. Visual Studio Code employs the same editor component (codenamed "Monaco") used in Azure <u>DevOps</u> (formerly called Visual Studio Online and Visual Studio Team Services).

Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse. This allows it to operate as a language-agnostic code editor for any language. It supports a number of programming languages and a set of features that differs per language. Unwanted files and folders can be excluded from the project tree via the settings. Many Visual Studio Code features are not exposed through menus or the user interface but can be accessed via the command palette.

Visual Studio Code can be extended via <u>extensions</u>, available through a central repository. This includes additions to the editor and language support) A notable feature is the ability to create extensions that add support for new <u>languages</u>, themes, and <u>debuggers</u>, perform <u>static code</u> <u>analysis</u>, and add <u>code linters</u> using the <u>Language Server Protocol</u>.

Visual Studio Code includes multiple extensions for <u>F</u>TP, allowing the software to be used as a free alternative for web development. Code can be synced between the editor and the server, without downloading any extra software.

Visual Studio Code allows users to set the code page in which the active document is saved, the <u>newline</u> character, and the programming language of the active document. This allows it to be used on any platform, in any locale, and for any given programming language

Mysqli:-

The MySQLi extension was introduced with PHP version 5.0.0 and the MySQL Native Driver was included in PHP version 5.3.0. 'i' stands for improved in MySQLi and provides various functions to access the MySQL database and to manipulate the data records inside the MySQL database. You would require to call the MySQLi functions in the same way you call any other PHP function.

About the Project

The Smart Study Planner will be created using WAMP Stack for a smooth, fast, efficient and user-friendly software. The primary task of smart study planner is to help student to create their self-learning time table/planner with the best time managed schedule without any problem. User will able to select their own free time for flexible hours planning of their study planner, this feature will help user to optimize and boost the studies in their rest hours. This will help multiple domain people to create a very effective planner for their Day to day life. With all the basic and advance features of most of the apps and web of time management, to-do-list, reminders and other apps.

Requirements

a). Software Requirements:

- Languages/Technologies Used: HTML, CSS, BOOTSTRAP, JavaScript
- IDE Used: Visual Studio Code
- Web Browser: Google Chrome / Mozilla Firefox / Microsoft Edge
- GitHub: GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Repository: A GitHub repository can be used to store a development project. It can contain folders and any type of files (HTML, CSS, JavaScript, Documents, Data, Images). A GitHub repository should also include a license file and a README file about the project.

b). Hardware Requirements:

• Operating System: Windows 7 and above

• RAM: 1GB and above

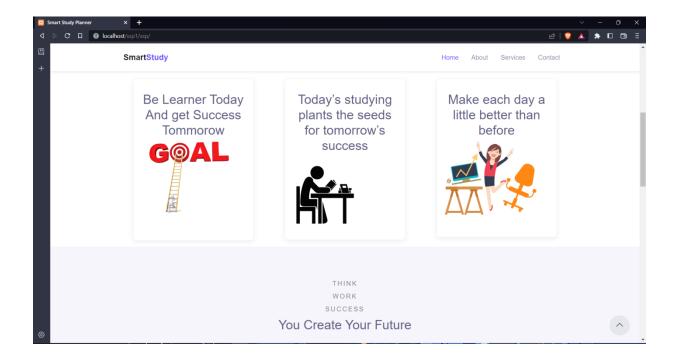
• Hardware Devices: Computer System

• Hard Disk: 2 GB or above

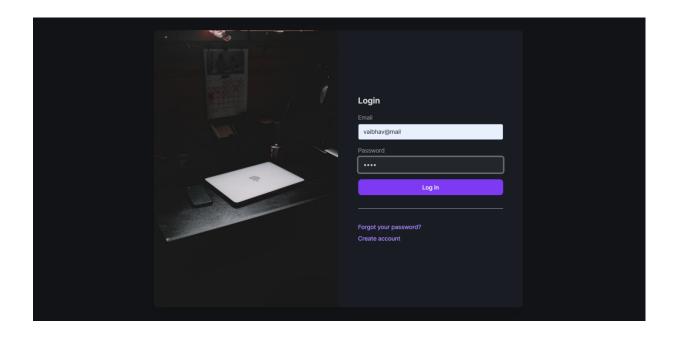
Chapter 3

List of Figures

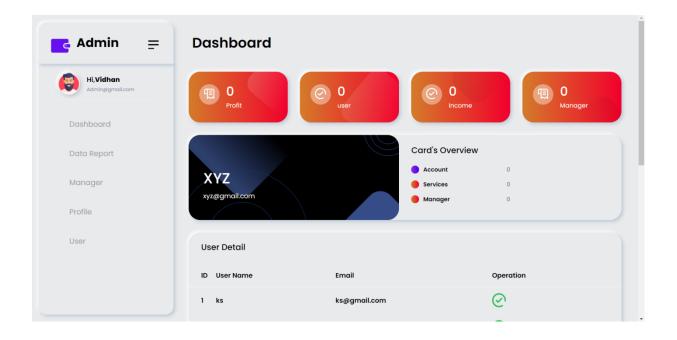
Home Page



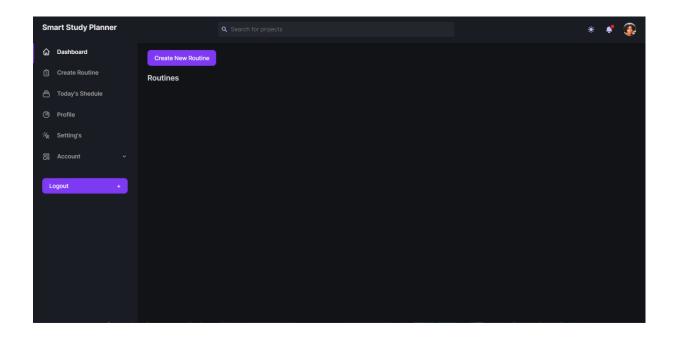
Login / Register Page



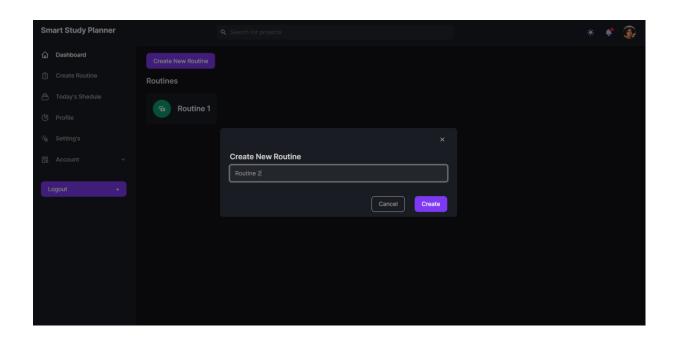
Admin Panel



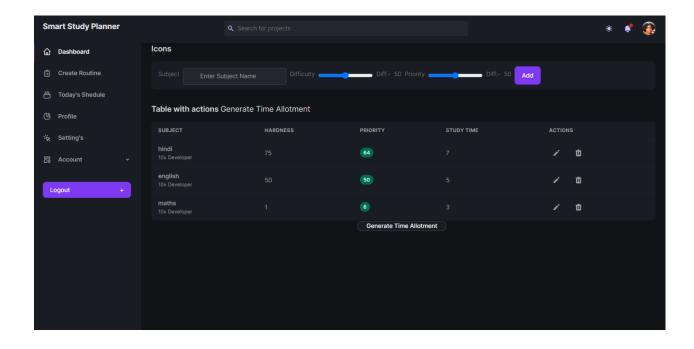
User Routine Page



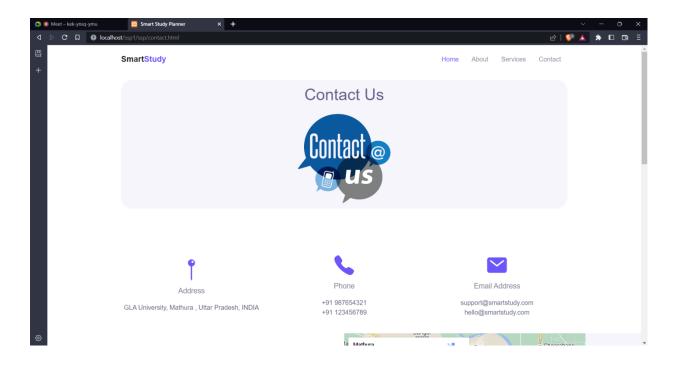
Creating Routine



Adding Subjects To Routine



Contact Us Page



Chapter 4

Software Testing

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery. It is very important to work the system successfully and achieve high quality of software. Testing include designing a series of test cases that have a high likelihood of finding errors by applying software-testing techniques. System testing makes logical assumptions that if all the parts of the system are correct, the goal will be successfully achieved. The system should be checked logically. Validations and cross checks should be there. Avoid duplications of record that cause redundancy of data. In other Words,

Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. It is executing a system in order to identify any gaps, errors, or missing requirements in contrary to the actual requirements.

The preliminary goal of implementation is to write source code and internal documentation so that conformance of the code to its specifications can be easily verified, and so that debugging, testing and modifications are eased. This goal can be achieved by making the source code as clear and straightforward as possible. Simplicity, clarity and elegance are the hallmark of good programs, obscurity, cleverness, and complexity are indications of inadequate design and misdirected thinking. Source code clarity is enhanced by structured coding techniques, by good coding style, by, appropriate supporting documents, by good internal comments,

and by feature provided in modem programming languages. The implementation team should be provided with a well-defined set of software requirement, an architectural design specification, and a detailed design description. Each team member must understand the objectives of implementation.

4.1 TERMINOLOGY

Error The term error is used in two ways. It refers to the difference between the actual output of software and the correct output, in this interpretation, error is essential a measure of the difference between actual and ideal. Error is also to used to refer to human action that result in software containing a defect or fault.

Fault is a condition that causes to fail in performing its required function. A fault is a basic reason for software malfunction and is synonymous with the commonly used term Bug.

Failure is the inability of a system or component to perform a required function according to its specifications. A software failure occurs if the behavior of the software is the different from the specified behavior. Failure may be caused due to functional or performance reasons.

4.2 TYPES OF TESTING

a. Unit Testing: The term unit testing comprises the sets of tests performed by an individual programmer prior to integration of the unit into a larger system program unit is usually small enough that the programmer who developed it can test it in great detail, and certainly in greater detail than will be possible when the unit is integrated into an evolving software product. In the unit testing the programs are tested separately, independent of each other. Since the check is done at the program level, it is also called program teasing.

- **b. Module Testing:** A module and encapsulates related component. So can betested without other system module.
- c. **Subsystem Testing:** Subsystem testing may be independently design and implemented common problems are sub-system interface mistake in this checking we convention it. There are four categories of tests that a programmer will typicallyperform on a program unit.

i Functional test

n Performanc

e test iii Stress test

iv Structure test

Functional Test: Functional test cases involve exercising the code with Nominal input values for which expected results are known; as well as boundary values (minimum values, maximum values and values on and just outside the functional boundaries) and special values.

Performance Test: Performance testing determines the amount of execution timespent in various parts of the unit, program throughput, response time, and device utilization by the program unit. A certain amount of avoid expending too much effort on fine-tuning of a program unit that contributes little to the overall

performance of the entire system. Performance testing is most productive at the subsystem and system levels.

Stress Test: Stress test are those designed to intentionally break the unit. A great deal can be learned about the strengths and limitations of a program by examining the manner in which a program unit breaks.

Structure Test: Structure tests are concerned with exercising the internal logic of a program and traversing particular execution paths. Some authors refer collectively to functional performance and stress testing as "black box" testing.

While structure testing is referred to as "white box" or "glass box" testing. The major activities in structural testing are deciding which path to exercise, deriving test date to exercise those paths, determining the test coverage criterion to be used, executing the test, and measuring the test coverage achieved when the test cases are exercised.

Chapter 5 Conclusion

We have completed our project within time limit with the coordination of our team members under the supervision of our mentor Ms. Mayank Saxena.

Our project repository is available at

https://miniproject-gla.github.io/Smart-Study-Planner/