# CHAPTER 1 INTRODUCTION

#### 1.1 BACKGROUND

Shooting is a sport that is open to people of all ages and it is not unusual to find talented teenagers competing against people old enough to be their grandparents at some local events. It requires good physical and psychological conditioning. As shooters strive to achieve technical perfection, a steady hand and nerves of steel are a must for success.

Shooting has been contested at most of the Olympic Games, appearing first in 1896. Women were first allowed to compete alongside men in Olympic shooting in 1968 and in later years, separate women's events were introduced. In addition, several of the events on the program remained mixed – open to both men and women. By 1996 in Atlanta, the shooting program was segregated, with men's events being completely separated from the women's. It is a global sport with athletes from around 100 countries typically participating at various international shooting competitions.





# 1.2 FEDERATION HIERARCHY



International Shooting Sports Federation (ISSF)



National Rifle Association of India (NRAI)



Assam Rifle & Shooting Association (ARSA)

# 1.3 ABOUT SHOOTING SPORT

The 15 Olympic shooting events are divided into three main groups:



# 1. Air Rifle



# 2. Air Pistol



# 3. Shotgun

# 1.4 SHOOTING DISCIPLINES AND EVENTS

DISCIPLINES	MEN'S EVENTS	WOMEN'S EVENTS	MIXED TEAM EVENTS	TOTAL EVENTS
Rifle	50m Rifle 3 Positions, 10m Air Rifle	50m Rifle 3 Positions, 10m Air Rifle	10m Air Rifle	5
Pistol	25m Rapid Fire Pistol, 10m Air Pistol	25m Pistol, 10m Air Pistol	10m Air Pistol	5
Shotgun	Trap, Skeet	Trap, Skeet	Trap	5

# 1.5 SHOOTING CATEGORIES (AGE GROUP)

SL. NO.	SHOOTER CATEGORY	AGE GROUP
1.	Youth (Men, Women)	12 years to 18 years
2.	Junior (Men, Women)	Above 18 years to 21 years
3.	Senior (Men, Women)	Above 21 years to 60 years
4.	Veteran (Men, Women)	Above 60 years





#### 1.6 SHOOTING SPORT IN INDIA

Ever since Abhinav Bindra's Olympic Gold Medal winning performance at the 2008 Beijing Olympics the sport of shooting has seen a rapid rise in India. Lots of people are able to take up shooting nowadays as the required infrastructure for the sport is becoming easily available to budding talents for training and honing their skills. As a result of this, the performance of Indian shooters at the world stage have been commendable and they have managed to churn out championship winning performances on a consistent and regular basis.



#### 1.7 SHOOTING SPORT IN ASSAM

Earlier the shooters from Assam had to participate in shooting competitions outside the state to qualify for National Shooting Championship Competitions due to lack of infrastructure in the state.

The hosting of the 33rd National Games in 2007 by Assam led to the establishment of the shooting range at 4APBn Complex, Kahilipara, Guwahati. The development of this infrastructure helped to promote shooting sport and increase participation in the various shooting disciplines such as 10 Meters Air Pistol & Air Rifle, 25 Meters Pistol, 50 Meters Rifle, Trap and Skeet (Shotgun events).

Assam Rifle and Shooting Association, (ARSA), has conducted various State Level, Pre-National Level, National Level and International Level Shooting Championships at this facility. They also providing regular coaching sessions at the facility to renowned, aspiring and budding shooters of the state. They have conducted various shooting orientation camps for the grassroots development of the sport in Assam.

In May 2017, a private shooting range was established by a society named Eklavya Shooting Sports Academy at 194, Beltola Tiniali, Guwahati. Eklavya Shooting Sports Academy provides regular coaching sessions in the 10 meter Air Pistol and Air Rifle disciplines to the participants. They have conducted shooting coaching camps for students of schools and colleges at Guwahati. Special shooting camps have also been conducted to engage the under privileged children as well as differently abled persons of the state.





# 1.8 RENOWED SHOOTERS OF ASSAM



# PROJECT OVERVIEW

#### 2.1 INTRODUCTION

Eklavya Shooting Sports Academy is a platform which lays a strong foundation on the core fundamental concepts, helping them in learning and understanding the concepts of Shooting Sports. Eklavya Shooting Sports Academy is highly evolved, which reduces time-consuming activities of manual paperwork. It is user-friendly and enables the students to register the programs with easy navigations. It saves time for the students by encouraging self-learning, minimizing the time spent. Eklavya Shooting Sports Academy has many features such as the online registration, gaming technology, leaderboard, E-books and keynotes. Eklavya Shooting Sports Academy is exclusively for all type of students.

The student must give his/her phone number to make the registration. The student will get free demo videos, eBooks, keynotes, question bank for respected sports and he/she can request+ for a demo of the live session. If students have any doubts they can communicate with the respected faculty. If the student needs every resource for each subject, he/she must take the subscription based on the plan. The live classes are conducted by top faculties making quality education available across diverse geographical and socio-economic.

Eklavya Shooting Sports Academy can be accessed from any part of the world, reducing the anxiety in choosing the appropriate coaching institute. As it is flexible and ready to be accessed from anywhere in the world, it is the highly desirable coaching institute. The institute is updated in terms of reaching to many people who have an enthusiasm to drive towards excellence in the gamming, through content delivery on campus as well as live satellite classes.

#### 2.2 TARGET AUDIENCE

The shooting website's target audience consists of individuals with an interest in shooting sports and activities. The audience may include the following:

- Shooting Enthusiasts: This group comprises individuals passionate about shooting, including beginners, amateurs, and experienced shooters. They seek a platform to connect with like-minded individuals, access relevant information, and enhance their shooting skills.
- 2. Shooting Range and Club Members: Members of shooting ranges and clubs are an essential audience. They are interested in finding new shooting locations, participating in events, and staying updated with range-specific information and announcements.
- 3. Shooting Event Participants: Individuals who actively participate in shooting competitions, tournaments, and events are a crucial audience. They require a platform to discover upcoming events, register, and access event-related details, such as rules, schedules, and results.
- 4. Shooting Equipment and Product Buyers: Individuals interested in purchasing shooting equipment, accessories, and related products form an important segment. They seek a reliable marketplace to explore a variety of products, compare options, and make purchases securely.

#### 2.3 KEY FEATURES

The shooting website will incorporate several key features to cater to the target audience and fulfil their needs. Some of the key features include:

- 1. Shooting Range and Club Directory: A comprehensive database of shooting ranges and clubs, including details like location, facilities, operating hours, and contact information. Users can search and discover suitable shooting locations based on their preferences.
- Event Calendar and Registration: A calendar feature that displays upcoming shooting
  events, competitions, workshops, and training sessions. Users can register for events,
  access event-related information, and receive notifications about upcoming events of
  interest.
- 3. Discussion Forums: Interactive forums where shooting enthusiasts can engage in discussions, seek advice, share experiences, and connect with others who share similar interests. This feature encourages knowledge sharing and community building.
- 4. Blogging Platform: A dedicated platform for users to contribute and read blog articles related to shooting sports, techniques, equipment reviews, safety guidelines, and other relevant topics. This allows users to share their expertise and insights with the community.
- 5. Photo and Video Galleries: An integrated gallery feature where users can showcase their shooting experiences by sharing photos and videos. This feature allows users to view and appreciate content shared by others, providing inspiration and fostering engagement.

#### 2.4 DEVELOPMENT APPROACH

The development approach for the shooting website will involve the following steps:

- 1. Requirement Gathering: Gathering detailed information about the target audience, their needs, and the desired features of the website.
- 2. Design and Prototyping: Creating wireframes and mockups to visualize the website's layout, user interface, and user experience. This helps in refining the design and ensuring usability.

- 3. Front-end Development: Implementing the user interface using modern web technologies such as HTML, CSS, and JavaScript. This involves creating responsive designs that adapt to different screen sizes and devices.
- 4. Back-end Development: Building the server-side functionality, including database management, user authentication, content management system, and integration of various features. This ensures smooth functionality and data management.
- 5. Testing and Quality Assurance: Conducting thorough testing to identify and fix any bugs or issues. This involves testing the website's functionality, compatibility across different browsers, and ensuring a seamless user experience.
- 6. Deployment and Maintenance: Deploying the shooting website on a suitable web hosting platform, configuring necessary infrastructure, and establishing a plan for regular maintenance and updates to ensure the website's performance and security.

#### 2.5 PURPOSE AND SCOPE OF THE PROJECT

The "Eklavya Shooting Sports Academy" website or app came into existence with an aim to improve the standards/quality of learning, saving the students time and making it easily accessible by equipping them with online registration, various videos ad activities. This application focus on several features such as Re-innovating the traditional methodology of learning with modern technology through live sessions.

The application focuses on providing the below features:

- 1. Students can take admission and join courses.
- 2. Senior Citizens can take membership for physical activities.
- 3. They can send an inquiry to us.
- 4. Next, we have our feature Key Notes and E-books where key notes provide a brief

# LITERATURE SURVEY

The literature survey is very much important before developing any software. The literature survey will guide the whole requirements of the project such as the total cost of the project what will be the duration of the project, the manpower required to develop the project. Without the literature survey, the project cannot be delivered on time.

The literature survey will also help us in deciding which operating system we require and what all tools we require for developing the software.

The programing language will also be decided in the literature survey.

# **EXISTING SYSTEM**

The Existing System consists of only live registration, e-books, and membership for physical activities. Some of the services that are available in the existing systems are as follows:

#### 1. Registration:

This feature enables the students to access registration online, anytime anywhere. The student /user is informed or notified about the scheduled appointment prior to the initiation of the class, this enables the student/ user to gain access to the ongoing classes anywhere. This feature helps them in the continuity of their studies so that they don't miss classes due to any reasons.

#### 2. E-books:

E-books can be accessed by the students. It is a guide to the students on each topic helping them in understanding the concepts with the diagrammatic image we provide.

It is descriptive digital notes which are well explicable facilitating and encouraging self-learning.

- i. The student can learn and understand since both the theoretical concepts are related to practical concepts in the form of the image.
- ii. The students can save their time as they don't have to function manually writing the notes for each topic.
- iii. The point wise explanation is provided for each topic along with diagrammatic imagery.
- iv. This helps the student with an in-depth understanding of the topic.
- iv. The students can relate the information and assimilate it simultaneously facilitating their progress.

# **HTML BASICS**

This language provides the format for specifying simple logical structure and links in a hypertext document. As a markup language, special formatting commands are placed in the text describing how the final version should appear. These formatted documents are interpreted by a Web browser which uses the HTML code to format the page being displayed. Although most professionals use special authoring tools to write HTML documents and to manage sites, developers of e-commerce sites and applications need to know the nitty-gritty details of HTML, and this is what you will study. HTML has had several versions over the years. "HTML 2.0" was the first standard HTML specification which was published in 1995. HTML 4.01 was a major version of HTML, and it was published in late 1999. Though HTML 4.01 version is widely used but currently we are having HTML 5 version which is an extension to HTML 4.01, and this version was published in 2012. This course will take you through website creation using HTML5.

# 5.1 HTML Markup

**HTML** (HyperText Markup Language) is the most basic building block of the Web. It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation (CSS) or functionality/behavior (JavaScript).

"Hypertext" refers to links that connect web pages to one another, either within a single website or between websites. Links are a fundamental aspect of the Web. By uploading content to the Internet and linking it to pages created by other people, you become an active participant in the World Wide Web.

HTML pages are created by tagging textual information with HTML markup. HTML markup consists of tags, which appear inside angled brackets < and >. An example of an HTML tag is which causes text to appear in bold. only notes where text should begin to appear in bold, while the tag marks the end of the emboldening. Most HTML tags have a corresponding end tag, which is specified by the name of the tag preceded by the / character.

#### **5.2 Nesting HTML Tags**

Text may be both bold and italicized. This is done by using both tags. When doing so, it is important to remember not to overlap HTML tags. Overlapping tags is a common mistake. Although Web browsers are usually smart enough to work out what is meant, it can lead to problems. Furthermore, for an HTML page to be considered valid HTML, it must contain no overlapping tags.

# 5.3 Creating HTML Text using Notepad++

This section covers the creation of an HTML page. You will need a Web browser and a text editor. Use HTML: Basics 3 any text editor you wish to, but the following Activity descriptions will use Notepad++. Notepad++ is a free Windows editor that also supports several programming languages. For example, you will notice that HTML keywords are highlighted in different colors.

- 1. Open your Web browser. This section's goal is to create a Web document that can be opened with your browser.
- 2. Open Notepad++. It can be found by selecting Start, then All Programs, then Notepad++.
- 3. Type the following text into Notepad++: your name and the module number (CSC5003). Save this file as start.txt.
- 4. Now load start.txt into the browser by dragging start.txt onto your browser.
- 5. The browser should now display the text contained in start.txt. (If it does not, make sure that you have saved start.txt and that this is the file you are opening).
- 6. Once you have displayed start.txt, return to Notepad. Add the text "Internet Commerce" and save the file again.
- 7. Return to the Web browser and reload the document (by using either by using the Refresh or Reload toolbar buttons, or by selecting File/Open once again).
- 8. If you can see the new piece of text, you have successfully used Notepad to create your first Web page.

# **5.4 Processing Forms**

Although forms could simply be used to display information, HTML provides them to supply a way for the user to interact with a Web server. The most widely used method to process the data submitted through a form is to send it to server-side software typically written in a scripting language, although any programming language can be used. The figure below outlines the kind of processing that takes place.

- 1. The user retrieves a document containing a form from a Web server.
- 2. The user reads the Web page and interacts with the form it contains.
- 3. Submitting the form sends the form data to the server for processing.
- 4. The Web server passes the data to a CGI program.
- The CGI software may use database information or store data in a server-side database.
   HTML Forms
- 6. The CGI software may generate a new Web page for the server to return to the user.
- 7. The user reads the new Web document and may interact with it.

# INTRODUCTION TO CASCADING STYLE SHEETS

There is no format to follow for teaching the aesthetics of style - most people, though, can recognize something that follows a classical design. But some things can be said about the style of a website. For instance, when Web pages belong to the same website, each page should have a consistent look to provide familiarity for the user. Style sheets (sometimes referred to as templates) are used in desktop publishing to provide consistency when formatting text. The format applied by the stylesheet could be to indent every first line of a paragraph by 2cm, insert a page break at the end of every chapter, and so on. Naturally, due to multimedia, Web pages not only have to consider text formatting, but also visual and sound presentation, and various multimedia formats in general. Before we continue, let us briefly discuss the advantages and disadvantages of using style sheets.

CSS was developed by **W3C** (World Wide Web Consortium) in 1996 for a rather simple reason. HTML element was not designed to have tags that would help format the page. We were only supposed to write the markup for the web page.

Tags like **<font>** were introduced in HTML version 3.2, and it caused quite a lot of trouble for web developers. Due to the fact that web pages have different fonts, colored backgrounds, and multiple styles, it was a long, painful, and expensive process to rewrite the code. Thus, CSS was created by W3C to solve this problem.

CSS is not technically a necessity, but we probably wouldn't want to look at a web page that features only HTML elements as it would look completely bare-boned.

#### **6.1 Types of CSS:**

Cascading Style Sheet (CSS) describes the HTML elements which are displayed on screen, paper, or in other media. It saves a lot of time. It controls the layout of multiple web pages at one time. It sets the font-size, font-family, color, background color on the page. It allows us to add effects or animations to the website. We use CSS to display animations like buttons, effects, loaders or spinners, and animated backgrounds. Without using CSS, the website will not look attractive. There are 3 types of CSS which are below:

Inline CSS: Inline CSS is used to style a specific HTML element. Add a style attribute to each HTML tag without using the selectors. Managing a website may difficult if we use only inline CSS. However, Inline CSS in HTML is useful in some situations. We have not access the CSS files or to apply styles to element.

**Internal**/ **Embedded CSS**: Internal or embedded CSS requires you to add **<style>** tag in the **<head>** section of your HTML document.

This CSS style is an effective method of styling a single page. However, using this style for multiple pages is time-consuming as we need to put CSS rules on every page of your website.

**External CSS**: In external CSS, we link the web pages to the external .css file. It is created by text editor. The CSS is more efficient method for styling a website. By editing the .css file, we can change the whole site at once.

#### **6.2** Advantages of Style Sheets

- 1. Multiple Styles A single document can be presented in multiple styles by using multiple style sheets.
- 2. Re-styling The use of style sheets (which are separate from the HTML files) allows the quick re- styling of any document, without modifying the original HTML.
- 3. Document maintenance The ability to re-style many documents allow us to easily make changes to the appearance of many Web pages without separately editing each one.
- 4. Consistency Style sheets guarantee consistency throughout the website.
- 5. Optimal file size The smaller the files the faster the download. Using style sheets can help minimize file sizes, since, for example, every < font > tag, is defined in one place in a style sheet, rather than in multiple places in the HTML file.
- 6. Style and structure When first developed, HTML was only concerned with document markup and not with the document's formatting. This eventually changed, with more and more functionalities being added to HTML to allow for formatting. With the introduction of style sheets, the HTML document is again concerned only with structural document markup all formatting is now placed in the style sheet.

# **TEST**

#### 7.1 MOCK TESTS

Mock tests are conducted pertaining to their preparation for the examination. Mock tests are a preparatory test from the student point of view. This promotes a sense of active mindset and alertness in initiating and accelerating their performance. The test provides insight for the students in knowing their performance by providing the results. It induces a sense of understanding in answering the questions that they are well-versed with, at the beginning of the test followed by attempting the questions of ambiguity.

#### 7.2 LIVE TEST

The tests are designed where the students can attend the test or have access to the test at a particular time frame, along with results generated and announced at a specified date, assisting them by the leaderboard displaying the results/ ranks for the students who have attended the live test at the stipulated time frame. The live test is conducted at a specified time and the student is notified prior to the test generated or initiated. The test can be simultaneously taken by many students globally and can obtain the results at a specified time. The live test creates an amicable environment for the students to participate and evaluate themselves in improving their ranks.

#### 7.3 PRACTICE TEST

The test is to clarify that any performance can be improved by constant practice. This enables them to be consistent in their performance. It provides a precise understanding of the concepts with clarity, improving their proficiency.

- i. They can have access to the test for all the subjects in combination.
- ii. They are allowed to take the practice test for each subject.
- iii. This test is a student-cantered approach, motivating the students to accomplish their goals.
- iv. They can take the test after they have understood the concepts.

# **FEASIBILITY STUDY**

Studying of the feasibility is the important element in the project which helps the designer to compare whether the need of the client is met or not. The investigation also checks the different entities which we will make us understand which all the requirements are there, and which all are going to meet in real system.

This study helps the fundamental architecture of the project to get the cost of the system and human effort so that we can advance further whether the project is profitable or loss. This study will conclude whether we need to start the actual work. The study also represents which are all the techniques need to follow to crack the problem and all different work projections and requirements will be given in different studies. The four key considerations involved in the feasibility study are:

- > Technical feasibility
- > Economic feasibility
- > Operational feasibility
- Schedule feasibility

#### 8.1 TECHNICAL FEASIBILITY

In this study we will get to know which techniques are to be used for developing the project and testing of our project platform that is to be considered.

The technical managers will undertake the training in technical development and working will be done by them. This study will give an idea about the current innovation which is used for building the project and to what extent it will flourish.

Technical Study will provide the assistance to state that the customer can utilize the mentioned innovation for a long time until the time of development. It will check the Security perception of the work. It will generate a report on the reliability with respect to the integration that will be considered.

Technical Feasibility determines whether the technology needed by the proposed system is available and how this technology can be integrated within the organization. The technical needs of the system may vary considerably but might include:

- The facility to produce output in a given time.
- Response time under certain conditions.
- Ability to process a certain volume of transaction at a particular speed.
- Facility to communicate data to distant location.

During examining the technical feasibility, we have given more importance to the configuration of the system than the actual make of the hardware configuration. It provides us a complete picture about our system requirements. The system will be technically feasible as all the technologies that will be used for developing, implementing, and maintaining the system is general and market available.

#### **8.2 ECONOMIC FEASIBILITY**

Economic Feasibility looks at the financial aspects of the project. It is most frequently used technique for evaluating the effectiveness of a proposed system. Economic feasibility is more commonly known as Cost/ benefit

It is a study about the project which includes the budget that may come up when we execute the entire project with the inclusion of time. It will calculate the different risks involved with respect to the online services.

Economic feasibility will calculate the return on investment. The study will also calculate the entire project cost. It will also consider the financial sectors which have different tools for the projections. If the cost of the project is more than the actual cost for the development, then the project execution may get the misfortune for the development team. Furthermore, if the price of the project is minimum than the evaluated spending then the project executions will be financially savvy. The application needed to be hosted on the service platform for this reason we need to calculate the considerable perceptions for the different work mode.

#### 8.3 OPERATIONAL FEASIBILITY

Operational feasibility checks if the system will work when developed and installed. It also checks if there are any major barriers to its implementation. Operational feasibility is a measure of how people are able to work with the system. The user's using the system will probably receive the greatest help from the system if they can concentrate on the problem to be solved rather than on how programs are to be constructed to solve the problem

The application required to be designed in a modular approach means each model will be handled by multiple teams and associates shows all different teams will be handled by the team leaders. The study shows how it will function when it is put in a system in one condition and the changes that will be noted in different types of conditions when put to utilize in light.

All the resources will be organized and managed.

The study also considers the entire considerations of online work resistance that can rise at the time of operations.

#### 8.4 SCHEDULE FEASIBILITY

Time is an important factor in the IT field, each project has deadlines one should complete the project within the deadline. This study will help in managing the time of the project or how much work is pending and what is the deadline.

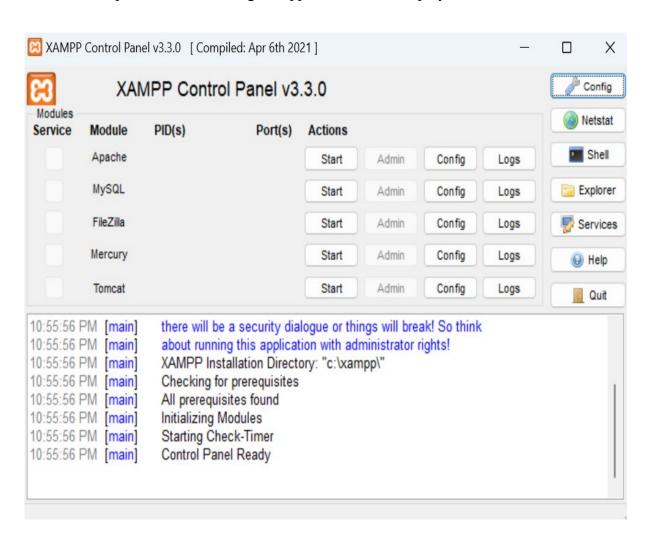
Schedule feasibility tells us is there any possibility if the project is postponed and what are effects does it will influence the cost and time to produce project.

# TOOLS AND TECHNOLOGIES USED

#### **9.1 TOOLS**

#### 1. XAMPP Server:

• XAMPP is a cross platform software package that includes Apache, MySQL, PHP, and Perl, providing a local server environment for web development. XAMPP simplifies the setup of the Eklavya Shooting Sports Academy on a local machine, enabling developers to test and debug the application before deployment.



#### 2. Bootstrap:

#### • Responsive Grid System:

Bootstrap utilizes a responsive grid system based on a 12-column layout. This grid system allows developers to create responsive and mobile-friendly web pages by defining the layout and alignment of content across different screen sizes.

#### • Pre-built Components:

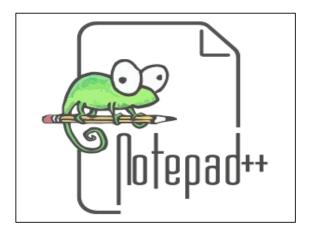
Bootstrap provides a wide range of reusable CSS components, including buttons, forms, cards, navigation menus, modals, alerts, and more. These components can be easily customized and integrated into web-pages, saving development time and effort.

#### • Responsive Typography:

Bootstrap includes a set of typography styles and classes for consistent and visually appealing text formatting. It offers a variety of font sizes, headings, paragraphs, and other text-related styles that automatically adjust based on the device's screen size.

#### 3. Notepad++:

• Notepad++ is a free text editor for Microsoft Windows that provides additional features not found in the standard Windows text editor, Notepad. It was first released on November 24, 2003, by developer Dan Ho, and is still in active development. It is specially designed for editing source code. The "++" in the name is a reference to the increment operator in programming languages such as C, C++, Java, and JavaScript. It is useful anytime you need to make significant changes to a text file.



- Notepad++ features are:-
  - 1. Edit text files up to 2 GB in size (the maximum size in Windows Notepad is 58 MB).
  - 2. Edit multiple files, organized in tabs.
  - 3. Line numbering.
  - 4. Syntax highlighting for over 70 programming languages, including HTML and Windows batch files.
  - 5. Advanced find and replace, with support for regular expressions.
  - 6. Create and edit text files for different operating systems, including macOS and Linux.
  - 7. Split-screen for editing and viewing multiple files at once, or multiple parts of the same file.
  - 8. Macros for recording a sequence of editing commands to be executed repeatedly.
  - 9. Support for lines to have bookmarks.
  - 10. A plugin system for adding features to the software.

# 9.2 TECHNOLOGIES HTML, CSS, JAVASCRIPT:

#### HTML:

The User Interface of Premedical is designed using HTML. HTML means Hypertext Markup Language that is used for designing the front end of the any website.



#### CSS:

Cascading Style Sheets (CSS) are used for styling the front end of any web pages like setting the color, style etc.



#### **JAVASCRIPT:**

JavaScript is a powerful programming language that can add interactivity to a website. It was invented by Brendan Eich.

JavaScript is versatile and beginner friendly. With more experience, you'll be able to create games, animated 2D and 3D graphics, comprehensive database-driven apps, and much more!

JavaScript itself is relatively compact, yet very flexible. Developers have written a variety of tools on top of the core JavaScript language, unlocking a vast amount of functionality with minimum effort. These include:

- Browser Application Programming Interfaces (<u>APIs</u>) built into web browsers, providing functionality such as dynamically creating HTML and setting CSS styles; collecting and manipulating a video stream from a user's webcam, or generating 3D graphics and audio samples.
- Third-party APIs that allow developers to incorporate functionality in sites from other content providers, such as Twitter or Facebook.
- Third-party frameworks and libraries that you can apply to HTML to accelerate the work of building sites and applications.

HARDWARE AND SOFTWARE CONFIGURATION

Android OS is used mostly by people. Nowadays many of them are using android phones.

Many smartphones' applications are supported by a powerful operating system known as

Android. Android applications make life more comfortable and advanced for users.

There are two sets of system requirements which can be used by most of the software. With an

increasing demand for higher processing power and resources in the newer versions of android

and windows, software requirements tend to increase over time. Industry analysts suggest that

this trend plays a bigger part in driving upgrades to existing applications or for new

applications. The software and hardware requirements used in this project are illustrated in the

following topics.

10.1 HARDWARE REQUIREMENTS

This academy software requires hardware infrastructure that can be support the smooth

operation of the system. The following hardware is required for running the academy software:

1. Server Hardware:

• Processor: Intel Core i3 or higher

• Ram: Minimum 8GB or higher

Storage: Minimum 100GB of available disk space

Network: Stable internet connection with sufficient bandwidth

2. Client Environment:

• Internet Connection Required

• Device Mobile, Laptop, Desktop, Tab

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#### 3. Networking:

- Local Area Network (LAN): A reliable LAN connection is required for local development and testing of the System.
- Internet Connection: A stable and high-speed internet connection is necessary for hosting the software on a web server and ensuring optimal user experience.

#### 4. Additional Hardware:

• Printers: Optional, for printing invoices, shipping labels, and other documents related to order fulfilment.

#### **10.2 SOFTWARE REQUIREMENTS**

It is necessary that the software components are required to run the system. The necessary software requirements for setting up and running the system:

#### 1. Operating System:

- Server-Side: Recommended operating systems include Windows Server, Linux (e.g., Ubuntu, CentOS), or macOS Server, depending on the server environment and administrator's preference.
- Client-Side: Metalholic E-commerce Store supports major operating systems, including Windows, macOS, and Linux, to ensure compatibility with various web browsers.

#### 2. Web Server:

Apache: The Metalholic E-commerce Store is designed to run on the Apache
web server, which can be installed and configured using the XAMPP server
package or other suitable web server software.

#### 3. Database:

 MySQL: The Metalholic E-commerce Store utilizes the MySQL database management system for data storage and retrieval. The recommended version is compatible with the selected Laravel framework and offers performance and security enhancements.

#### 4. Development Tools:

- PHP: Metalholic E-commerce Store is developed using PHP, so a compatible PHP version should be installed on the server and client devices.
- Composer: A dependency manager for PHP, Composer is used to install and manage the Laravel framework and other PHP packages.

#### 5. Web Browser:

 The Metalholic E-commerce Store should be compatible with popular web browsers such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge. Regular testing should be conducted to ensure compatibility with the latest browser versions.

# NON-FUNCTIONAL REQUIREMENTS

In systems and requirements engineering, the function of non-functional requirements are requirements which can be specify the different criteria that can be used to implement and judge the operation of a system, sufficient than specific behaviors of the system. This should be differing strikingly with functional requirements that specify different behavior or functions. Non-functional requirements are frequently called qualities of a system. Other terms for non-functional requirements are "constraints", "quality attributes", "quality goals" and "quality of service requirements".

#### **Reliability:**

Reliability will became mostly determined by the consumers association status. Reliability supports if user will be connected to the internet.

#### Availability:

Availability is the process in which our system should be available all the time. There should be no latency time file fetching the data from the server. Our application should be running all the time so that clients can access the project from any place at any time.

#### Maintainability:

Maintainability is the business logic in which every maintenance of the software should be maintained properly and time to time the maintenance of the software should be done.

#### Portability:

As the system is designed using Android.

#### **User Friendly**

The application is simple and standard, and it is easy to use. Users can understand each tab by seeing the icons used for each tab. Application contains easy navigation to each related module.

#### **Performance**

This application is developed using efficient programming languages like typescript, JavaScript etc.

#### Security

The user who is authenticated and authorized using Cognate identity pool and user pool can use the application.

#### **Scalability**

Whenever the server is getting more load, the server is having ability to balance the load. Elastic Load Balancing (ELB) is a put balance for the action for Amazon Web Services (AWS) deployments and use to make more useful services. ELB generally gives a share to the incoming application for traffic and scales resources to arrange the traffic demands and supply services.

#### Reliable

The application can be accessed from any location with the minimum requirement of internet speed and is available all the time and is much more reliable.

# **IMPLEMENTATION**

The agile model is used in the proposed system. Agile Methods break the product into small incremental builds. The combination of iterative and incremental process models in agile SDLC can be focused on customer satisfaction by dealing with the delivery of each working software product. In iterations, building is provided. Each iteration used from about one to three weeks. In every iteration includes works as teams works on various areas like.

- i. **Planning**: Planning is the first and most important step before implementation of the project.
- ii. Requirements Analysis: After planning is done for the implementation of the project,Next step is to analyze the requirements.
- iii. **Design**: Designing wireframes are must for the proper flow of a project.
- iv. Coding: Coding is the core part of building blocks of functions into programs.
- V. Unit Testing: To proper working of the programs and blocks can be used in the unit testing.
- vi. Acceptance Testing: Testing is used for checking the system environments and execution of the system after the implementation of the system.

# **SOFTWARE TESTING**

Software Testing is a process of detecting an error and used to execute the programs in the system. Testing is one of the holding and important phase in software engineering. The main goal of software testing is, the system should work according to the requirements of the customer and to convince the system developer and customer, that the software is good to make the comfortable and easy way to use for customer and works according to the customer requirements. Testing makes the system more reliable, increase the performance of the system. There are some pre-planned sets of activities that are performed for testing the software systematically.

Software Testing is used to check the system or project is meeting all the necessary requirements of the end user, it is an investigation which is done to provide End users or customers used with the information about requirements and customers classification of the project or System that used for possible check of the programs executions. The Testing includes the number of tests techniques which includes the process of different types of software testing applications are there to test the system.

#### 13.1 AIMS OF TESTING

- i. Whether the system meets all the requirements of the end user.
- ii. The design and development are one as scheduled.
- iii. Whether it is working for all the possible inputs.
- iv. System is showing errors for the Possible Wrong inputs.
- v. Whether the system is Sufficient.
- vi. The System can be run on different environments or not.
- vii. The System is performing its duties or not.
- viii. The System validated and verified.

#### 13.2 TYPES OF TESTING

#### **Unit Testing**

Each module of the application is tested to make sure that all modules work according to the functional requirements. The result obtained with correct input value and the results obtained with wrong input values are verified and validated according to the requirements.

#### **Integration Testing**

The link between all modules is tested for the correct execution to provide the desired output. Navigation through all the modules are necessary and important to understand the flow of the system, which is performed in integration testing.

#### **System Testing**

Once all the Modules are connected, it is tested as a single system. This testing is done many times as a process of verification and validation. The connectivity check after the integration is tested accordingly.

# **CONCLUSION**

This application will help people with information regarding shooting sports.

Students can take admission and join courses.

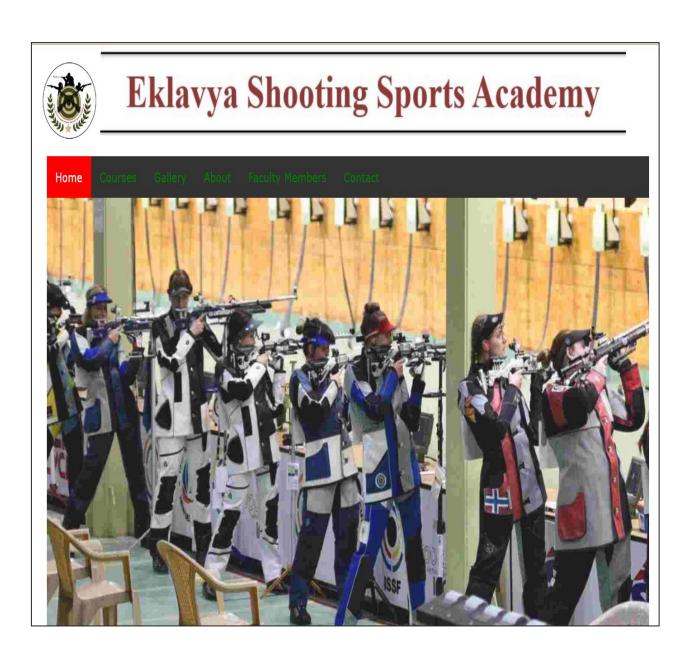
Senior Citizens can take membership for physical activities.

And if we will implement the backend part such us full using the PHP, Database for creating like admission, registration, student individual login etc. then it will help us that to use the software in any platform like academy, school, college.

Finally, the keynotes and eBooks provide complete Study notes for their preparation.

# **APPENDICES**

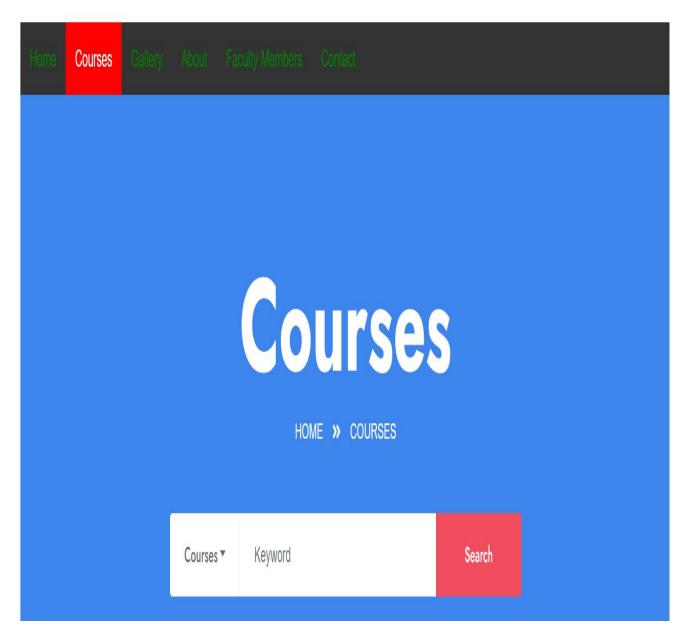
#### 1. HOME PAGE



# 2. COURSES



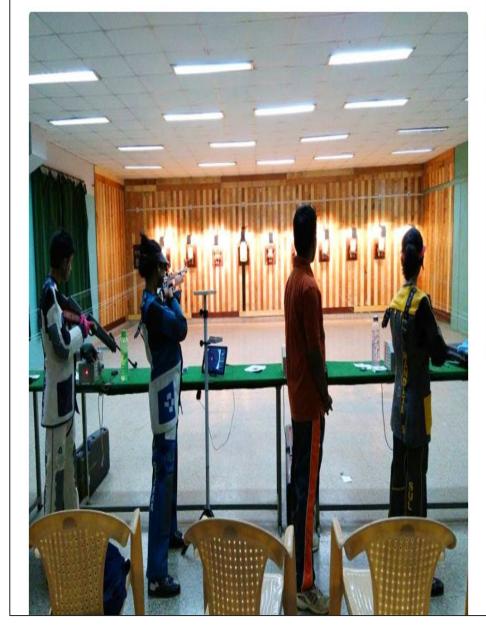
# **Eklavya Shooting Sports Academy**



# 3. COURSE FEE

COURSE DETAIL

# **Courses for beginners**

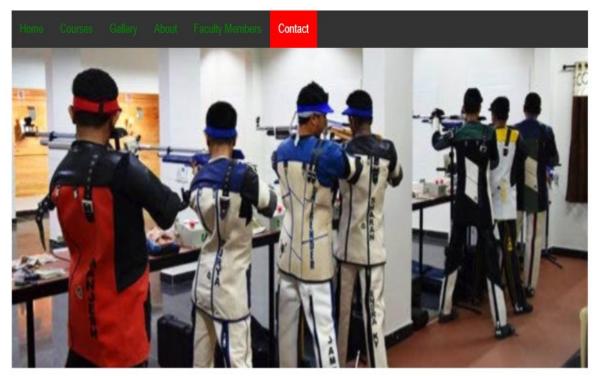


Rating	4.5 (250)
Lectures	15
Duration	10.00 Hrs
Skill level	All Level
Language	English
Course Price: ₹199	
Enroll Now	

# 4. CONTACT



# **Eklavya Shooting Sports Academy**



# Contact Us

1	Write Somthing		
			/

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- 7. National Shooting Sports Federation (NSSF) documentation retrieved from https://www.nssf.org/

Note: The above references are provided for informational purposes and may not represent an exhaustive list of all resources consulted during the development of the Eklavya Shooting Sports Academy.