System Analysis and Design and Development Tools

The project will use :-

1. Markup Language: Hypertext Markup Language (HTML) is the standard markup language used for creating web pages and applications. It uses a set of tags to structure the content of a web page, defining elements such as headings, paragraphs, images, links, tables, and more. HTML documents are delivered over the HTTP protocol and are rendered by web browsers into an on-screen image that users can interact with.

2. Styling Language: Cascading Style Sheets (CSS) is a style sheet language used to describe the visual appearance and formatting of HTML documents. CSS provides a way to separate the presentation layer from the structure and content of a web page. It allows developers to define styles for elements, including colors, fonts, layouts, and animations, thereby enhancing the visual appeal and user experience of web pages.

3. Scripting Language: JavaScript is a programming language that enables dynamic and interactive behavior on web pages. It is primarily used to add interactivity, validate forms, manipulate the DOM (Document Object Model), handle events, make AJAX requests, and perform client-side computations. JavaScript is executed by web browsers and allows web pages to respond to user actions and update content dynamically without requiring a full page reload.

4. Database Management: MySQL Server is a popular open-source relational database management system. It provides a robust and scalable platform for storing, managing, and retrieving structured data. MySQL supports SQL (Structured Query Language) for querying and manipulating data, making it a widely used choice for web applications and other data-driven systems.

5. Server-Side Technology: PHP is a widely used server-side scripting language for web development. It allows developers to generate dynamic web content, interact with databases, handle form submissions, authenticate users, and perform various server-side operations. PHP is often used in conjunction with HTML and CSS to create dynamic and interactive web applications.

6. Version Control System (VCS): GitHub is a web-based platform that provides version control and collaboration features. It allows developers to create and manage repositories for their codebase, track changes, branch and merge code, and collaborate with other developers through pull requests and code reviews. GitHub also offers issue tracking, project management, and documentation features, making it a comprehensive tool for software development teams.

7. Documentation Tools: Markdown is a lightweight markup language that uses simple and readable syntax to format text documents. It allows developers to create well-structured and formatted documentation without the need for complex formatting tools. Swagger is a popular tool for documenting APIs, providing a way to describe API endpoints, request/response formats, and authentication requirements. Postman is a tool for API development and testing, which also offers documentation features to create API documentation with examples and explanations

These tools collectively provide the necessary resources for web development, database management, scripting, version control, and documentation, enabling efficient and successful implementation of projects.