Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 30-10-2023   **Day: - MONDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: -

Introduction: Open the session with a warm welcome and an overview of the Full Stack Development course. Highlight the importance of collaborative coding and introduce participants to the key skills they will acquire throughout the course.

Brief about the Organization: Provide a concise overview of the organization hosting the course. Share information about its mission, expertise in the tech industry, and any notable achievements. Emphasize how the organization's values align with the course objectives.

Observations: -

Participant Engagement: Observe participants' engagement levels during the introduction to gauge their interest and enthusiasm for the course content and the tools introduced.

Understanding of Organization: Ensure that participants grasp essential information about the hosting organization, fostering a sense of trust and credibility in the course.

Interest in Google Colab: Monitor participants' reactions and questions related to Google Colab, noting any particular features or benefits that capture their interest.

Outcomes: -
Clear Course Expectations: Participants should leave with a clear understanding of what the course entails, the skills they will acquire, and the collaborative nature of the learning experience.

Awareness of Organization Values: Participants should be aware of the organization's values and expertise, providing context for their learning journey and building confidence in the course content.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: -GAGAN M

USN: -4NN21CS014

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 31-10-2023

Day: - TUESDAY

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Introduction to Visual Studio Code: Brief overview highlighting VS Code as a lightweight, cross-platform source code editor by Microsoft. Emphasis on its popularity due to versatility and extensive community support. Downloading and Installing VS Code: Clear demonstration of download and installation steps on Windows, macOS, and Linux. Emphasized the minimal system requirements, making it accessible to a broad user base. Basic Applications and Features: Walkthrough of code editing capabilities, debugging features, and version control integration. Introduction to extensions for enhancing functionalities like language support, themes, and productivity tools. Brief overview of basic preferences setup for personalized coding experience.

Observations: - Installation Process: Smooth and user-friendly installation observed across various operating systems. Minimal user intervention required, contributing to a positive first impression.

First-Time User Experience: Users found the initial setup and configuration intuitive, with minimal confusion.

Positive feedback on the straightforward onboarding process.

Extension Management: Users easily managed and installed extensions, appreciating the diverse options available.

Identified popular extensions based on user preferences and coding needs.

Outcomes: - Successful Installation: Users successfully downloaded and installed VS Code on diverse operating systems. Minimal reported issues, contributing to a high installation success rate.
Positive First Impressions. Overall positive sentiment towards VS Code's accessibility for beginners.
Effective Extension Integration: Seamless integration of extensions was noted, enhancing the overall development experience. Users acknowledged the versatility and customization options provided by extensions.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M

USN: -4NN21CS014

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: -01-10-2023

Day: - WEDNESDAY

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: -

Introduction to VS Code Operations: Demonstrated the basic operations of opening, creating, and saving files in Visual Studio Code (VS Code). Highlighted the importance of the integrated terminal for running code. Creating and Saving a Simple HTML File: Walkthrough of creating a basic HTML file using VS Code.

Emphasis on saving the file with an appropriate name and extension.

Integrated Terminal Usage: Introduction to the integrated terminal (Ctrl + `) and its role in executing commands. Navigated through basic terminal commands such as cd for changing directories.

Observations: - User Interaction with VS Code: Users found the basic operations of opening, creating, and saving files straightforward and intuitive. Positive feedback on the convenience of the integrated terminal.

Extension Installation Experience: Users expressed interest in exploring and installing extensions to customize their development environment. A general observation of users appreciating the extensibility of VS Code.

HTML Formatting and Execution: Users easily grasped the concept of automatic HTML formatting in VS Code.

Positive responses to the clarity of instructions for running a simple HTML file.

Outcomes: -
Efficient File Management: Users successfully created, saved, and managed files within the VS Code environment. Overall positive outcomes in terms of user efficiency and file organization.
Interest in Extensions: Users showed a willingness to explore and install extensions based on their specific needs.
Improved awareness of the extensibility of VS Code.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M

USN: -4NN21CS014

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: -02-10-2023

Day: - THURSDAY

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Code Creation and Manual Browser Opening: Guided users in writing or copying HTML code in a text editor. Demonstrated the process of saving the file with a .html extension. Instructed users to open the file manually in a web browser. Live Server Extension in VS Code: Introduced the "Live Server" extension from the Extensions view in VS Code. Walked users through the steps of opening an HTML file with Live Server. Highlighted the real-time synchronization between code changes and browser preview.

Integrated Terminal and Python SimpleHTTPServer: Instructed users on opening the integrated terminal in VS Code. Navigated users through the process of running a local server using Python's SimpleHTTPServer module. Directed users to access the HTML file through the specified localhost address.

Observations: -

User Engagement with HTML Introduction: Users displayed interest and understanding in the introductory concepts of HTML. Positive responses regarding the clarity of the explanation.

Manual Browser Opening Experience: Users found the manual opening of the HTML file in a browser straightforward. Some users preferred this traditional method for its simplicity. Live Server Extension Feedback: Positive feedback on the Live Server extension for its ease of use and real-time preview capabilities. Users appreciated the convenience of automatic browser launching.

Integrated Terminal and Python SimpleHTTPServer: Users successfully navigated the integrated terminal and executed Python SimpleHTTPServer commands. Some users found this method useful for its lightweight setup.

Outcomes: -
Diverse Execution Options
Positive User Feedback.
Enhanced Development Experience: Users reported an enhanced development experience with features like Live Server and the built-in preview within VS Code. The introduction of different execution methods contributed to a versatile and user-friendly HTML coding environment.

Student Signature

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 03-10-2023   **Day: - FRIDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: -

Introduction to VS Code Commands: Explanation of how commands in Visual Studio Code (VS Code) enhance the development experience. Overview of command palette (Ctrl + Shift + P) as the central hub for accessing commands.

Common Operations: Demonstrated basic operations like file creation, opening, and saving using VS Code commands.

Code Editing Commands: Showcased commands for efficient code editing, including copy, cut, paste, and undo (Ctrl + Z). Introduced multi-cursor editing using Alt for increased productivity.

Observations: -

User Engagement with Commands: Users engaged positively with the command palette and found it intuitive. Interest in learning and utilizing keyboard shortcuts for various operations.

Efficiency in Code Editing: Users appreciated the efficiency gained through code editing commands, especially multi-cursor editing. Positive feedback on the speed and responsiveness of VS Code.

Effective Extension Management: Users found extension management commands straightforward. Expressions of interest in exploring and experimenting with extensions based on specific needs.

Outcomes: -
Increased Productivity: Users reported increased productivity and efficiency in coding tasks using various commands. Recognition of the importance of learning and incorporating keyboard shortcuts into their workflow. Enhanced Code Navigation: Positive outcomes in terms of improved code navigation and exploration through commands like "Go to Definition." Interest in Extensions: Users expressed a heightened interest in exploring and utilizing extensions for a more personalized development environment.

Student Signature

Date: - 06-11-2023   **Day: - MONDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: -

Introduction to HTML Structure: Provided an overview of HTML as a markup language for creating the structure of web pages. Introduced the basic structure of an HTML document with the <html>, <head>, and <body> elements. HTML Elements and Tags: Explained the concept of HTML elements as building blocks of a web page. Introduced common HTML tags such as <h1>, <p>, <a>, <imp>, and more, emphasizing their respective purposes. Attributes Description: Defined HTML attributes as additional information provided within HTML tags. Explained common attributes like src, href, alt, class, and id. Examples of HTML Structure: Provided practical examples of complete HTML documents showcasing the basic structure. Demonstrated the use of common HTML elements to create content, headings, paragraphs, links, and images.

Observations: -

Understanding of HTML Structure: Users demonstrated a clear understanding of the fundamental structure of an HTML document. Positive feedback on the clarity of the introductory explanation.

Recognition of HTML Elements: Users recognized and understood the purpose of common HTML elements and tags. Engaged positively with examples illustrating how these elements contribute to web page content.

Appreciation for Attributes: Users appreciated the importance of attributes in providing additional information to HTML elements. Positive responses to examples that clarified attribute usage, enhancing the overall understanding.

Outcomes: -
Established Foundation in HTML. Proficiency in Using Elements: Users gained proficiency in using common HTML elements and tags to structure content effectively. Increased confidence in creating diverse content elements within an HTML document. Understanding Attribute Usage: Users developed a clear understanding of HTML attributes and their role in enhancing element functionality. Recognition of attributes as key components for customizing and extending HTML elements. Application in Real-world.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Introduction to HTML Links: Provided an overview of HTML links as elements that enable navigation between web pages. Introduced the <a> (anchor) tag and explained its attributes, including href for specifying the link's destination. Creating Text Links: Demonstrated how to create text links using the <a> tag. Showcased examples of linking to external websites, internal pages, and anchors within a page. Creating Image Links: Explained the concept of image links using the <a> tag around an <img> tag. Provided examples of linking images to other pages or external resources. Navigation and Lists: Illustrated the use of lists (<ul> and <ol>) for organizing navigation links. Showcased the combination of lists and links to create navigation menus. Introduction to Multimedia: Introduced multimedia elements, including <img> for images and <video> and <audio> for multimedia content. Discussed the attributes for multimedia elements, such as src, alt, and controls. Embedding Video and Audio: Demonstrated how to embed video and audio content in a webpage using the <video> and <audio> tags.

Observations: - Understanding of HTML Links: Users demonstrated a clear understanding of creating text and image links. Positive feedback on the simplicity of the <a> tag and its attributes.

Effective Navigation Implementation: Users effectively implemented navigation using lists and links.

Interest in creating organized and visually appealing navigation menus.

Appreciation for Multimedia Elements: Users appreciated the introduction to multimedia elements and their attributes. Interest in exploring the integration of multimedia content in web pages.

Embedding Video and Audio: Users successfully embedded video and audio content using the <video> and <audio> tags. Positive feedback on the visual and interactive aspects of multimedia embedding.

Outcomes: -
Proficiency in Link Creation.
Enhanced Navigation Skills. Users developed enhanced navigation skills, incorporating lists and links for organized webpage structure. Positive outcomes in terms of creating effective navigation menus.
Multimedia Integration Capability. Application in Real-world Scenarios.

Daily Dairy for Inter/Intra-Institutional Internship

Student Signature

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 08-11-2023   **Day: - WEDNESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Introduction to HTML Forms: Provided an overview of HTML forms as elements that allow users to input and submit data. Introduced the <form> tag and explained its role in creating a form container. Form Elements and Input Types: Introduced various form elements, including text fields, checkboxes, radio buttons, and dropdown lists. Demonstrated the use of the <input> tag with different type attributes for various input types. Labeling and Accessibility: Emphasized the importance of labeling form elements using the <label> tag. Explained the relationship between labels and input elements for improved accessibility. Form Submission and Buttons: Discussed the submission process using the <button> and <input type="submit"> elements. Demonstrated how to handle form submission and where the form data can be sent. Semantic HTML: Introduced the concept of semantic HTML as a way to structure content meaningfully.

Observations: -

Understanding of Form Elements: Users demonstrated a clear understanding of creating various form elements and input types. Positive feedback on the simplicity of the <form> tag and input attributes.

Appreciation for Labeling: Users appreciated the importance of labeling form elements for better user experience and accessibility. Recognition of the role of <label> in creating a clear association with form controls. Effective Use of Buttons: Users effectively implemented form submission buttons and understood their role. Interest in customizing buttons for enhanced visual appeal.

Grasp of Semantic HTML: Users grasped the concept of semantic HTML and its role in structuring content meaningfully. Positive responses to the examples showcasing the use of semantic elements.

Outcomes: -

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - CHIRAG M N   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 09-11-2023

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Introduction to CSS: Provided an overview of Cascading Style Sheets (CSS) as a style language used to describe the look and formatting of a document written in HTML. Emphasized the separation of content and presentation for improved maintainability. CSS Syntax and Selectors: Introduced the basic syntax of CSS, including selectors, properties, and values. Demonstrated the use of various selectors (e.g., element selector, class selector, ID selector) to target specific HTML elements. Styling Formats: Explored different styling formats in CSS, such as color, font, text, and margin/padding properties. Showcased examples of applying styles to elements to change their appearance. CSS Box Model: Explained the CSS Box Model, including content, padding, border, and margin. Demonstrated how to use the box model to control the layout and spacing of elements. Linking CSS with HTML: Illustrated the different methods of linking CSS stylesheets with HTML documents, including internal, external, and inline styles.

Observations: - Understanding of CSS Basics: Users demonstrated a clear understanding of the basic syntax and structure of CSS. Positive responses to the separation of concerns principle in web development. Application of Selectors: Users effectively applied CSS selectors to target and style specific HTML elements. Interest in using class and ID selectors for more granular control. Proficiency in Styling Formats: Users gained proficiency in applying various styling formats to elements, such as changing colors, fonts, and spacing. Positive feedback on the visual impact of CSS styling. Grasp of CSS Box Model: Users showed an understanding of the CSS Box Model and its role in element layout. Recognition of how the box model influences spacing and sizing of elements.

Outcomes: - Competency in Styling Elements: Users achieved competency in styling HTML elements using CSS, enhancing the visual appeal of web pages. Increased confidence in applying styles to different types of elements. Adoption of Best Practices: Users demonstrated an understanding of best practices, such as the separation of concerns and the use of external stylesheets for consistent styling. Visual Impact of CSS: Users recognized the significant visual impact that CSS has on the presentation of web content. Positive outcomes in terms of creating aesthetically pleasing and well-styled web pages.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M　　　　　　　　　**USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 10-11-2023   **Day: - FRIDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Introduction to CSS Syntax: Provided an introduction to the basic syntax of Cascading Style Sheets (CSS). Explained the structure of CSS rules, consisting of a selector, property, and value. CSS Selectors: Covered various CSS selectors, including element selectors, class selectors, ID selectors, and descendant selectors. Demonstrated how selectors are used to target specific HTML elements for styling. CSS Properties and Values: Introduced common CSS properties such as color, font-size, margin, and padding. Explained how properties define the aspects of styling, and values determine the specific characteristics. Syntax of CSS Rule: Walked through the syntax of a CSS rule, which includes a selector followed by a declaration block. Demonstrated how multiple declarations can be grouped within the block. Importance of Specificity: Discussed the concept of specificity in CSS and how it determines which styles take precedence when multiple rules apply to the same element.

Observations: - Understanding of CSS Syntax: Users demonstrated a clear understanding of the basic structure and syntax of CSS rules. Positive feedback on the simplicity of the CSS rule format. Effective Use of Selectors: Users effectively applied various CSS selectors to target different types of HTML elements. Interest in combining selectors for more specific targeting. Application of Properties and Values: Users grasped the application of CSS properties and their corresponding values. Positive responses to the visual impact of changing properties like colors and fonts. Comprehension of CSS Rule Structure: Users understood the structure of CSS rules, including the selector and declaration block. Recognition of the flexibility of grouping multiple declarations for a single selector. Awareness of Specificity: Users demonstrated an awareness of specificity and its role in resolving conflicting styles. Interest in understanding how to write more specific selectors when needed.

Outcomes: -
Confidence in CSS Rule Creation. Effective Application of Selectors.
Users learned to effectively apply different selectors to style elements based on their structure and characteristics. Recognition of the importance of selector choice for precise styling.
Visual Impact of Styling. Positive outcomes in terms of creating visually appealing and customized designs.
Understanding Specificity for Conflict Resolution.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 13-11-2023   **Day: - MONDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I began my internship by familiarizing myself with the development environment and tools used by the team. I set up the project on my local machine and explored the existing codebase, focusing on the frontend components developed with React.js. I attended an onboarding session where I learned about the team's workflow and project management practices.

Observations: - I observed that the team emphasized the importance of version control using Git, with a well-defined branching strategy for development. The codebase was modular and well-organized, making it easier to navigate and understand. I also noticed that the team used regular code reviews to maintain high-quality code and facilitate knowledge sharing.

Outcomes: -
By the end of the day, I successfully set up the project environment and gained a clear understanding of the team's workflow. I felt more confident about contributing to the project and was ready to start working on assigned tasks.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 15-11-2023   **Day: - WEDNESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - My tasks for the day included fixing bugs in the existing frontend code and implementing new features as outlined in the project specifications. I worked on creating a responsive navigation bar using React.js and ensured it functioned seamlessly across different screen sizes. Additionally, I wrote unit tests to validate the new features.

Observations: - During the development process, I realized the significance of thorough testing in preventing bugs and ensuring code reliability. I also observed how the team prioritized responsive design to enhance the user experience on various devices. Collaboration and communication were key, as I regularly consulted with team members to clarify requirements and gather feedback.

Outcomes: -
I successfully completed the assigned tasks, contributing to the project's progress. My understanding of React.js deepened, and I improved my skills in writing unit tests and creating responsive designs.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 16-11-2023   **Day: - THURSDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Observations: - I observed the critical role of secure coding practices in protecting user data and preventing security breaches. The team's use of middleware for handling authentication and authorization impressed me, as it streamlined the development process and improved code maintainability. Effective communication between frontend and backend developers was essential for seamless integration.

Activities carried Out: - Today, I focused on backend development, working with Node.js to develop API endpoints for the application. I designed and implemented a user authentication system, ensuring secure login and registration processes. Additionally, I integrated the APIs with the frontend components to enable data flow between the client and server.

Outcomes: - I successfully implemented the user authentication system, which enhanced the application's security. My experience with Node.js and API development grew, and I gained insights into best practices for securing web applications.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 17-11-2023   **Day: - FRIDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Observations: - I realized the importance of a well-designed database schema in ensuring data integrity and optimizing performance. Indexing and normalization techniques played a crucial role in speeding up query execution and reducing redundancy. The team's regular database performance monitoring helped identify and address potential bottlenecks.

Activities carried Out: - My main task was to work on the database layer, creating and optimizing database schemas to support new features. I used MySQL to design relational tables and establish relationships between them. I also wrote SQL queries to retrieve and manipulate data, ensuring efficient data access and storage.

Outcomes: -
I completed the database design and optimization tasks, contributing to the application's data management capabilities. My understanding of relational databases and SQL improved significantly, enhancing my ability to design efficient data models.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M　　　　　　　　**USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 18-11-2023　　　　　　　　　　　　**Day: - SATURDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Observations: - I observed the importance of adhering to design guidelines to maintain a consistent look and feel across the application. The team's use of component-based architecture in React.js facilitated code reuse and modularity. Regular feedback and iterative development helped refine the feature and address any usability issues.

Activities carried Out: - Today, I collaborated with the frontend team to implement a new user interface feature. I used React.js to create dynamic components and integrated them with the existing application. I also ensured that the new feature adhered to the project's design guidelines and provided a seamless user experience.

Outcomes: - I successfully delivered the new user interface feature, enhancing the application's functionality and user experience. My skills in React.js and frontend development were further strengthened, and I gained valuable experience in collaborative development.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M

USN: -4NN21CS014

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 20-11-2023

Day: - MONDAY

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I focused on integrating third-party services into the application, such as payment gateways and email notification systems. I used RESTful APIs to connect these services and ensure seamless data exchange. Additionally, I wrote documentation to guide other team members on using and maintaining these integrations.

Observations: - I observed the importance of thorough documentation in ensuring that integrations are easy to use and maintain. The team's emphasis on testing third-party services helped identify and resolve potential issues early. Proper error handling and logging were crucial for maintaining the application's reliability and user experience.

Outcomes: -
I successfully integrated the third-party services, adding valuable functionality to the application. My experience with RESTful APIs and external service integration grew, and I understood the importance of clear documentation in collaborative projects.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 21-11-2023   **Day: - TUESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - On the final day, I focused on testing and debugging the application to ensure it was ready for deployment. I used various testing frameworks to conduct unit, integration, and end-to-end tests. I also participated in a team review meeting to discuss the project's progress and identify areas for improvement.

Observations: - I observed the critical role of comprehensive testing in delivering a reliable and bug-free application. The team's use of automated testing frameworks streamlined the testing process and improved efficiency. Regular review meetings provided valuable insights and fostered a culture of continuous improvement. complexities.

Outcomes: - I successfully completed the testing and debugging tasks, contributing to the project's readiness for deployment. My understanding of testing frameworks and debugging techniques improved, and I gained a sense of accomplishment from seeing the project's progress.

Student Signature

Daily Dairy for Inter/Intra-Institutional Internship
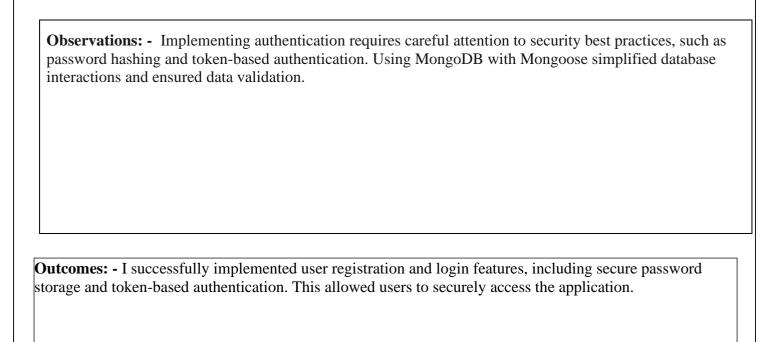
Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 22-11-2023   **Day: - WEDNESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I began by setting up my development environment and familiarizing myself with the backend technologies and frameworks to be used in the project. This included installing Node.js, Express.js, and configuring a local MongoDB database. I also studied the project requirements and planned the architecture and data flow.

Observations: - I noticed the importance of having a well-structured development environment and a clear understanding of the project requirements before diving into coding. Proper initial setup saves a lot of time and effort in the later stages of development.

Outcomes: - By the end of the day, I had a fully functional development environment and a clear roadmap for the backend implementation. This foundation prepared me for the upcoming development tasks.

Daily Dairy for Inter/Intra-Institutional Internship

Student Signature

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 23-11-2023   **Day: - THURSDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - My focus was on creating the initial server setup using Express.js. I defined the basic routes and middleware to handle incoming requests and responses. Additionally, I implemented a basic logging mechanism to track server activity.

Observations: - Setting up a server with Express.js was straightforward, thanks to its simplicity and flexibility. I realized the importance of middleware in managing requests, responses, and errors efficiently. Logging is crucial for monitoring server performance and debugging issues.

Outcomes: -

I successfully set up the server and implemented basic routing and logging mechanisms. This provided a strong foundation for building more complex features in the subsequent days.

Daily Dairy for Inter/Intra-Institutional Internship

Student Signature

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 24-11-2023   **Day: - FRIDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I started working on the user authentication system, implementing user registration and login functionalities. I used bcrypt for password hashing and JWT (JSON Web Tokens) for secure authentication. Additionally, I created MongoDB schemas and models for storing user data.

Observations: - Implementing authentication requires careful attention to security best practices, such as password hashing and token-based authentication. Using MongoDB with Mongoose simplified database interactions and ensured data validation.

Outcomes: - I successfully implemented user registration and login features, including secure password storage and token-based authentication. This allowed users to securely access the application.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 25-11-2023 **Day: - SATURDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - My tasks included developing CRUD (Create, Read, Update, Delete) operations for managing user data. I created endpoints for user profile management, including updating personal information and viewing profile details. I also added middleware to protect routes that require authentication.

Observations: - CRUD operations form the backbone of many applications, enabling users to interact with and manage their data. Properly securing these endpoints is crucial to prevent unauthorized access and data breaches.

Outcomes: - I implemented comprehensive CRUD operations for user data management, ensuring that authenticated users could securely update and retrieve their information. This enhanced the application's functionality and user experience.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 27-11-2023   **Day: - MONDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - Today, I focused on integrating third-party APIs into the backend. I selected an external API to fetch additional data relevant to the project and implemented the necessary endpoints to retrieve and process this data. Additionally, I handled API rate limiting and error responses gracefully.

Observations: - Integrating third-party APIs requires careful handling of API responses and errors. Proper error handling and rate limiting are essential to ensure the stability and reliability of the application.

Outcomes: - I successfully integrated the third-party API, enabling the application to fetch and utilize external data. This added valuable functionality and enhanced the overall user experience.

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Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 28-11-2023   **Day: - TUESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I worked on optimizing the backend performance by implementing caching mechanisms. I used Redis to cache frequently accessed data, reducing the load on the database and improving response times. Additionally, I analyzed and optimized database queries to ensure efficient data retrieval.

Observations: - Caching is a powerful technique to enhance application performance, especially for read-heavy operations. Optimizing database queries and using indexes can significantly improve data retrieval speed and reduce latency.

Outcomes: - I successfully implemented caching and optimized database queries, resulting in improved backend performance and faster response times for the users.

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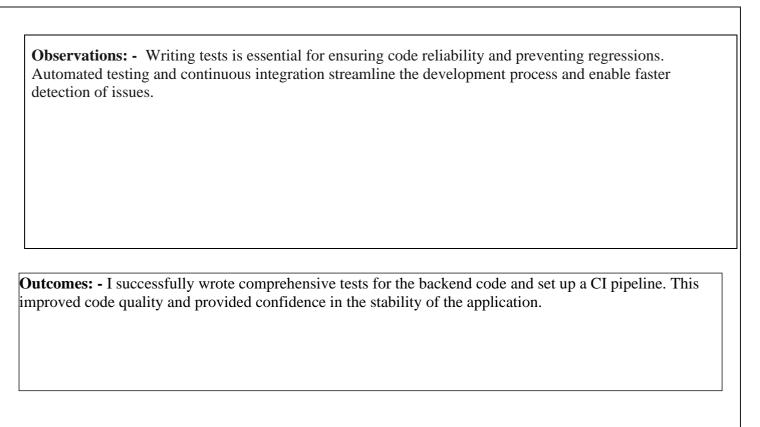# Daily Dairy for Inter/Intra-Institutional Internship

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 29-11-2023   **Day: -WEDNESDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - I dedicated the day to writing tests for the backend code. I used testing frameworks like Mocha and Chai to write unit tests for individual functions and integration tests for API endpoints. I also set up a continuous integration (CI) pipeline to automate the testing process.

Observations: - Writing tests is essential for ensuring code reliability and preventing regressions. Automated testing and continuous integration streamline the development process and enable faster detection of issues.

Outcomes: - I successfully wrote comprehensive tests for the backend code and set up a CI pipeline. This improved code quality and provided confidence in the stability of the application.

Daily Dairy for Inter/Intra-Institutional Internship

Student Signature

Name of the candidate: - GAGAN M   **USN: -4NN21CS014**

Event/Activity: FULL STACK WEB DEVELOPMENT

Date: - 30-11-2023   **Day: - THURSDAY**

Learning Aim: - This Full Stack Development course imparts participants with the skills to build dynamic web applications. Covering front-end technologies such as HTML, CSS, and JavaScript, as well as back-end development with server-side scripting and database management, the program emphasizes hands-on experience with popular frameworks. Graduates emerge as proficient full-stack developers prepared to contribute across the entire software development lifecycle.

Activities carried Out: - On the final day, I focused on deploying the backend application to a cloud platform. I chose Heroku for deployment and configured the necessary environment variables and build scripts. I also monitored the deployed application to ensure it was running smoothly.

Observations: - Deploying to a cloud platform involves several steps, including environment configuration, build scripts, and monitoring. Proper deployment ensures the application is accessible and performs well in a production environment.

Outcomes: - I successfully deployed the backend application to Heroku, making it accessible to users. Monitoring the deployed application ensured it was running smoothly, and I was able to address any issues promptly.

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