

Daily Dairy

Day 1 (16-7-2024):

Today I started my journey as a Web developer at the Software Development Company. There I met the enthusiastic and talented team of fellow developers and mentors and introduced myself. They inspired an environment that nurtures both creativity and productivity among the team. The warm welcome from the team made the first day less intimidating. Here the day ended.

Day 2 (17-7-2024):

Today I started by learning how things work. The first encounter with the code and tools was a bit tricky. Figuring out how things worked took a moment, but I'm gradually finding my way around. Had a brief struggle with setting up the development environment, but the mentors were incredibly helpful in guiding me through the process. Then I started learning React initially from scratch.

Day 3 (18-7-2024):

As I was going through the concepts of React, my mentor told me about some of the important topics that I should not miss and had to pay more attention to. He also guided me on how to practice the things so that I can use the concepts clearly and easily. Then I started learning to make myself comfortable with the topics.

Day 4 (19-7-2024):

It was a wonderful day today as I created my first React application. I installed Node.js, which was necessary to use React in production. I also ran my first npm command to basically create my first React application. It was the basic step towards my new learning.

Day 5 (20-7-2024):

It was work from home today. So I revised the topics and headed towards the next topics, which was actually writing my first code in React.

Day 6 (21-7-2024):

Sunday

Day 7 (22-7-2024):

Today I showed my first code and the things I learned on the last holiday to my mentor. Then I started learning again. I started practicing code, then my mentor told me the prerequisites of learning React. He guided me to focus on HTML, CSS & JavaScript first and clear all my doubts so it would be easy for me to learn React more comfortably and easily. He also advised me to do everything on my own and practice the things.

Day 8 (23-7-2024):

I started learning HTML from scratch and witnessed that HTML is a vast language. I was not new to the language, but to make things more clear and not be left with anything important, I started learning the basic structure of the HTML document (like how an HTML written code looked), then headed toward understanding the roles of elements and commonly known tags like `<html>`, `<head>`, `<title>`, `<body>` and also practiced the respective tags in the code editor.

Day 9 (24-7-2024):

Today I started with the concept of nesting. Initially, I found it a bit puzzling, but hands-on practice brought clarity. I experimented with creating a basic webpage, witnessing the immediate visual impact of HTML elements. Exploring HTML feels like unlocking the architect's toolbox for the digital world. It's like creating the skeleton of a digital masterpiece. It's the foundational sketch, the blueprint of possibility, where each tag is a stroke contributing to the creation of a unique and dynamic online experience.

Day 10 (25-7-2024):

Today I explored the use of attributes that help to enhance the functionality and appearance of HTML elements. I learned the use of attributes like the href attribute of `<a>` specifies the URL of the page the link goes to, the src attribute of `` specifies the path to the image to be displayed, the width and height attributes of `` provide size information for images, the alt attribute of `` provides an alternate text for an image, the style attribute is used to add

styles to an element, etc. Then I applied attributes to fine-tune the behavior and appearance of HTML elements.

Day 11 (26-7-2024):

Today I dived into more complex HTML elements, such as forms and tables, to broaden my skill set and explore the versatility of forms and tables. I learned about form elements, input elements, text fields, labels, radio buttons, check buttons, submit buttons, and attributes for `<input>`. Then, using my learning, I created my first form with basic fields. Then I learned about action buttons and methods. Learning methods was important as it's for submitting the form after entering the information in the form, and with this, my day ended.

Day 12 (27-7-2024):

It was work from home today. So I revised the topics I learned this week.

Day 13 (28-7-2024):

Sunday

Day 14 (29-7-2024):

Continuing the learning, I learned that the HTML `<form>` element can contain one or more form elements like `<input>`, `<label>`, `<select>`, `<textarea>`, `<button>`, `<fieldset>`, `<legend>`, `<datalist>`, `<output>`, `<option>`, etc. I practiced each and every element and initially found form elements a bit confusing, but step-by-step practice made them more familiar. Adding to it, I also started learning about inputs, input attributes, and input form attributes.

Day 15 (30-7-2024):

Today I experimented with different input attributes and input form attributes and witnessed the increasing complexity of HTML, realizing its potential for crafting interactive and dynamic web content. It took me the whole day to make differences and be familiar with forms, inputs, etc.

Day 16 (1-8-2024):

Grasped the importance of clean and semantic HTML for accessibility and search engine optimization. As I learned about forms, I thought to start with tables. So I started learning about tables—cells, rows, headers, and table

borders, sizing, padding, etc. Then I practiced today's learning and applied borders, sizing, and padding, which is basically for designing the tables or adding more styles to it.

Day 18 (2-8-2024):

Introduced CSS to bring life to HTML, experimenting with styles, colors, and layouts. Learned how to use CSS within the HTML document, how to write CSS in HTML, the methods, and the properties used in CSS, which gives a great effect to the HTML file and makes the webpage look more beautiful. Continued to learn.

Day 19 (3-8-2024):

It was work from home today. So, I revised the topics I learned this week.

Day 20 (4-8-2024):

Sunday

Day 21 (5-8-2024):

Continued practicing writing CSS in the HTML file. Unlocked how to use the properties properly and where to use them specifically. Witnessing the collaboration of HTML and CSS is like seeing a black-and-white sketch turn into a vibrant painting.

Day 22 (6-8-2024):

Today I designed a webpage using basic HTML and CSS, making it more clear to use and understand the concepts more efficiently.

Day 23 (7-8-2024):

In the journey of learning HTML perfectly, today I learned about lists, block-level or inline elements, and div. Moreover, I also learned about the class container in HTML and ID.

Day 24 (8-8-2024):

Initiated the exploration of JavaScript, the dynamic scripting language that adds interactivity to web pages. JavaScript makes HTML pages more dynamic and interactive. Learned about script and non-script tags. As I was learning HTML,

I focused on learning HTML first and then proceeded toward JavaScript, learning basic scripting lines.

Day 25 (9-8-2024):

Today I started with file paths, learning it was easy to understand. Then I proceeded to the head and, most importantly, learned about layout and more semantic elements that define the different parts of a web page and help in making it more dynamic. Also learned some grid layouts, grid designs, and the float property of CSS.

Day 26 (10-8-2024):

It was work from home today. So, I revised the topics I learned this week.

Day 27 (11-8-2024):

Sunday

Day 28 (12-8-2024):

Today I learned about the importance of making our webpage responsive. It includes the concept of CSS. It was difficult to make the calculations to fit the webpages perfectly on small screens. It required a lot of practice to understand it and make use of it.

Day 29 (13-8-2024):

Exploring more in HTML, I gathered information about multimedia, HTML Videos, HTML Sounds, video formats, etc. Initially, it was difficult, but hands-on practice made it easy. Then revised all the new topics we studied.

Day 30 (14-8-2024):

Holiday (Raksha Bandhan)

Day 31 (15-8-2024):

Practiced all the HTML tags and gained all the knowledge about HTML and CSS.

Day 32 (16-8-2024):

Continuing learning in CSS and getting more into CSS properties, I explored

advanced CSS techniques, focusing on flexbox and grid layouts for enhanced webpage structuring.

Day 33 (17-8-2024):

It was work from home today. So, I revised the topics I learned this week.

Day 34 (18-8-2024):

Sunday

Day 35 (19-8-2024):

Explored more into the CSS properties such as selectors, comments, backgrounds, which I had already learned in HTML, and practiced it more to become more comfortable with the calculations and properties.

Day 36 (20-8-2024):

Witnessed the evolution of webpage layouts from static to dynamic, thanks to advanced CSS features. Realized the crucial role of responsive design in providing a consistent user experience across devices.

Day 37 (21-8-2024):

Practicing the previous topics. Explored advanced CSS techniques, focusing on flexbox and grid layouts for enhanced webpage structuring. Implemented responsive design principles to ensure seamless adaptation across various devices.

Day 38 (22-8-2024):

Today, I explored various CSS frameworks to improve the consistency and efficiency of styling. I delved into CSS animations and transitions, adding dynamic effects to webpage elements. I also mastered flexbox and grid layouts, which helped me create flexible and responsive designs. Additionally, I experimented with media queries to ensure seamless user experiences across multiple devices.

Day 39 (23-8-2024):

I was excited to dive deeper into CSS animations and transitions today. While the topic was a bit confusing initially, hands-on practice helped clarify it. The

artistic side of CSS really fascinated me as I explored ways to bring more dynamism to the web elements.

Day 42 (27-8-2024):

I eagerly continued exploring CSS frameworks, seeking a more efficient and consistent approach to styling. I also worked on enhancing webpage interactivity with smooth transitions and eye-catching animations. Coordinating animation timings was initially challenging, but through trial and error, I gained valuable insights.

Day 43(28-8-2024):

Today, I truly appreciated how CSS could transform static elements into dynamic, engaging features. I realized the full artistic potential of CSS, where every line of code adds to the user's visual experience.

Day 47 (30-8-2024):

I practiced CSS by creating dynamic designs, applying different properties I had learned to develop more engaging and flexible layouts.

Day 50 (2-9-2024):

It was a work-from-home day, so I took the opportunity to revise the topics I learned throughout the week, ensuring I grasped all the important concepts.

Day 51(3-9-2024):

My mentor tested my knowledge by assigning a task to create webpages using various CSS properties I had learned. I also needed to make the designs responsive, which was exciting as I was able to apply my knowledge in practice.

Day 52 (4-9-2024):

I explored advanced CSS techniques today, learning how to enhance website efficiency and design appeal. Working on coordinating multiple animations was challenging at first, but iterative testing helped me achieve satisfactory results.

Day 53 (5-9-2024):

I completed my CSS learning journey today by practicing various properties and designing webpages. I also worked on combining multiple animations, refining my skills further through continuous tweaking and testing.

Day 54 (6-9-2024):

I started learning JavaScript today, focusing on foundational concepts like variables, data types, and basic operations. JavaScript is essential for adding interactivity and logic to websites, and I'm excited to start using it to bring my designs to life.

Day 57 (9-9-2024):

Today, I continued to explore JavaScript, learning how it can transform static web pages into dynamic, interactive experiences. I witnessed firsthand the power of JavaScript in making websites responsive to user actions..

Day 70 (9-9-2024 to 20-9-2024):

I started the Learnify LMS project by setting up the initial environment. I installed necessary tools like Next.js, Tailwind CSS, and MySQL. After that, I created the basic folder structure for the project. I also focused on outlining the core features of the platform, such as course creation, enrollment, user management, and payment processing. I researched best practices for performance optimization, considering the integration of Redis for caching and MongoDB for scalable data management.

Day 71 (21-9-2024):

It was work from home today . So I tried to test the project.

Day 72 (22-9-2024):

Sunday

Day 73-77 (23-9-2024 to 27-10-2024):

Today, I worked on designing the database schema for the LMS. I set up the MySQL database, created tables for users, courses, enrollments, and payments, and defined relationships between them. I also wrote some initial seed data to test the database setup. In parallel, I reviewed Prisma's ORM documentation to integrate it smoothly with the MySQL database for easier data handling. I focused on ensuring scalability and flexibility in the database design.

Day 78-82 (30-09-2024 to 04-10-2024):

I spent most of the day building the user authentication system. I integrated user sign-up and login functionalities using JWT for secure authentication. Tailwind CSS was used to design a responsive and user-friendly interface. I also included role-based access control to distinguish between admins and regular users (students and teachers). I tested the authentication flow thoroughly to ensure smooth user registration and login processes.

Day (02-10-2024):

Gandhi Jayanti

Day 83-87 (07-10-2024 to 11-10-2024):

I started working on the UI design for the mobile app, based on the wireframes from yesterday. Using Tailwind CSS, I adapted the LMS layout to fit smaller screens. I created components for the course catalog, student dashboard, and video player that work well on mobile. I made sure the design was visually consistent and user-friendly.

Day 87-97 (11-10-2024 to 20-10-2024):

I was on leave due to Basketball Tournament .

Day 98-102 (21-10-2024 to 25-10-2024):

I dedicated today to testing various parts of the LMS. I went through the entire platform as both an admin and a student, testing the flow from registration to course completion. I found some minor bugs related to course enrollment and payment status updates, which I fixed. I also worked on improving error messages and ensuring that the system handles edge cases gracefully.

Day 103-109 (28-10-2024 to 03-11-2024):

It was work from home due to Diwali. So I reviewed all that I have learnt so far.

Day 110 (4-11-2024):

Today I dedicated today to testing various parts of the LMS. I went through the entire platform as both an admin and a student, testing the flow from registration to course completion. I found some minor bugs related to course enrollment and payment status updates, which I fixed. I also worked on improving error messages and ensuring that the system handles edge cases gracefully.

Day 111 (5-11-2024):

Today I started learning about the user requirements and some features that must be added in the website .

Day 112-117 (5-11-2024 to 12-11-2024):

I started optimizing the system's performance by integrating Redis for caching frequently accessed data, like course listings and user information. I also worked on optimizing database queries and reducing unnecessary API calls. This improved the overall speed of the platform, especially during high-traffic periods.

Day 118-119(13-11-2024 to 14-11-2024):

I worked on implementing video analytics with Mux to track how much of a video each student watches. This feature allows instructors to track student engagement and identify areas where students may need additional help. I displayed video engagement metrics on the instructor dashboard to make it easier for them to monitor student progress.

Day 120(15-11-2024):

Holiday

Day 121(16-11-2024):

Saturday

Day 122 (17-11-2024):

Sunday

Day (18-11-2023 - 22-11-2023):

This week I built a user activity tracking system today. I'm now tracking login times, course progress, quiz participation, and other activities. This data will be used to improve the user experience and provide actionable insights to instructors and administrators. It also helps in personalizing content recommendations based on student behavior.

Day (25-11-2023 to 29-11-2023):

I worked on improving the security of the LMS today. I ensured that sensitive data like passwords and payment information is encrypted and stored securely. I

also implemented CSRF protection for all forms and validated inputs to prevent injection attacks. I reviewed the data privacy policies to ensure compliance with GDPR and other regulations.

Day (30-11-2024 to 1-12-2024):

Saturday- Sunday .

Day (2-12-2024 to 6-12-2024):

This week I, focused on deploying the LMS to production. I set up continuous integration and deployment pipelines using GitHub Actions. I deployed the app to AWS, using Elastic Beanstalk for scalability and RDS for database management. I also configured CloudFront for content delivery to improve site speed and performance globally.

Day (6-12-2024 to 7-12-2024):

Saturday- Sunday .

Day (8-12-2024 to 16-12-2024):

This week involved refining features, improving UX/UI, handling additional testing, and preparing for launch. I improved the search and filter functionalities for courses, added more video content, and ensured better mobile compatibility. I also worked on marketing materials, including a blog and email campaigns, to attract instructors and students.

I continued to address feedback from users and fixed any new bugs that appeared. I added performance monitoring tools to track how well the platform performs in production. Additionally, I worked on the final documentation for

both users and developers, ensuring that everything is properly explained for future development.

Day (17-12-2024 to 20-12-2024):

This week was dedicated to preparing the web for deployment, including setting up build configurations and finalizing the database schema.

Day (21-12-2024 to 22-12-2024):

Saturday- Sunday .

Day (23-12-2024 to 24-12-2024):

This week all the errors were resolved but an some error were arising again and again. Then my mentor tried solving it and it was solved .

Day (25-12-2024):

Holiday

Day (26-12-2024 to 27-12-2024):

This week all the errors were resolved but an some error were arising again and again. Then my mentor tried solving it and it was solved .

Day (28-12-2024 to 29-12-2024):

Saturday- Sunday .

Day (30-12-2024):

All the errors were solved and front-end was completed