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ZAPCOM INTERNSHIP 2023 REPORT

JADHAV SHIVARAJ SUDHAKAR
2026
GOA UNIVERSITY MCA 2020-2023

Phone: 9665465208
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REPORT OF INTERNSHIP DONE AT ZAPCOM SOLUTIONS PVT LTD

SUBMITTED BY:

JADHAV SHIVARAJ SUDHAKAR

2026

UNDER THE GUIDANCE OF:

Mr. Yakaswamy Gadudula

(Sr. Full Stack Developer, Zapcom)

Mr. Shivraj Pai

(Sr. Software Engineer, Zapcom)

Mr. Janakiram Reddy

(Associate Software Engineer, Zapcom)

1st June 2023

TO WHOMSOEVER IT MAY CONCERN

This is to inform you that **Mr. Shivaraj Sudhakar Jadhav,** student of Master of Computer Applications (MCA) of Goa University, Goa, is currently undergoing his final semester project (Semester VI/V) at our company, **Zapcom Solutions Pvt. Ltd** from 4th January, 2023.

During his tenure he has met the expectations of his team lead/mentor/guide and found to be regular and sincere.

This letter is being issued on his request to be submitted with the project report at Goa University.

The final internship completion letter will be provided on completing his internship.

For Zapcom Solutions Pvt. Ltd.

Srinivas Reddy Kothakota
Chief Operating Officer

Zapcom Solutions Pvt. Ltd. INDIA

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105 Decker Court, Ste. 810 Irving,
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GOA UNIVERSITY

GOA BUSINESS SCHOOL

CERTIFICATE OF EVALUATION

This is to certify that Mr. Jadhav Shivaraj Sudhakar has been evaluated for the project work titled "Report of Internship done at Zapcom Solutions Pvt Ltd" undertaken at Zapcom Solutions Pvt Ltd, Bangalore in partial fulfilment for the award of the degree in Master of Computer Application.

Examiner 1

Examiner 2

Place: Goa University

Date: 16th June 2023

Dean, Goa Business School

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First and foremost, I am immensely grateful to the Almighty for giving me the strength, determination, and opportunity to undertake this internship and complete this report successfully.

I would like to extend my sincere appreciation to the entire team at Zapcom Solutions Pvt Ltd. for their support and guidance throughout my internship journey. Their expertise and encouragement have been invaluable in shaping my professional growth.

I am especially thankful to Mr. Kishore Pallamereddy, CEO of Zapcom, for providing me with this valuable internship opportunity. His belief in my abilities and continuous support have been instrumental in my learning and development.

I would like to acknowledge and express my deep gratitude to my internship mentors, Mr.Yakaswamy Gadudula, Mr.Shivraj Pai, and Mr.Jankiram Reddy. Their guidance, patience, and willingness to share their knowledge have greatly contributed to my understanding of the industry and have enhanced my skills.

I would also like to thank the faculty members of the MCA department at Goa Business School, Goa University, for their valuable insights and guidance during my internship. Their academic expertise and encouragement have been invaluable.

Lastly, I would like to express my sincere appreciation to my friends and family for their unwavering support, understanding, and motivation throughout this internship period. Their belief in my abilities has been a constant source of inspiration.

I am deeply grateful to everyone mentioned above, as well as anyone else who has played a role, no matter how small, in the successful completion of my internship and the preparation of this report.

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INTRODUCTION

This internship report serves as a comprehensive overview of my full-time on-site internship experience at Zapcom in Bangalore. Commencing on 4th January 2023, this report encapsulates essential details about the organization, the projects and mini-projects I undertook, as well as other tasks and specialized training I completed during this internship period.

In the forthcoming chapters, I will delve into various aspects including the company itself, providing insights into its structure, work environment, and organizational culture. Furthermore, I will elaborate on the specific projects I had the privilege to contribute to, offering a concise overview of each project, the modules I developed, and the tasks I successfully accomplished within those modules.

This report will emphasize not only my valuable learning experiences throughout the internship but also the significant contributions I made to the organization as an intern. It will showcase the knowledge I acquired and applied while successfully fulfilling the assigned tasks.

Additionally, I will discuss the tools and technologies that were utilized during my internship, shedding light on the practical skills I gained in these areas. To provide a comprehensive overview, I will outline a timeline of my internship, highlighting the various phases and milestones I encountered along the way.

Finally, I will conclude by sharing my overall experience and reflecting on how this internship has facilitated my personal and professional growth. I am grateful for the opportunities and challenges presented during this internship, and I am excited to discuss the insights gained and the skills acquired throughout this enriching journey.

COMPANY PROFILE

Zapcom Group is a US based Product and technology Start-up focusing on Travel, Logistics, Ecommerce, Retail, Banking and Fintech domains. The Company is a Venture floated by a couple of KEY global leaders who had led MNCs globally and worked in the US for over 20 years.

Zapcom is a boutique engineering solutions firm with a product mindset that has the ability to inspire, engage and transform. The Company takes a data-centric approach to creating products, platforms, and teams that drive delightful experiences and measurable business value.

We serve our customer with a unique approach which includes Solution co-creation, Elasticity, Security first, Metrics driven, Automate, Product Mindset and Customized DevOps pods from our five global locations Dublin – California, Dallas – Texas, Heredia – Costa Rica, Hyderabad – India, Bangalore – India.

With the experience acquired over delivering 100s of projects successfully, we have designed the ways of working that are right for the client's outcome. We are passionate about building digital products and platforms that can bend revenue and cost curves. We design, build, operate and optimize technology for our clients by leading their digital transformation journey.

Website: https://zapcg.com/

TUTORIALS AND COURSES COMPLETED UNDER THE INTERNSHIP

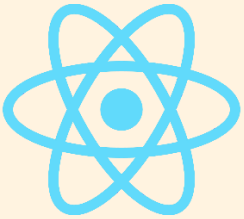
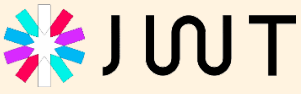
UDEMY COURSES

- Build Websites from Scratch with HTML & CSS by Brad Hussey
- The Complete JavaScript Course 2023: From Zero to Expert! by Jonas Schmedtmann
- React - The Complete Guide (incl Hooks, React Router, Redux) by Maximilian Schwarzmüller
- Node.js, Express, MongoDB & More: The Complete Bootcamp 2023 by Jonas Schmedtmann
- Testing React with Jest and React Testing Library (RTL) by Bonnie Schulkin

YOUTUBE TUTORIALS & OTHERS

- Typescript
- Material UI v5
- Agile Foundations

TOOLS AND TECHNOLOGIES USES

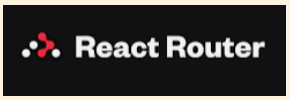
	**Node.js** is an open-source, cross-platform, back-end JavaScript runtime environment that runs on the V8 engine and executes JavaScript code outside a web browser.
	**React** is a free and open-source front-end JavaScript library for building user interfaces based on UI components. It is maintained by Meta and a community of individual developers and companies.
	**Redux** is an open-source JavaScript library for managing and centralizing application state. It is most commonly used with libraries such as React or Angular for building user interfaces. Similar to Facebook's Flux architecture, it was created by Dan Abramov and Andrew Clark.
	**JSON Web Tokens** are an open, industry standard RFC 7519 method for representing claims securely between two parties.
	**Material-UI** is a popular open-source library for React that provides customizable and visually appealing UI components, following Google's Material Design principles. It offers a wide range of pre-built components and advanced features, enabling developers to create modern and user-friendly interfaces with ease.

axios	**Axios** is a promise-based HTTP Client for node.js and the browser. It is isomorphic (= it can run in the browser and nodeJs with the same codebase). On the server-side it uses the native node.js http module, while on the client (browser) it uses XMLHttpRequests.
Express JS	**Express.js**, or simply Express, is a back end web application framework for Node.js, released as free and open-source software under the MIT License. It is designed for building web applications and APIs. It has been called the de facto standard server framework for Node.js.
GitLab	**GitLab** Inc. is the open-core company that provides GitLab, the DevOps software that combines the ability to develop, secure, and operate software in a single application. The open source software project was created by Ukrainian developer Dmitriy Zaporozhets and Dutch developer Sytse Sijbrandij.
Azure DevOps	**Azure DevOps** Server is a Microsoft product that provides version control, reporting, requirements management, project management, automated builds, testing and release management capabilities. It covers the entire application lifecycle, and enables DevOps capabilities.
	**Visual Studio Code**, also commonly referred to as VS Code, is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

	**npm** is a package manager for the JavaScript programming language maintained by npm, Inc. npm is the default package manager for the JavaScript runtime environment Node.js.
	**Postman** is an API platform for building and using APIs. Postman simplifies each step of the API lifecycle and streamlines collaboration so you can create better APIs—faster.
	**Git** is a software for tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed, data integrity, and support for distributed, non-linear workflows.
	**Formik** is a widely-used open-source library in the React ecosystem that simplifies form management. It provides an intuitive and flexible API for handling form validation, submission, and state management. With Formik, developers can easily build robust and interactive forms while reducing boilerplate code and improving development efficiency.
	**Yup** is a popular JavaScript schema validation library that enables developers to define and enforce validation rules for data objects. It provides a simple and declarative syntax for creating validation schemas, making it easy to validate and sanitize user input. With Yup, developers can ensure data integrity and enhance the overall quality and reliability of their applications.

	**Next.js** is a powerful JavaScript framework for building server-side rendered (SSR) and static websites. It is based on React and offers features such as automatic code splitting, server-side rendering, static site generation, and dynamic routing. Next.js provides a streamlined development experience with its built-in features and optimizations, making it a popular choice for building modern and scalable web applications.
	**AWS CodeCommit** is a fully-managed source control service provided by Amazon Web Services. It allows developers to securely store and manage their Git repositories in the cloud. CodeCommit offers features such as version control, branch management, and collaboration tools, enabling teams to work together on code efficiently. With its integration with other AWS services, CodeCommit provides a seamless workflow for continuous integration and deployment, making it a reliable and scalable solution for hosting and managing code repositories in the AWS ecosystem.
	**TypeScript** is a strongly-typed superset of JavaScript that adds static typing to the language. It allows developers to catch errors and bugs during development by providing compile-time type checking. TypeScript offers features such as type annotations, interfaces, classes, and modules, which enable better code organization, reusability, and maintainability. It improves productivity by providing tools like autocompletion, code navigation, and refactoring support. TypeScript is widely adopted in modern web development, making it easier to build scalable and robust applications with reduced runtime errors.

	**bcrypt** is a widely-used cryptographic hashing function designed for password hashing. It is commonly used in applications to securely store user passwords by hashing them before storing in a database. bcrypt incorporates a salt and a work factor to make the hashing process slow and resistant to brute-force attacks. This helps protect user passwords even if the database is compromised. By utilizing bcrypt, applications can enhance the security of user authentication and safeguard sensitive user information.
	**dotenv** is a popular npm package for managing environment variables in Node.js apps. It loads configuration values from a .env file into process.env, simplifying customization and sensitive data storage. It enhances security and maintainability by separating configuration from code and is widely used in Node.js projects.
	**MongoDB** is a popular NoSQL database that provides a flexible and scalable solution for storing and managing data. It is designed to handle large volumes of data, support high throughput, and offer high availability. MongoDB stores data in flexible, JSON-like documents, allowing for dynamic schema structures. It offers powerful querying capabilities, including support for indexing and aggregation pipelines. MongoDB is widely used in modern web development, providing a robust backend solution for various applications, including e-commerce platforms, content management systems, and data-intensive applications. Its rich ecosystem and extensive community support make it a go-to choice for developers seeking a scalable and efficient database solution.

	**MongoDB Atlas** is a cloud-based, fully managed database service by MongoDB. It simplifies database management and scaling, offering flexible document modeling, automatic scaling, security, and global distribution. It's a reliable solution for storing and accessing data, freeing developers from infrastructure management.
	**MongoDB Compass** is a graphical user interface (GUI) tool provided by MongoDB for visually exploring and interacting with MongoDB databases. It offers a user-friendly interface for performing CRUD operations, querying data, and managing database collections. With its intuitive features, Compass simplifies the process of database navigation, document validation, and index management. It provides developers and database administrators with a convenient way to interact with MongoDB databases, making it easier to visualize and manipulate data.
	**React Router** is a routing library for React apps that enables dynamic navigation and routing. It offers declarative routing, nested routing, route parameters, query parameters, and redirects. With React Router, developers can create smooth and intuitive navigation between pages in their React applications.
	**Mongoose** is an Object Data Modeling (ODM) library for MongoDB and Node.js. It provides a straightforward way to interact with MongoDB, allowing developers to define schemas, create models, perform database operations, and handle relationships between data. Mongoose simplifies the process of working with MongoDB by providing a higher-level abstraction and useful features like data validation, query building, middleware, and more. It is widely used in Node.js applications to streamline database interactions and enhance productivity.

validator.js	**Validator** is a versatile JavaScript library used for data validation. It provides a set of powerful and customizable validation functions to validate various types of data, including strings, numbers, dates, emails, URLs, and more. Validator helps ensure that the data inputted by users meets specific requirements and follows predefined rules. It is commonly used in both client-side and server-side JavaScript applications to validate user inputs and ensure data integrity.
Firebase	**Firebase** is a powerful development platform by Google for building mobile and web applications. It provides a range of backend services, including authentication, database, storage, hosting, and analytics. With Firebase, developers can easily build and deploy applications without managing infrastructure, allowing them to focus on creating exceptional user experiences.
mailtrap by railsware	**Mailtrap** is an email testing service for developers. It provides a safe environment to test email functionality during app development, ensuring reliable and error-free email features. With Mailtrap, developers can send and receive test emails without worrying about real recipients. It simplifies email testing and enhances the quality of email functionality in applications.
	**Live Server** is a development tool that provides a local web server with live reloading. It automatically refreshes web pages as you make changes to the code, eliminating the need for manual page reloading. It offers features like multi-browser support and CSS injection, improving the development workflow and speeding up the process.

PROOF OF CONCEPT-1

PROBLEM STATEMENT

Online food blog website.

- The admin Should be able to add a recipe(detailed recipe, nutrients content,etc.).
- The user should be able to browse the recipe.
- The recipe should have a visual image to attract readers and have some description with the image.
- Any anonymous user should be able to view the home page, but for detailed articles and collection of articles the user should be authorized.

TOOLS AND TECHNOLOGIES USED

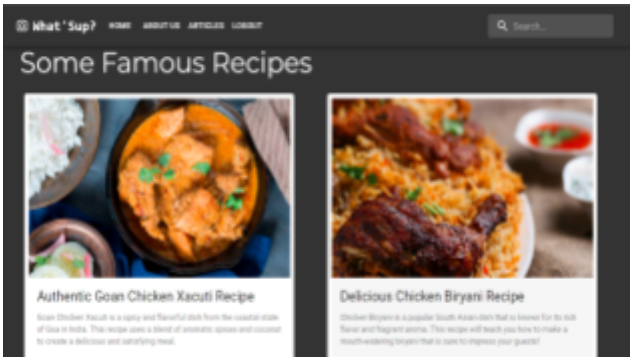
- Git
- React
- React Router
- Material UI
- Node
- Express
- Mongoose
- DotEnv
- JWT token
- MongoDB
- MongoDB Atlas
- MongoDb Compass
- Mailtrap
- Postman
- Formik
- Yup
- Bcrypt

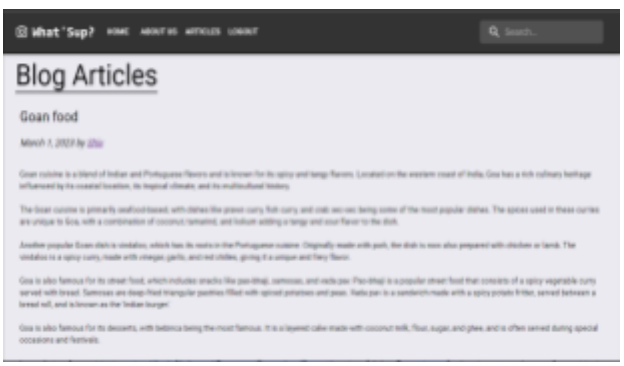
PROJECT SCREENSHOTS

User Login and registration.

Forgot Password

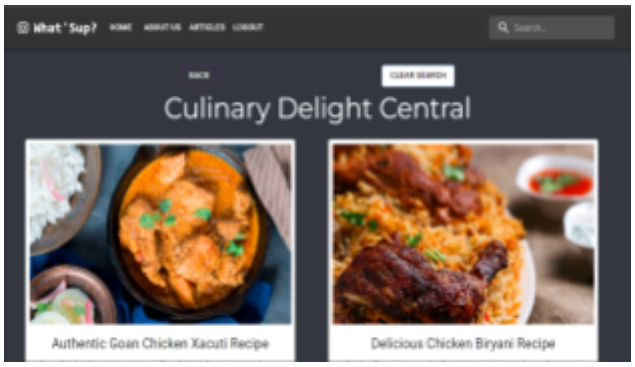
Home Page.

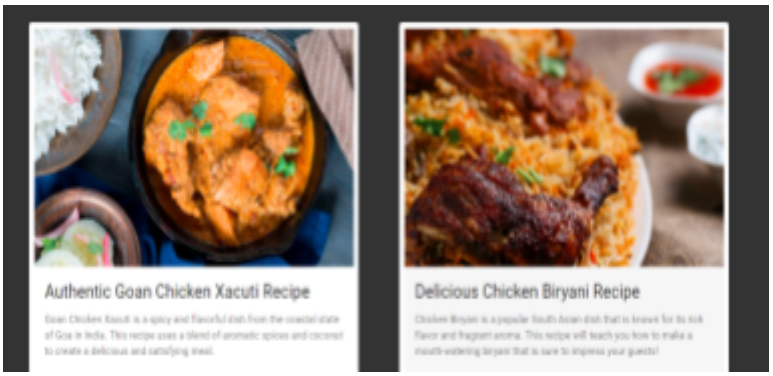




About Us Page

Articles Page





Blog Page

PROOF OF CONCEPT-2

PROBLEM STATEMENT

- Todo App using pure HTML, CSS & Javascript
- Should have options for user to add , delete and edit the list

TECHNOLOGIES AND TOOLS USED

- HTML
- CSS
- JavaScript
- Live Server

PROJECT SCREENSHOTS

Landing Page

Performing Actions

PROJECT-1 – ZAPCOM WEBSITE

PROBLEM STATEMENT

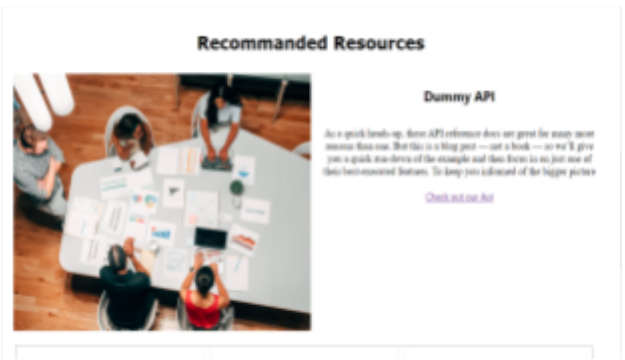
Creating a wiki site for zapcom to showcase their Api collections.

TECHNOLOGIES AND TOOLS USED

- React.js
- Module CSS
- Material UI
- React Router

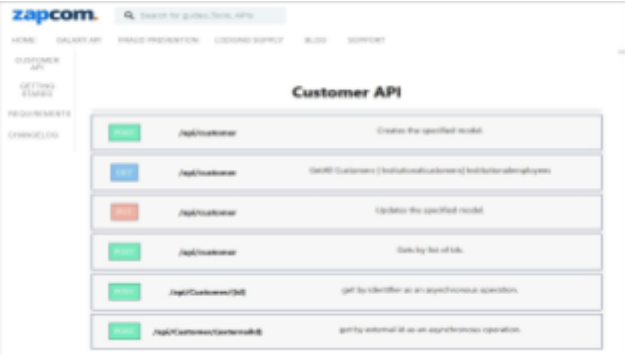
MY CONTRIBUTION

- Home Page



- Provides an overview of the company and its API collection.
- Highlights key features and benefits of the APIs.
- Includes attractive visuals and compelling content to engage users

Api Overview Page

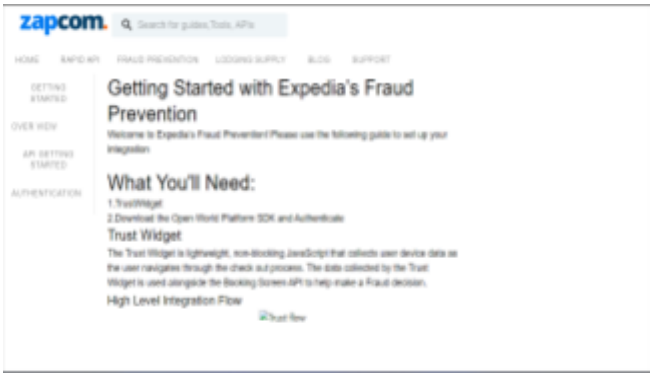


- Showcases the various APIs offered by the company.
- Provides brief descriptions and use cases for each API.
- Includes relevant documentation links for developers to explore further.

Fraud Prevention Sub Pages
1.Getting started Page

- Guides users on how to get started with the APIs.
- Includes step-by-step instructions for setting up the API.
- Provides links to the API page.

2.Fraud Prevention Page



- Focuses on the fraud prevention module of the company's offerings.
- Explains the importance of fraud prevention and its impact on businesses.
- Describes the features and capabilities of the fraud prevention solution.

Support Page

- Offers assistance and support for the Website.
- Provides external links for users to reach out for help or inquiries.
- Takes user Feedback.

PROJECT-2 – About Sure Rewards Program BY CAPILLARY

DESCRIPTION

Abbott is the parent company of PediaSure, which is a brand under its nutrition division. PediaSure is a well-known nutritional supplement specifically formulated for children. It is designed to provide essential nutrients, vitamins, and minerals to support growth, development, and overall nutrition in children. PediaSure offers a range of products, including shakes and drinks, that are trusted by parents and recommended by healthcare professionals worldwide. As part of Abbott's commitment to improving nutrition, PediaSure plays a crucial role in addressing nutritional needs and supporting healthy growth in children.

PROBLEM STATEMENT

Migrating Angular codebase to a React Next.js application, utilizing TypeScript and Material-UI to improve the code's maintainability, performance, and developer experience. With React, Next.js, TypeScript, and Material-UI, the application will provide a modern, user-friendly interface and efficient development process.

TOOLS AND TECHNOLOGIES USED

- React
- Typescript
- Next.js
- Material-UI
- Player
- AWS CodeCommit
- Visual studio code
- Microsoft Azure
- Jest
- Redux

MY CONTRIBUTION

1. About Sure Rewards Program

    - Created an About page that provides information about the application
    - Explains the functionality of the application, including the redemption of points
    - Details the step-by-step process for users to redeem points
    - Ensures users have a clear understanding of how to utilize their accumulated points effectively
    - Implemented a player component within the application
    - Utilized the Player API to integrate video playback functionality
    - Allows users to play YouTube videos directly within the application
    - Enhances the user experience by providing seamless video playback without redirecting to external platforms

2. Frequently Asked Questions

    - Developed a Frequently Asked Questions (FAQ) page within the application
    - Implemented an accordion component to display and hide question-answer pairs
    - Provides users with a convenient way to access answers to common inquiries
    - Enhances user experience by organizing and presenting information in a structured and interactive manner

3. Terms and Conditions

    - Implemented a Terms and Conditions page within the application
    - Included comprehensive details and information regarding the terms and conditions
    - Added an arrow button that allows users to quickly navigate back to the top of the page
    - Enhances user experience by providing easy access to important sections and promoting smooth scrolling

4. Profile Landing Page

    - Developed a profile landing page to provide users with personalized information and options
    - Displayed user details such as name, phone number, and membership badge (silver, gold, platinum)
    - Implemented navigation to manage the user's profile, including updating personal information
    - Included a transaction section to view and track user's transaction history
    - Provided a logout option for users to securely sign out from their account

- Enhanced user experience by presenting relevant information and actions on a single page

5. Transaction Page

- Developed a transaction page to display the user's earned and used points
- Showcased the amount of points earned and points used in a clear and organized manner
- Implemented a filter option to allow users to sort and view specific transactions based on points earned or points used
- Designed a header section that includes the user's name, a back button for easy navigation, and the remaining points balance
- Enhanced user experience by providing a comprehensive overview of the user's transaction history and facilitating easy navigation and filtering options.

6. General

- Configured the font settings to ensure a consistent typography style throughout the application
- Integrated a CMS (Content Management System) using Redux to facilitate efficient content management and data retrieval
- Redesigned the application by leveraging the theming capabilities of Material UI, allowing for a customized theme that aligns with the desired visual style
- Ensured cross-platform compatibility by making the application usable on multiple platforms, such as desktop, mobile, and tablet devices.

INTERNSHIP TIMELINE

Week 1

- Interaction with HR Team.
- Interaction with Global HR.

Week 2

- Assigned a Mentor
- Intoduction to Mentor
- Assigned a Todo App by mentor
- Working on the Todo App

Week 3

- Change of Mentor.
- Update in the Todo App
- Completion of the App
- Interaction with CEO.

Week 4

- Started a HTML & CSS crash course
- HTML attributes and Elements
- CSS Flex, Grid, etc
- Completed 6 hours Course
- Github course on YouTube
- Completed Course Assignments and projects

Week 5

- Started JavaScript Course on Udemy.
- Covered Topics : DOM manipulation, Event Handling, Style manipulation, variable environment , arrow function, etc.

Week 6

- Started with modern JavaScript concepts
- Destructuring Array & Objects, Short Circuiting, looping, logical assignments, Optional chaining
- Callback function, bind method, sets, maps,
- Array method , looping, chaining method etc

Week 7

- Change of mentors
- Introduction to new mentors
- New task : React Course on Udemy
- Explored React.js and its advantages over normal JavaScript.
- Learned about components, JSX syntax, and building components.
- Explored dynamic data formatting and working with props.
- Learned about event handling and working with event handlers.
- Explored how component functions are executed and worked with state.
- Utilized the useState hook and implemented form inputs.

Week 8

- Learned about user input handling, working with multiple states, and updating state.
- Explored child to parent component communication and lifting state up.
- Implemented controlled and uncontrolled components and rendered lists of data.
- Explored dynamic styling options and common debugging techniques.
- Continued exploring advanced React concepts such as fragments, portals, and refs.
- Overcame limitations of JSX and worked with wrappers, fragments, and portals.

Week 9

- Learned about refs, controlled vs uncontrolled components, and advanced React hooks.
- Developed a food order app project, managing state and using context API.
- Implemented useReducer hook and utilized it in a form project.
- Explored useEffect hook and its dependencies, cleanup function, and useReducer vs useState.
- Explored more advanced concepts like React optimization techniques.
- Learned about component updates, preventing unnecessary re-evaluations, and optimizing with memoization.
- Explored class-based components, their advantages, and their lifecycle methods.
- Compared class-based components with functional components and learned about error boundaries.

Week 10

- Contributed to the "Wiki Pages" project showcasing Zapcom's APIs.
- Created Home, Support, Getting Started, and Customer pages.
- Developed Home page for API overview.
- Designed Support page for user assistance.
- Implemented Getting Started page with step-by-step instructions.
- Created Customer page to showcase testimonials.
- Utilized React.js, TypeScript, and Material-UI.
- Collaborated with intern team, participated in code reviews.

Week 11

- Explored connecting to a database and sending HTTP requests.
- Utilized the Star Wars API for data retrieval.
- Set up an application and backend for the project.
- Implemented GET and POST requests using async/await and useEffects().
- Handled loading and data states, as well as HTTP errors.
- Explored custom hooks for managing HTTP requests and form handling.
- Built a Food Ordering App, including form validation and submission.
- Introduced Redux for state management, learned about its core concepts and integration with React components.

Week 12

- Explored Redux and asynchronous code handling.
- Learned different ways to send HTTP requests and implemented them.
- Utilized action creator thunk and fetched data from Firebase.
- Explored Redux DevTools for debugging and monitoring state changes.
- Introduced React Router for navigation and routing.
- Implemented different types of routes and dynamic routing.
- Worked with loaders and data handling in routes.
- Implemented error handling and validation in user input.
- Reused actions and utilized the useFetcher() hook for efficient data management.

Week 13

- Explored deferred data fetching with the defer() function.
- Implemented authentication functionality and worked with query parameters.
- Added user login and attached authentication tokens to outgoing requests.
- Implemented user logout, token expiration management, and route protection.
- Introduced Material UI and installed the necessary dependencies.
- Explored Material UI components and customized their styling.
- Utilized Material UI components to create a homepage, overcoming implementation challenges.

Week 14

- Worked on the project and created additional elements for the homepage, such as an introduction to the site and brief articles, using various Material UI components to ensure responsiveness.
- Completed the footer for the site, finalizing the homepage.
- Continued learning in the React course and gained knowledge about the deployment process of a React app on Firebase.
- Explored different animation techniques for the React app, including CSS transitions, animations, and ReactTransitionGroup.
- Implemented animations using Transition components, customized CSS class names, and managed animation timings and events.
- Explored animation lists and alternative animation packages.
  Started understanding the testing process, including what to test and how to test.
- Set up the necessary tools for testing and ran initial tests, including testing connected components.

Week 15

- Explored testing asynchronous code and worked with mocks to test asynchronous functionalities.
- Introduction to TypeScript and understanding base types, array and object types, type inference, union types, and type aliases.
- Explored function types and generics in TypeScript.
- Created a new React + TypeScript project and learned to work with components and props in a typed manner.
- Defined data models and solved exercises related to TypeScript in React projects.
- Implemented form submissions and worked with refs using TypeScript.
- Explored function props, state management, adding styles, and using context API with TypeScript.
- Reviewed and recapped the class components section of the React.js course.
- Completed the React.js course, summarizing the learnings from the Hooks, Routes, and Redux sections.

Week 16

- Explored the internal project, understanding the hierarchy of an organization, roles, and data access restrictions.
- Created the Software Requirements Specification (SRS) document, outlining all the project features.
- Started researching and getting familiar with technologies such as AWS Cognito, Amazon DynamoDB, S3, and Elastic Search through online resources like YouTube.
- Enrolled in a Node.js course on Udemy and covered topics such as reading and writing files, asynchronous nature of Node.js, creating a sample web server, routing, and HTML templating.
- Learned about parsing variables from URLs, creating and using custom modules, and managing 3rd-party package installations, setup, and updates.
- Gained an overview of how the web works, understanding HTTP in action, differentiating between front-end, backend, and API development, and exploring static and dynamic APIs.
- Explored the inner workings of Node.js, including processes, threads, the event loop, events, event-driven architecture, streams, and the require model.

Week 17

- Explored and addressed the issue of callback hell by transitioning to the use of Promises.
- Built custom Promises and learned how to consume them using Async/Await syntax.
- Explored handling multiple Promises simultaneously and waiting for their completion.
- Introduced Express framework and set up basic routing for API development.
- Learned about RESTful API design principles and implemented handling of various HTTP requests like GET, POST, PATCH, and DELETE.
- Implemented URL parameter handling and refactored routes for better code organization.
- Explored middleware and its role in the request-response cycle, and created custom middleware functions.
- Utilized third-party middleware for additional functionality and implemented new routes.
- Explored serving static files, working with environment variables, and began an introduction to MongoDB.
- Connected to a hosted MongoDB database using Atlas and Compass App, and established the database connection with the Express application.
- Learned about Mongoose, created models using Mongoose, and performed CRUD operations on documents.
- Introduced the MVC (Model-View-Controller) architecture and refactored code into a more organized structure.
- Explored advanced database operations such as filtering, sorting, limiting, pagination, and aliasing.

Week 18

- Explored key features of Next.js: server-side rendering, simplified routing, and full-stack app development.
- Created a new Next.js project, analyzed project structure, and added initial pages.
- Implemented nested paths and dynamic pages with parameters.
- Enabled smooth navigation between pages using links.
- Prepared project for scalability and organization.
- Implemented a list of meetups and added a new meetup form.
- Configured layout wrapper and programmatic navigation.
- Added custom components and utilized CSS modules for styling.
- Explored pre-rendering challenges and implemented static site generation (SSG).
- Worked with server-side rendering (SSR), data fetching, and MongoDB integration.

Week 19

- Started working on the migration from Angular to React.
- Completed the migration of several reusable components.
- Currently focusing on the program module migration.
- Successfully completed the "About Sure Reward" page migration.
- Started working on the second page migration.

Week 20

- Worked on the creation of the user interface (UI) for the program module.
- Implemented UI components for the FAQ, terms and conditions, and about Sure Rewards sections.
- Designed and developed the profile module, including the profile landing page, transaction page, and manage user landing page.
- Started the TypeScript conversion process for all components

Week 21

- Created a generic popup component with the ability to dynamically add buttons and assign functions to them.
- Addressed code issues and made necessary corrections based on the review feedback.
- Redesigned the FAQ component and implemented dynamic styling to achieve the desired output for the page.
- Started training on Jest for unit testing purposes.
- Integrated CMS (Content Management System) into the project to enable content management and updates.
- Configured Redux for state management, setting up the necessary actions, reducers, and store.
- Implemented global CSS configuration to set up a consistent font style throughout the application.

MY EXPERIENCE OF INTERNSHIP

My Internship at Zapcom has been a wonderful experience, it was a ride with ups and downs facing challenges every day. I was intrigued by the family culture at Zapcom after speaking to some of my seniors who had gone to Zapcom through university placement. As Zapcom provides technology solutions on a global scale, I felt that an internship at Zapcom was a great platform for me to gain deeper insights into the IT industry.

What I like about my internship experience

I like how interns are treated just like full-time associates and get assigned actual and meaningful tasks which are crucial and beneficial to the company's clients. It feels great to be a part of the actual development team working for a client. The most memorable part of my internship was when I completed one of my sprint tasks in time assigned to me.Even though I only joined as an intern for the past five months, I still felt a strong sense of achievement by completing the task.

In addition to my tasks, we had engaging team-building events at Zapcom. We went to an adventure park for outdoor activities like kayaking and team-building exercises. Monthly celebrations included birthdays, anniversaries, and welcoming new employees. These events provided a fun and enjoyable opportunity to connect with fellow team members and strengthen our bond.

What I learnt from my internship

I gained deeper insights into the IT industry and it will help me significantly with my career planning. I developed a better understanding of the career path of a web developer through the internship, helping me to make an informed career decision. My biggest takeaway would be the new long-term relationships and connections which I had forged with my colleague and fellow interns at Zapcom.

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