



INTERNSHIP REPORT

ARYAN KUSHWAHA

2202

INTERNSHIP DONE AT GYTWORKZ TECHNOLOGIES PVT LTD

An Internship Report for
Course code and Course Title: CSA-652 Industry Internship
Credits: 16
Submitted in partial fulfilment of Master's Degree
Master of Computer Applications
by

ARYAN KUSHWAHA

Seat Number: 22P0320027

ABC ID: 978-311-631-773

PRN: 201801594

Under the Mentorship of

MR. GANDHAR SANZAGIRY

Goa Business School
Master of Computer Applications



GOA UNIVERSITY

Date: June 2024

Examined by:

Seal of the School/Dept

DECLARATION BY STUDENT

I hereby declare that the data presented in this Internship report entitled, "Internship done at Gytworkz Technologies Pvt Ltd" is based on the results of investigations carried out by me in the Master of Computer Applications at Gytworkz Technologies, under the mentorship of Mr. Gandhar Sanzagiry and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities/College will be not be responsible for the correctness of observations/experimental or other findings given the internship report/work.

I hereby authorize the University/College authorities to upload this dissertation on the dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

Aryan Kushwaha

Seat no: 22P0320027

Date: 13 June 2024

Place: Goa University

COMPLETION CERTIFICATE

This is to certify that the internship report "Internship done at Gytworkz Technologies Pvt Ltd" is a bonafide work carried out by Mr. Aryan Kushwaha, under my mentorship in partial fulfilment of the requirements for the award of the degree of Master of Computer Applications in the Discipline of Computer Science and Technology at the Goa Business School, Goa University.

Date:

Signature and Name of Mentor

Signature of Dean of School

School Stamp

Date:

Place: Goa University

CONTENTS

Chapter	Particulars	Page Numbers
	Offer Letter	i
	Internship (Completion) certificate	ii
	Acknowledgment	iii
	Executive summary	iv
1.	Organization/Company	1 - 4
	1.1 Birds-eye-view	
	1.2 Products/services	
	1.2.1 Services	
	1.2.2 How Are We Different?	
	1.2.3 How Do We Do This?	
	1.2.4 Why Us?	
2.	Projects	5 - 16
	2.1 Project - Secude Dashboard	
	2.1.1 Overview	
	2.1.2 Scope	
	2.1.3 Key Features	
	2.1.4 Tasks Handled	
	2.2 Project - Idhao	
	2.2.1 Tasks Handled	
3.	Tools & Technologies Used	17 - 19
4.	Learnings	20 - 22
	4.1 Skills Developed	
	4.2 Knowledge Gained	
	4.3 Professional Growth	

CONTENTS

Chapter	Particulars	Page Numbers
5.	Challenges	23 - 24
6.	Internship Diary	25 - 27
	Appendix I: Samples of the work done	28 - 29
	Appendix II: Photos while you are at work	30 - 31

Letter of Offer

2nd January 2024

Aryan Kushwaha

294/10/2, Kushwaha Apts, Sarvem Vaddo, Guirim, Mapusa, Bardez,
Goa - 403507

GYTWorkz is engaged in the design, development and sales of software products and services.

This letter defines the terms and conditions agreed between both the parties.

TERMS & CONDITIONS

- 1) This offer is effective from 2nd January 2024
- 2) This offer is for **Six months**. On completion of six months, based on your performance your internship may be concluded or extended or you may be converted to a full-time employee at mutual consent.
- 3) On conversion as a full-time employee based on your performance CTC would range from 4 LPA to 6 LPA.
- 4) Recipient agrees to work for minimum of 8 hours per day for project deliverables.
- 5) This offer may be terminated by either party by giving 15 days notice.
- 6) If you require leave during your period of work at the company, the same has to be pre-approved by your reporting manager.
- 7) Recipient agrees that he/she will be available for the Management/Customer calls which are related to specific assigned work/related to project.
- 8) If you're absent for over 5 consecutive days without your RM's approval, it's considered unauthorized. You'll receive a cautionary letter regarding company policy and be required to return to duty promptly. Failure to do so will result in being considered as absconding and voluntarily abandoning your services, leading to termination of your services with the company.
- 9) In addition to the above, the Company has the right to terminate your services without notice immediately, in case of any misconduct or breach of your duties and responsibilities.
- 10) Recipient agrees to take the responsibility of the quality deliverables of the assigned projects and meet the customer expectations.
- 11) GYTWorkz agrees to pay **INR 22222** per month, for the approved hours spent on the project.
- 12) Payment terms & conditions: Monthly payments will be processed as per the Approved Hours based on the invoice submitted. 10% of TDS is deducted.

For GYTWorkz Technologies Private Limited



Rachana Kothapally

HR Business Partner

Human Resource Department

I have read and understood the terms and conditions, and hereby signify my acceptance of the same.

Signature: 

Name: Aryan Kushwaha

Title: SDE-Consultant

Date: 28/12/2023



May 31, 2024

CERTIFICATE

This is to certify that Mr. Aryan Kushwaha, a student of Goa Business School enrolled in the MCA program, successfully completed an internship focusing on "Full-Stack Development" at GYTWorkz Technologies Pvt. Ltd from January 2, 2024, to July 1, 2024.

During his internship, Aryan demonstrated a strong curiosity to learn and a high level of dedication. We wish him a successful career ahead!

A handwritten signature in black ink, appearing to read 'Aryan', is written over a light blue circular stamp that contains the text 'GYTWORKZ'.

Yours sincerely
GYTWorkz Technologies Pvt. Ltd

ACKNOWLEDGEMENT

The internship opportunity I had with GYTWorkz Technologies Pvt Ltd was an invaluable experience for my learning and professional growth. I am truly fortunate to have been part of such a prestigious organization. This opportunity allowed me to meet and learn from many incredible professionals who guided me throughout my training. I am deeply grateful for the support and encouragement I received, and I would like to express my sincere appreciation to everyone involved.

First and foremost, I would like to extend my heartfelt thanks to Mr. Bhasker Reddy Kottapally, CEO of GYTWorkz, for believing in my potential and giving me this chance. His leadership and vision made this internship possible for me.

I am especially grateful to Mr. Gandhar Sanzagiry, Principal Architect at GYTWorkz, for being an outstanding mentor. His profound knowledge, friendly demeanor, and constant encouragement greatly enriched my learning experience. His dedication to excellence in web development was truly inspiring.

I also want to thank Mr. Bharadwaj Sukenapelly from the HR team at GYTWorkz for creating a welcoming and supportive environment. Their efforts ensured that I felt comfortable and valued throughout my internship.

My gratitude extends to Dr. Jyoti Pawar, Dean of Goa Business School, Goa University; Preeti Khorjuvekar, internal guide for my internship and all the other faculty members of MCA. Their unwavering support and encouragement were instrumental in my success.

I would also like to thank my parents, teachers, and friends. Their unwavering support and belief in me have been a constant source of motivation.

This internship has been a significant milestone in my career development. I am committed to applying the knowledge and skills I have gained to achieve my career goals.

EXECUTIVE SUMMARY

The purpose of this report is to summarize, reflect, analyze, and synthesize my full-time, on-site internship at GYTWorkz Technologies Pvt Ltd, Hyderabad. I joined as an intern at GYTWorkz on January 2, 2024, and have been here since then. This report contains a collection of projects and other tasks that I have worked on during my internship at GYTWorkz, along with the new learnings, challenges, and experiences that I have encountered since the beginning of this internship period.

In the chapters that follow, I will discuss the company and the work environment. I will then elaborate on the projects I worked on, providing brief information about each project, the components I built, and the tasks I completed within those components.

This report highlights my learning experiences and contributions to the organization as an intern. It will describe the knowledge I gained by successfully completing the tasks that were assigned to me.

I will also talk about the tools and technologies that were used during my internship, followed by a detailed internship diary/timeline. I have also shared my overall experience and how it has helped me grow both personally and professionally.

CHAPTER 1: ORGANIZATION/COMPANY

1.1 BIRDS-EYE-VIEW

Name of Company: GYTWorkz Technologies Pvt. Ltd

Address: 1-89/3/4, Raghuma Towers, 4th Floor, Hi-Tech City Main Road, Madhapur, Hyderabad, Telangana 500081

Office Phone Number: +91 7989252240

Email id: support@gytworkz.com

Website: www.gytworkz.com

Industry: IT Services and IT Consulting

Headquarters: Hyderabad, Telangana

Founded: 2019

GYTWorkz is a product engineering company of a committed team with one strong agenda: Design and develop for the cloud. We clearly understand: "Cloud is not a location; it is a Method". Started in 2019, we have strongly poised to partner with startup founders to make their ideas a reality. GYTWorkz has thus far helped multiple startup founders visualize their ideas. We have been successfully playing the role of a tech co-founder for various startups.

Start-ups we are associated with: FilFi, ReFrame (Engage), Intro, IOTRL.

Beyond startups, GYTWorkz has delivered solutions in Application Engineering (NodeJS, Java), Mobile App Development (Android, IOS, React Native, Flutter), Data Platforms (Pipelines, Analytics, BI) for global companies successfully.

Specialties

AWS, Azure, Cloud, Angular, React, React Native, Flutter, IoT, vue.js, cloud performance optimization, and cloud cost optimization.



1.2 PRODUCTS/SERVICES

1.2.1 Services

Product Development

Our expertise in building quality products attracts clients to us. We take pride in creating robust software tools and mobile applications that enhance operational efficiency. Additionally, we develop precise SaaS products with multi-tier architecture that integrate seamlessly with other software solutions, fostering a reliable IT ecosystem.

Data Engineering

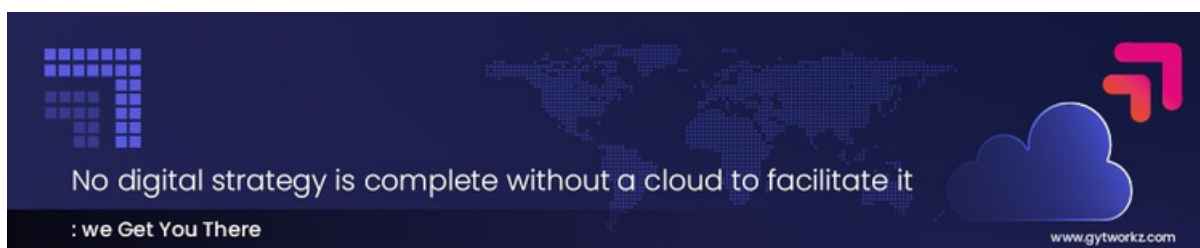
At GYTWorkz, our skilled data engineers create data pipelines to transform raw data into valuable insights. We go beyond structuring data, enabling powerful analytics and smart decision-making. We build Data Lakes, Data Pipelines, and Data Analytics to turn unstructured data into actionable business value.

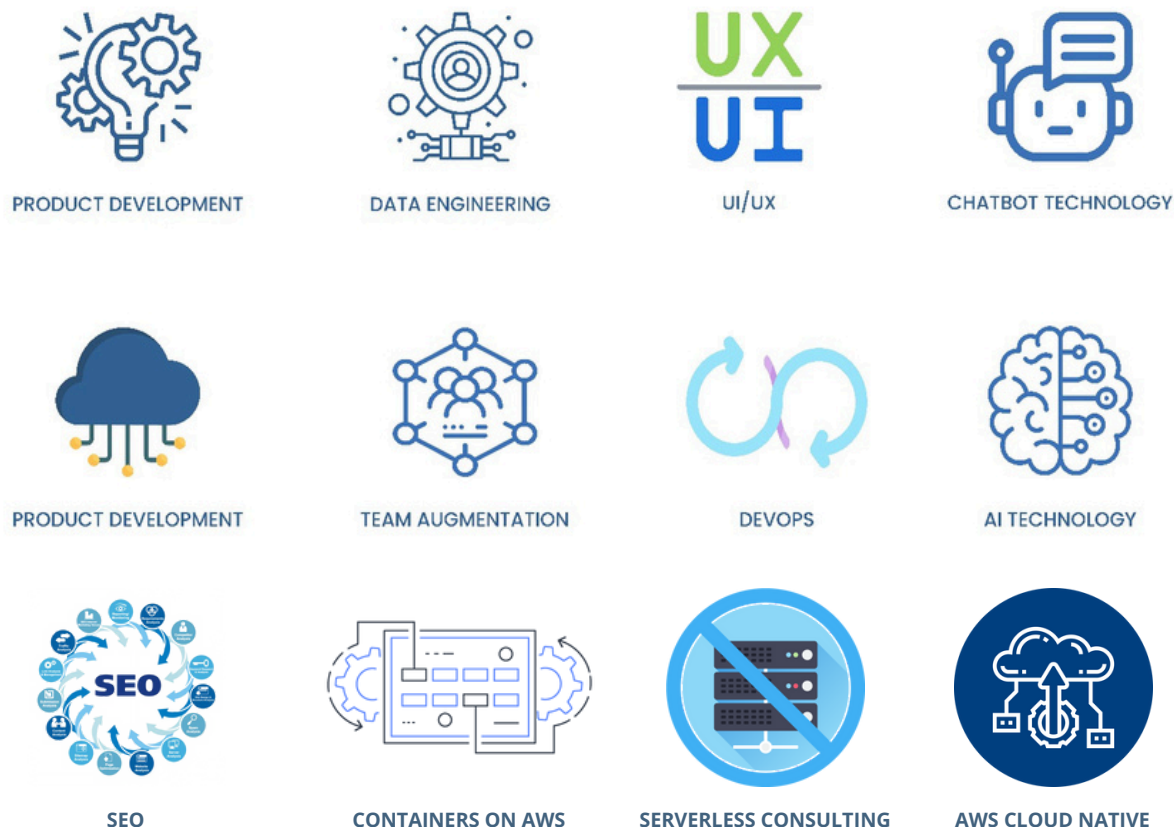
UI/UX

We help build a connect between client objectives and customer needs and in that process, create a very intuitive, interactive and user-friendly design. We are clients too, hence realize the importance of understanding client perspective and align with the objectives.

DevOps

DevOps integrates people, technology, and processes to streamline and automate the entire product development lifecycle, providing value to customers. It reduces hassles from development to release, ensuring fewer errors and inefficiencies in the software development lifecycle.





1.2.2 How Are We Different?

Most of the IT services industry in India is headcount driven, and unfortunately, not value driven. Delivering quality solutions has become an aspiration and a milestone to achieve these days. This is where GYTWorkz comes into play. At GYTWorkz, Quality is just a way of life. Our priority is to build teams focused on quality and not just time.

1.2.3 How Do We Do This?

We achieve this by focusing on the most important aspect of an IT services value chain – the engineer. Engineers, sadly, are either under-utilized and or mis-directed. They are taught to deliver on time and in that process, quality is side-lined. GYTWorkz aims to change that.

1.2.4 Why Us?

We create venues and opportunities to help teams learn from each other even as they blend together to have fun at work. Our focus is also on creating strong, committed and progressive teams who enjoy their stay. For us, achieving good numbers is just the by-product of our commitment to client success with a quality driven approach.

CHAPTER 2: PROJECTS

2.1 PROJECT - SECUDE DASHBOARD

2.1.1 Overview

Secude specializes in data security and compliance solutions for enterprises using SAP software. Their key products include:

1. HALOCAD: Ensures secure collaboration and sharing of CAD files with end-to-end encryption and access controls.
2. HALOCORE: Protects SAP data at the source by securing sensitive information before it leaves the SAP environment, safeguarding exports, downloads, and transfers.

Secude helps businesses comply with data protection regulations like GDPR and integrates seamlessly with existing enterprise systems, particularly SAP, without disrupting workflows. They offer consulting and support services to assess data security needs, implement solutions, and ensure ongoing compliance. Their primary focus is on industries such as manufacturing, engineering, and technology, where data security and intellectual property protection are critical.

2.1.2 Scope

The project work involved the development of an advanced web application portal dedicated to a comprehensive log dashboard. Our primary focus in this scope was the integration of key features, enabling users to effortlessly upload log files. The dashboard we were developing was to be integrated into the Secude web app, which was already in production.

2.1.3 Key Features

- **Seamless Integration:** Integrated the log dashboard into Secude's existing web applications using a provided code snippet, maintaining security through existing authentication protocols (OAuth2).
- **Data Presentation Options:** Top 10/Last X entries/days/hours or other values, as discussed during the requirements phase.
- **Date/Time Dimensions:** Support for various Date/Time dimensions.
- **Dynamic Filtering:** Dynamic filtering with the ability to exclude selected values and refresh the charts.
- **Chart Types:** Support for multiple chart types including Line, bar charts, pie charts, radar charts and any other types decided during the requirements phase.
- **Setting Limits:** Ability to set maximum or minimum values.
- **Filtering Capability:** Filtering out capability to tailor the displayed data.
- **Dashboard Arrangement:** Charts can be arranged in various ways, including similar charts in one dashboard or standalone charts with no connection to others.
- **Hiding Charts:** Capability to Enable/Disable charts manually.
- **Uploading New Data:** Capability to upload new data, pending discussions about the backend infrastructure and requirements.
- **Creating Default Dashboards:** Capability to create default dashboards, offering a predefined layout for quick access and convenience.
- **Removing Charts:** Capability to remove existing charts as needed.
- **Top 10 A feature to display the Top 10 entries is incorporated, offering a quick snapshot of the most significant data points within the dataset.**
- **Displaying of Old Upload Files Records(historical Data)**
- **Ability to delete historical data.**
- **Scheduler:** Auto read the path set periodically for log files in that directory.
- **Features for Labeling IP ranges and Grouping of file Types together.**

2.1.4 Tasks Handled

1) Setup up of the Frontend boiler plate.

- Created a frontend folder with Angular version, node version and dependencies provided by the client.
- Created a frontend structure based on the leads guidance.
- Initialized the code to git repository.

2) Setup up of the Backend boiler plate.

- created a backend folder with node version and dependencies provided by the client.
- Created a backend structure based on the leads guidance.
- Initialized the code to git repository.

3) Coming up with a UI design, as to meet clients requirement.

- Created a wire frame on figma.
- Using Wireframe designed a basic UI design using figma.
- Following the color palette, font style given by the client.

4) Understanding the log files thoroughly(different type of logs LEEF ,CEF & JSON)

- listed all the logs data in an excel sheet for all the type of logs.
- compared the different logs files with each other.

5) Mapping the CEF & LEEF to the JSON file.

- mapped common fields from different log files with each other.

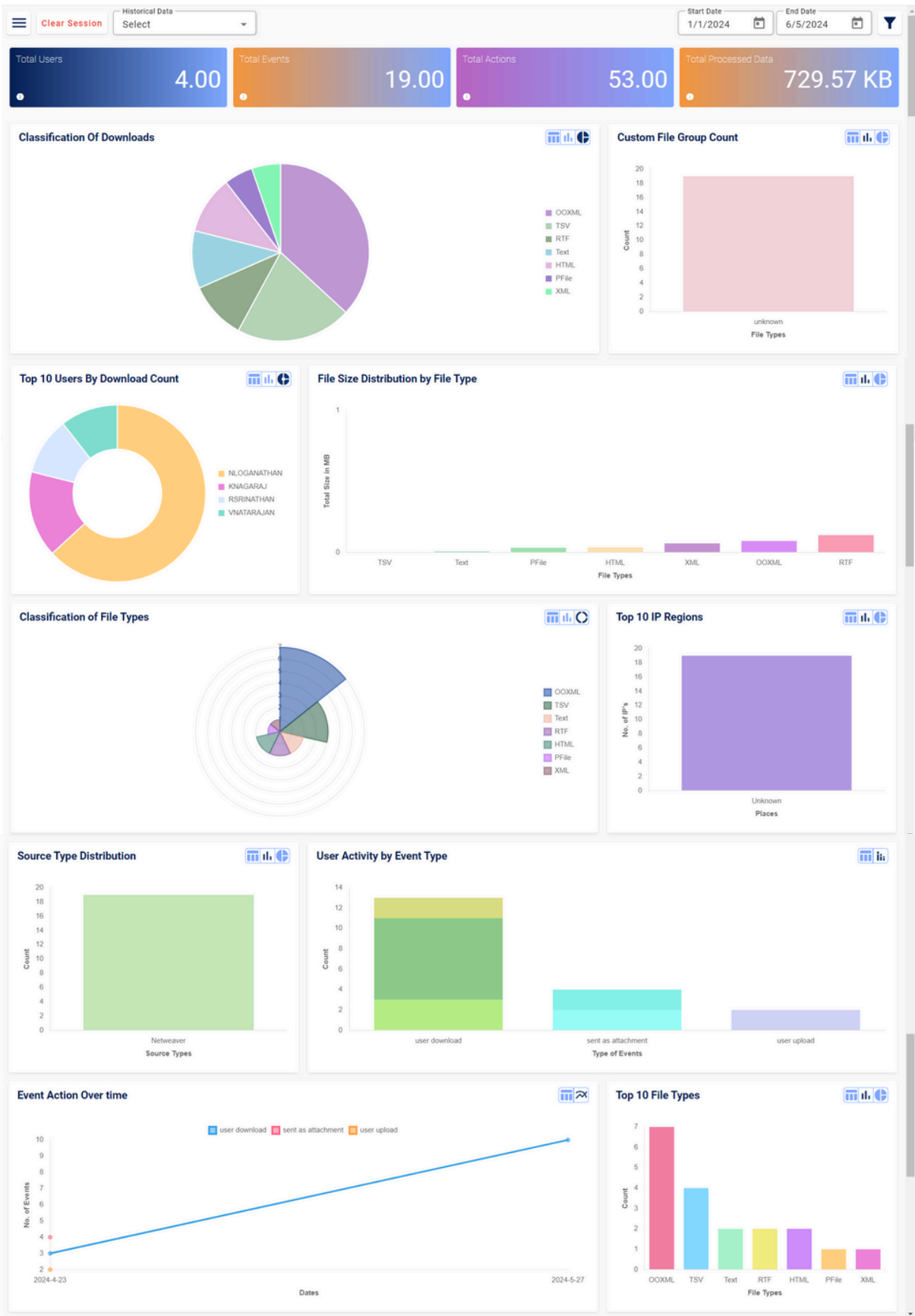
6) Deciding what useful charts can be shown to the user.

- From the listing down insightful charts that can be shown to the user.
- Choosing what chart type will fit for that chart data.

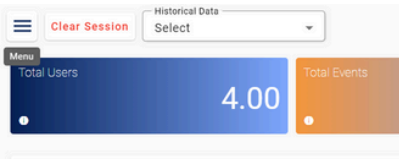
7) Meet with Clients.

- Meet Twice a week to get feedback and any suggestions.
- Showcasing the work done.

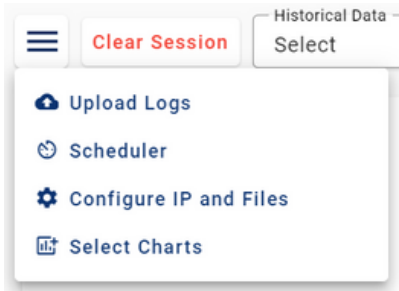
8) Development of the Dashboard as per the UI.



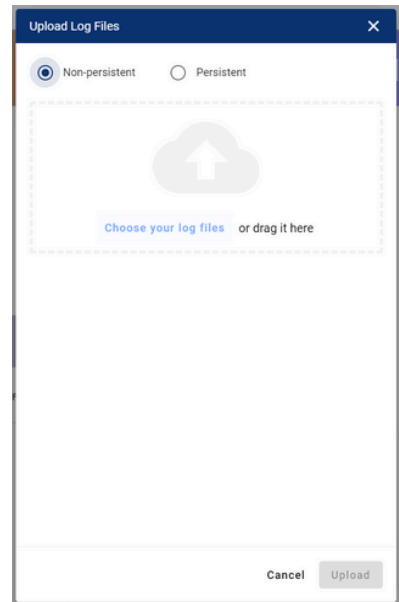
9) Creating a Dialog box for the Log File Upload.



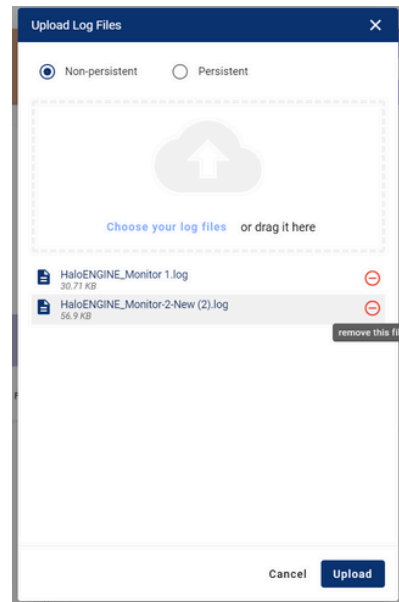
Click on the menu to select from list of options



Click on the Upload Logs



Upload files by Dropping or selecting



Upload or Remove the Files selected in the list

10) Adding Charts to the Dashboards.

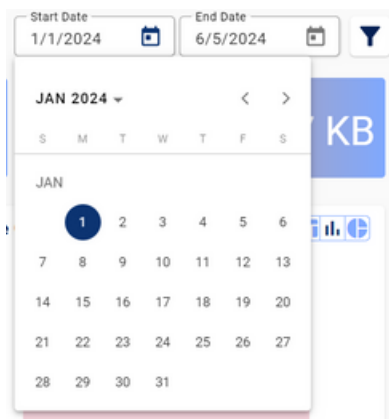
- Making the charts responsive.
- Detailing the Charts on what details to show.

11) Integrating API's data with the charts.

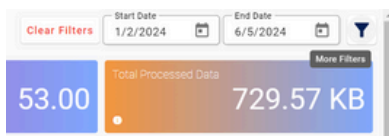
- Hitting API's to fetch the data for the charts.
- Modeling the data coming from the backend with the charts.

12) Adding of Filters.

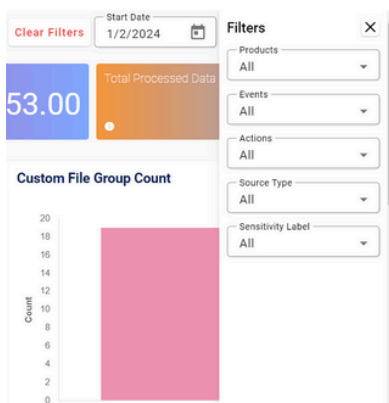
- Filters to filter data based on date and other parameters for the charts



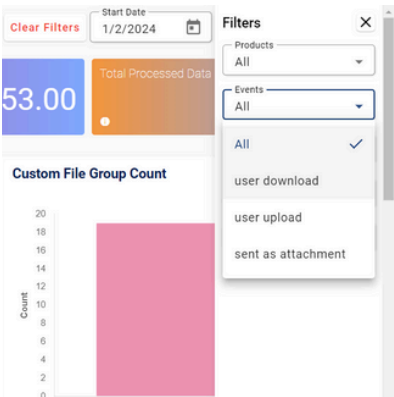
Date Filters to Select Start Date and End Date



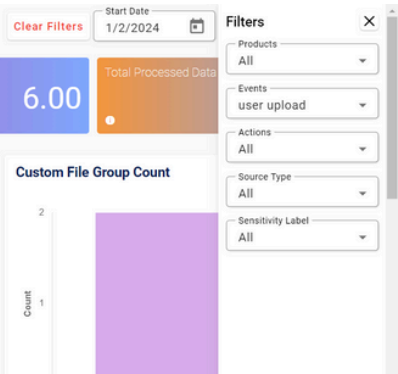
Click On Filter Icon For More Filters



Click on the Drop Down to select a filter

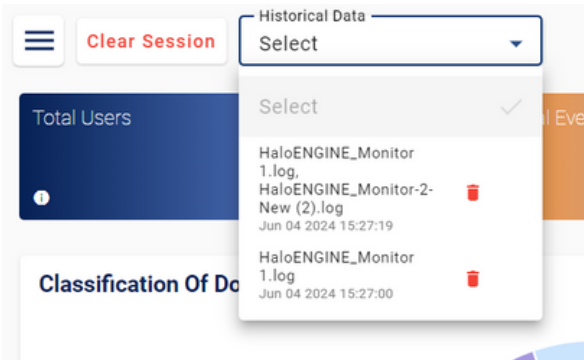


Select From the listed option

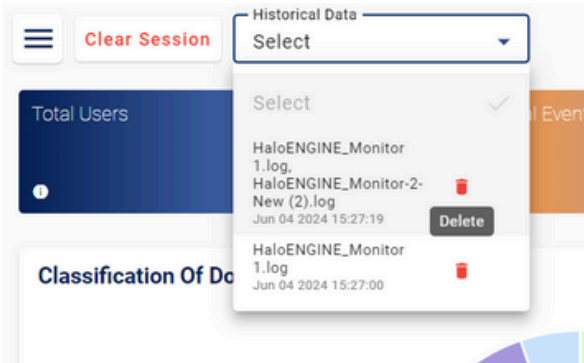


New filtered data will show up in the charts

13) Adding a dropdown for showing historical data.



Click on the Dropdown and select a record to view in the charts.



You can also delete a record data by clicking on delete icon

14) Creating a Dialog box for setting custom labels for IP ranges.

The screenshot shows a dialog box titled "Configure IP Addresses & File Groups" with a close button (X) in the top right corner. It has two tabs: "IP Config" (selected) and "Files Config". In the "IP Config" tab, there is a "+ Add Row" button in blue. Below it, there are two input fields: "IP Address 1*" and "Place*", each followed by a red "X" icon. At the bottom of the dialog, there are "Cancel" and "Save" buttons.

Add IP Address and the Corresponding Place,
which will affect the IP regions Chart

15) Creating a Dialog box for setting custom labels for a group of File Types.

The screenshot shows the same dialog box, but with the "Files Config" tab selected. In this tab, there is a "+ Add Row" button in blue. Below it, there are two input fields: "File Types 1*" containing the text "txt,docx,xml" and "Name*" containing the text "Office Files", each followed by a red "X" icon. At the bottom of the dialog, there are "Cancel" and "Save" buttons.

Add File Types and the Corresponding label, which
will affect the File Group Chart

16) Creating a Dialog box for setting scheduler path with reads the directory for log files.

Path	Age (in days)
c:\Desktop	1
C:\Users\Aryan Kushwaha\Down	3

Add File path of the log file to be read and the age For how many days to read that path

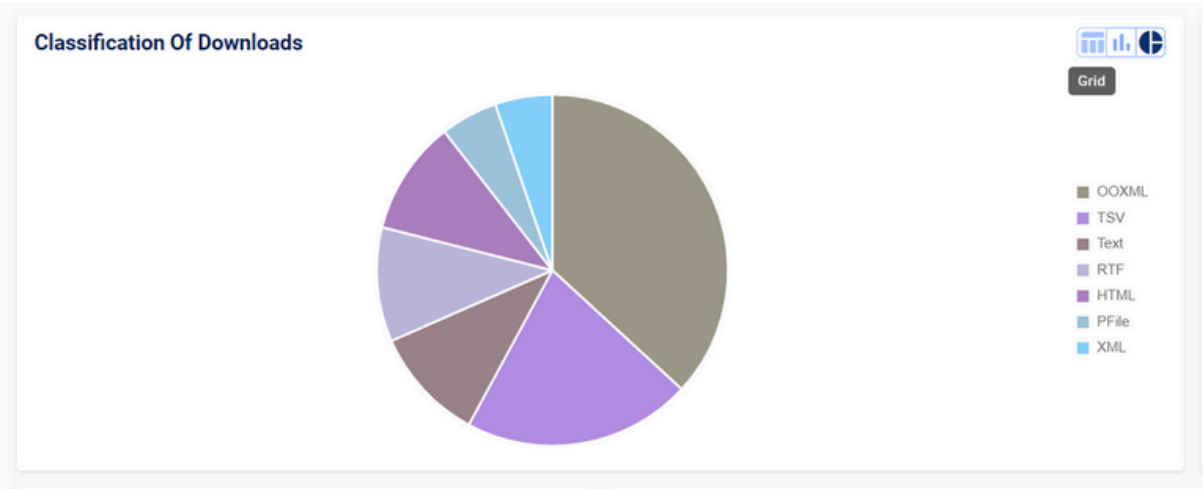
17) Creating a Dashboard config Dialog Box where Charts can be rearranged, enabled/disabled and reset to default.

The default order of the charts

charts can be enabled/disabled

Each chart item can be dragged and rearranged which will reflect on the main dashboard

18) Adding a toggle button to change the type of charts shown.



Users can change the type of charts displayed

Classification Of Downloads	
Classificationtype	Count
OOXML	14
TSV	8
Text	4
RTF	4
HTML	4
PFile	2
XML	2

After Clicking the chart Changes to that specific Chart Type

2.2 PROJECT - IDHAO

2.2.1 Tasks Handled

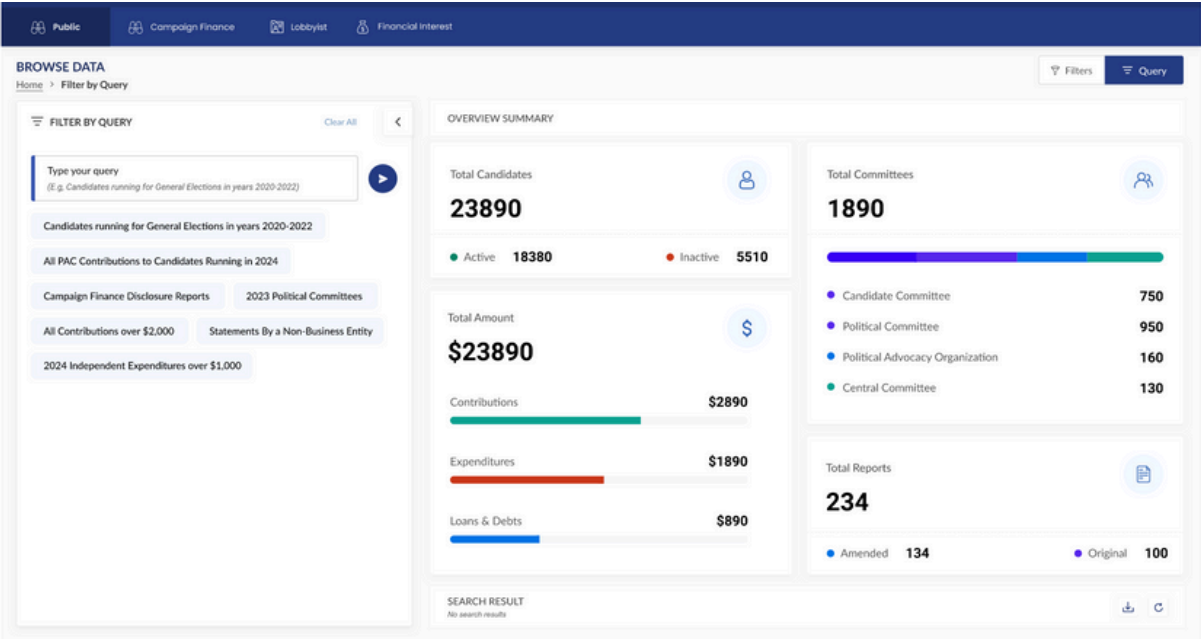
- 1) Created UI components as per the designs provided.
- 2) Created Charts as required using chart.js.
- 3) Integrated the API's for many existing Components and also for the charts.

The screenshot displays a web application interface for browsing data. At the top, there is a dark blue navigation bar with four tabs: 'Public', 'Campaign Finance', 'Lobbyist', and 'Financial'. Below this, the main heading is 'BROWSE DATA', followed by a breadcrumb trail 'Home > Filter by Query'.

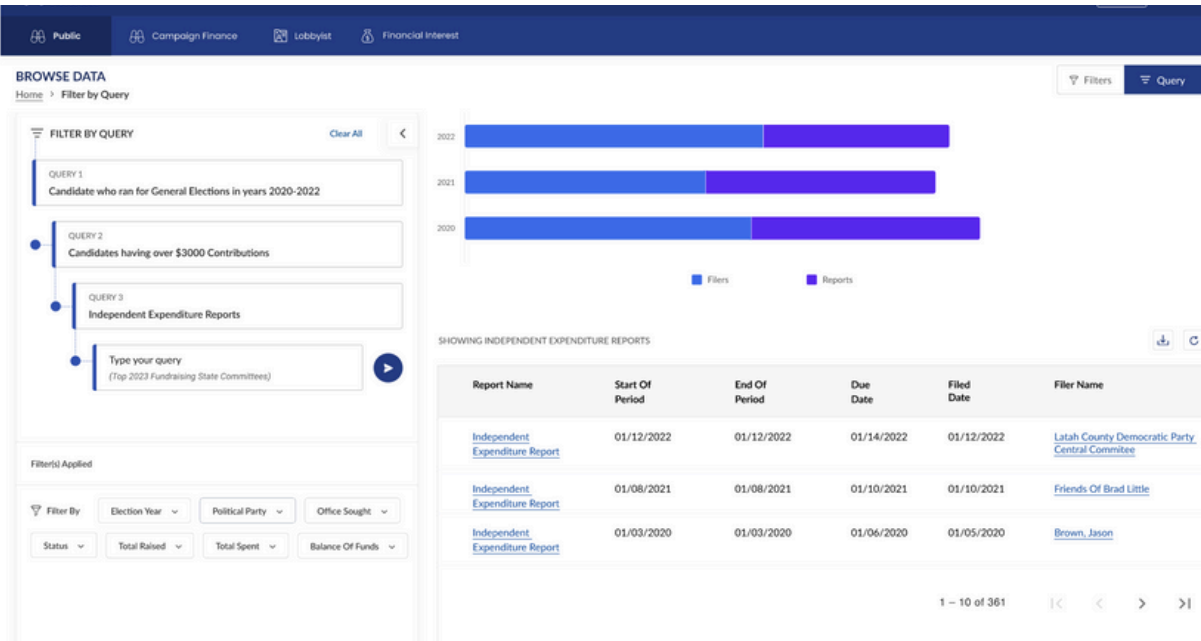
The central part of the interface is a 'FILTER BY QUERY' modal or section. It features a search bar with the text 'Candidate who ran for General Elections in years 2020-2022'. Below the search bar, a 'Did you mean:' section suggests 'Candidates who ran for General Elections in years 2020-2022?' with a green checkmark and a red 'X' button. A 'Type your query' input field is also present, with a placeholder example '(E.g, Candidates having over \$3000 Contributions)' and a blue play button.

At the bottom, there is a 'Filter(s) Applied' section. It includes a 'Filter By' dropdown menu and several filter chips: 'Election Year', 'Political Party', 'Office Sought', 'Status', 'Total Raised', 'Total Spent', and 'Balance Of Funds'. Each chip has a dropdown arrow.

Created the UI for Did you mean Section component & Filter By Chips



Made the UI For the Chips under the Query filter and All the cards in the overview summary



Made the UI For the Chart using Chart.js and the table below the charts with paginator

CHAPTER 3: TOOLS & TECHNOLOGIES USED DURING THE INTERNSHIP



ANGULAR

Angular is an open-source, JavaScript framework written in TypeScript. Google maintains it, and its primary purpose is to develop single-page applications. As a framework, Angular has clear advantages while also providing a standard structure for developers to work with.



JAVASCRIPT

JavaScript (JS) is a cross-platform, object-oriented programming language used by developers to make web pages interactive. It allows developers to create dynamically updating content, use animations, pop-up menus, clickable buttons, control multimedia, etc.



TYPESCRIPT

TypeScript is a programming language that adds extra functionality to JavaScript. JavaScript was never intended to drive complex frontend and backend applications. It was initially designed to add simple interactivity to websites; for example, to make clicky buttons and animate drop-down menus.



NODE.JS

Node.js is an open-source and cross-platform JavaScript runtime environment. It is a powerful tool suitable for a wide range of projects. Node.js stands out as a game-changer. Imagine using the power of JavaScript not only in your browser but also on the server side.



MONGODB

MongoDB is built on a scale-out architecture that has become popular with developers of all kinds for developing scalable applications with evolving data schemas. As a document database, MongoDB makes it easy for developers to store structured or unstructured data. It uses a JSON-like format to store documents.



JIRA

Jira is agile project management tool used by teams to plan, track, release and support world-class software with confidence. It is the single source of truth for your entire development lifecycle, empowering autonomous teams with the context to move quickly while staying connected to the greater business goal.



BITBUCKET

Bitbucket Cloud is a Git based code hosting and collaboration tool, built for teams. Bitbucket's best-in-class Jira and Trello integrations are designed to bring the entire software team together to execute on a project.



STRAPI

Strapi is the next-gen headless CMS, open-source, javascript, enabling content-rich experiences to be created, managed and exposed to any digital device.



STORYBOOK

Storybook is a frontend workshop for building UI components and pages in isolation. Thousands of teams use it for UI development, testing, and documentation. It's open source and free.



FIGMA

Figma design is for people to create, share, and test designs for websites, mobile apps, and other digital products and experiences. It is a popular tool for designers, product managers, writers and developers and helps anyone involved in the design process contribute, give feedback, and make better decisions, faster.



GIT

Git is a DevOps tool used for source code management. It is a free and open-source version control system used to handle small to very large projects efficiently. Git is used to tracking changes in the source code, enabling multiple developers to work together on non-linear development.



NPM

Node package manager (npm) is a package manager and a software register but it's also a place where developers can find, build and manage code packages. Right now, npm contains over 800,000 packages for various applications, from front-end and robotics to mobile apps.



CHART.JS

Chart.js is a free JavaScript library for making HTML-based charts. It is one of the simplest visualization libraries for JavaScript, and comes with the following built-in chart types: Scatter Plot. Line Chart.



POSTMAN

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.

CHAPTER 4: LEARNINGS

4.1 SKILLS DEVELOPED

- Strapi with React and PostgreSQL integration
- Using Postman for API testing and data submission
- SCSS for styling Angular applications
- Creating responsive and dynamic web applications
- Integrating third-party libraries and components (e.g., Storybook, Moment.js)
- Advanced usage of Angular and Angular Material
- Creating custom form elements in Angular
- Developing Angular components and services
- Implementing drag-and-drop functionality in Angular tables
- Working with Angular forms, including reactive forms
- Implementing Chart.js in Angular for data visualization
- Customizing Chart.js legends and drilldown functionality
- Handling file uploads and validations in Angular
- Node.js with Express.js
- TypeScript with Node.js
- Creating Express routes and controllers
- Using Mongoose for MongoDB with Node.js

4.2 KNOWLEDGE GAINED

- The capabilities and versatility of Angular for building dynamic and responsive single-page applications (SPAs).
- Advanced features of Angular Material for creating sophisticated and consistent UI components.
- The benefits of using SCSS for scalable and maintainable styling in large projects.
- The use of data visualization libraries like Chart.js to create interactive and insightful charts.
- The importance of form handling and validation in Angular to ensure robust and user-friendly applications.
- The integration of Strapi as a headless CMS with React for flexible and powerful content management solutions.
- The advantages of using REST APIs for efficient data communication between frontend and backend.
- Insights into using Postman for testing and debugging APIs to ensure reliability and performance.
- The role of documentation tools like Storybook in maintaining comprehensive and accessible documentation for UI components.
- The importance of version control systems like Git in managing project versions and collaboration.
- The use of Moment.js for effective date handling in applications.
- Practical knowledge in debugging and resolving common errors encountered during development.
- The trend towards using modular and component-based architectures for better scalability and maintainability.
- The growing emphasis on responsive and user-friendly UI/UX design in web applications.
- The importance of understanding and adhering to legal and regulatory requirements in property and utility management.
- The significance of thorough research and understanding of organizational structures to enhance project planning and execution.

4.3 PROFESSIONAL GROWTH:

- Advanced knowledge of Angular and Angular Material, mastering custom form elements, reactive forms, and data visualization using Chart.js. Improved skills in creating dynamic, responsive, and user-friendly interfaces.
- Worked on real-world projects, enhancing the ability to apply theoretical knowledge in practical scenarios. Developed a comprehensive understanding of project workflows, from planning and development to testing and deployment.
- Encountered and resolved various technical challenges, improving problem-solving skills and the ability to troubleshoot issues effectively.
- Gained insights into industry trends such as the shift towards modular and component-based architectures, the importance of responsive UI/UX design, and the use of headless CMS like Strapi.
- Learned the importance of best practices in coding, version control, documentation, and API testing, contributing to more efficient and maintainable codebases.
- Improved collaboration skills by working with teams, understanding the dynamics of teamwork, and learning to communicate effectively with peers and supervisors.
- Enhanced ability to manage time and meet deadlines, balancing multiple tasks and projects efficiently.
- Developed skills in writing clear and comprehensive documentation, which is crucial for maintaining and scaling projects.
- The hands-on experience and knowledge gained during the internship have strengthened technical expertise, making me more confident and capable in handling complex development tasks.
- The diverse projects and technologies explored have provided a clearer understanding of career interests and strengths, helping to shape future career goals and aspirations.
- Building professional relationships with colleagues, mentors, and industry professionals, which can be valuable for future career opportunities and growth.

CHAPTER 5: CHALLENGES

Backend Integration:

- Challenge: Integrating PostgreSQL with Strapi instead of the default SQLite.
- Solution and Strategy: Researching and following Strapi documentation to configure PostgreSQL as the database. Using community forums and resources for troubleshooting.
- Lessons Learned: The importance of understanding configuration settings and dependencies when integrating different technologies. Improved ability to follow and adapt documentation for specific needs.

Form Handling in Angular:

- Challenge: Implementing complex form handling and validation in Angular.
- Solution and Strategy: Using reactive forms to manage form state and validation. Leveraging Angular's built-in validators and creating custom validation logic as needed.
- Lessons Learned: The power of reactive forms in Angular for managing complex form interactions and the importance of robust validation to ensure data integrity.

Chart Customization:

- Challenge: Customizing Chart.js legends and implementing drilldown functionality.
- Solution and Strategy: Exploring Chart.js documentation and community examples to customize legends. Writing custom functions to handle drilldown events and update charts dynamically.
- Lessons Learned: The flexibility of Chart.js for creating interactive data visualizations and the value of community resources for finding solutions to complex customization requirements.

API Integration with Component Frontend:

- Challenge: Integrating APIs with frontend components in Angular for seamless data exchange.
- Solution and Strategy: Using Angular's HttpClient module to make API calls and handle responses. Implementing services to manage API requests and data manipulation. Ensuring proper error handling and data validation.
- Lessons Learned: Understanding the importance of efficient API integration for dynamic frontend applications. Improved skills in managing asynchronous operations and handling API responses effectively.

Component Communication:

- Challenge: Managing communication and data sharing between Angular components.
- Solution and Strategy: Using Angular services to facilitate data sharing and communication between components. Implementing ViewChild and Input/Output decorators to manage component interactions.
- Lessons Learned: Effective use of Angular services and decorators for component communication, enhancing the modularity and maintainability of the application.

Error Handling:

- Challenge: Encountering and resolving ERESOLVE errors during npm install in an old Vue.js project.
- Solution and Strategy: Investigating dependency conflicts and updating package versions to resolve compatibility issues. Using tools like npm audit to identify and fix vulnerabilities.
- Lessons Learned: The importance of managing and updating dependencies to maintain a healthy codebase. Gained problem-solving skills in resolving package conflicts.

CHAPTER 6: INTERNSHIP DIARY

JANUARY 2024

WEEK 1 - 3

- Learnt basics of JavaScript
- Learnt basics of TypeScript
- Understanding TypeScript Generics
- Understanding HTTP Sockets
- Learning Angular

WEEK 4

- Exploring WebRTC

FEBRUARY 2022

WEEK 5-6

- Developing custom form elements library
- Designing a custom UI library
- Documenting designs and features
- Showcasing component behavior with Storybook

WEEK 6

- Learning Strapi

WEEK 6-8

- Worked on live project Idhao
- Worked on the frontend components
- Integrated API's with components
- Used Chart.js to create the graph and customize its appearance.

MARCH 2022

WEEK 8 -10

- FIFFI project migration from Vue.js and Koa 2(express library) to Angular and node.js
- Refactoring the backend
- Started with backend migration

WEEK 11

- Started with new client project Secude
- Secude project setup
- Worked on to understand the Log files(CEF, LEEF & JSON)
- Worked on the Backend Setup

WEEK 12

- Created UI design
- Worked on frontend file upload dialog box

WEEK 13

- Made cards and other UI elements for the dashboard
- Worked on dashboard charts & filters
- Made the UI responsive

APRIL 2022**WEEK 14**

- Added new dialog box, buttons and worked on date filter
- Worked on radar & doughnut charts
- Worked on multi-line chart and fixed radar

WEEK 15

- Worked on adding namespaces to all the styling
- Worked on adding 2 more charts to the dashboard
- Worked on the dialog box for IP Addresses

WEEK 16

- Worked on historical data filter
- Worked on refining the UI and added menu hamburger button
- Worked on IP address and historical data API integration
- Added IP config, path config & files config into tab group

WEEK 17

- Integrated API's for IP config and Files config
- Integrated delete API for files-config and IP-address and toggle charts button for all the charts
- Added grid table for all charts
- Added enable/disable toggle for charts and dialog for select charts
- Charts can be reordered and set to default

MAY 2022**WEEK 18**

- Added the new scheduler feature and historical data can be deleted
- Made changes to the charts color to match theme and other UI changes
- Number cards can be enabled/disabled, fixed the Charts breaking issue

WEEK 19

- Split the functionality of clear button into 2 clear session and clear filters
- Changed UI as per the new functionality
- Fixed historical data filter UI breaking and other fixes
- Created new chart classification of uploads and fixed the decimal issues on y axis of charts

WEEK 20 - till date

- Split the functionality of clear button into 2 clear session and clear filters
- Changed UI as per the new functionality
- Fixed historical data filter UI breaking and other fixes
- Created new chart classification of uploads and fixed the decimal issues on y axis of charts

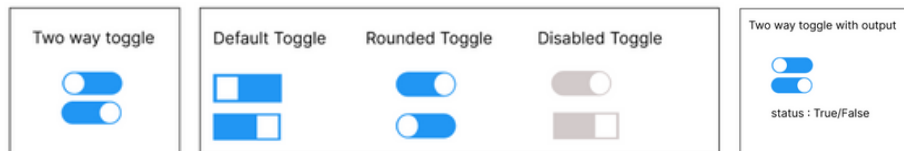
WEEK 20 - till date

- Added user session based approach to separate user activities

Appendix I: Samples of the Work Done

Custom Form Elements Library

Toggle Switch:



Properties

Name	Description	default	Options
Variant	How your toggle switch will look?	default	default, rounded
Label	Toggle Switch Label	Toggle Switch	"Any String"
Color	What theme to use?	primary	primary, accent, warn
Size	How large should the button be?	medium	small, medium, large
Disabled	Whether the button is Disabled or not?	false	true, false
Error_msg	what error you want to display while validating	" "	Any String
Is_required	when field cannot be empty, some input from user is required	false	true, false
FormControlName	Form control element by name	toggle-switch	"Any string"
state	The state of the switch	false	true, false

Input Fields

Url

Input field for URL

Label

Label

https://

Email

Input field for Email

Label

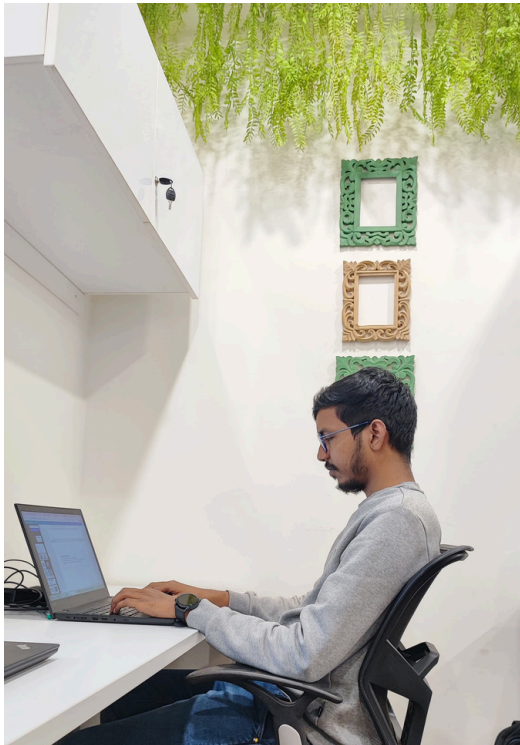
Label

example@gmail.com

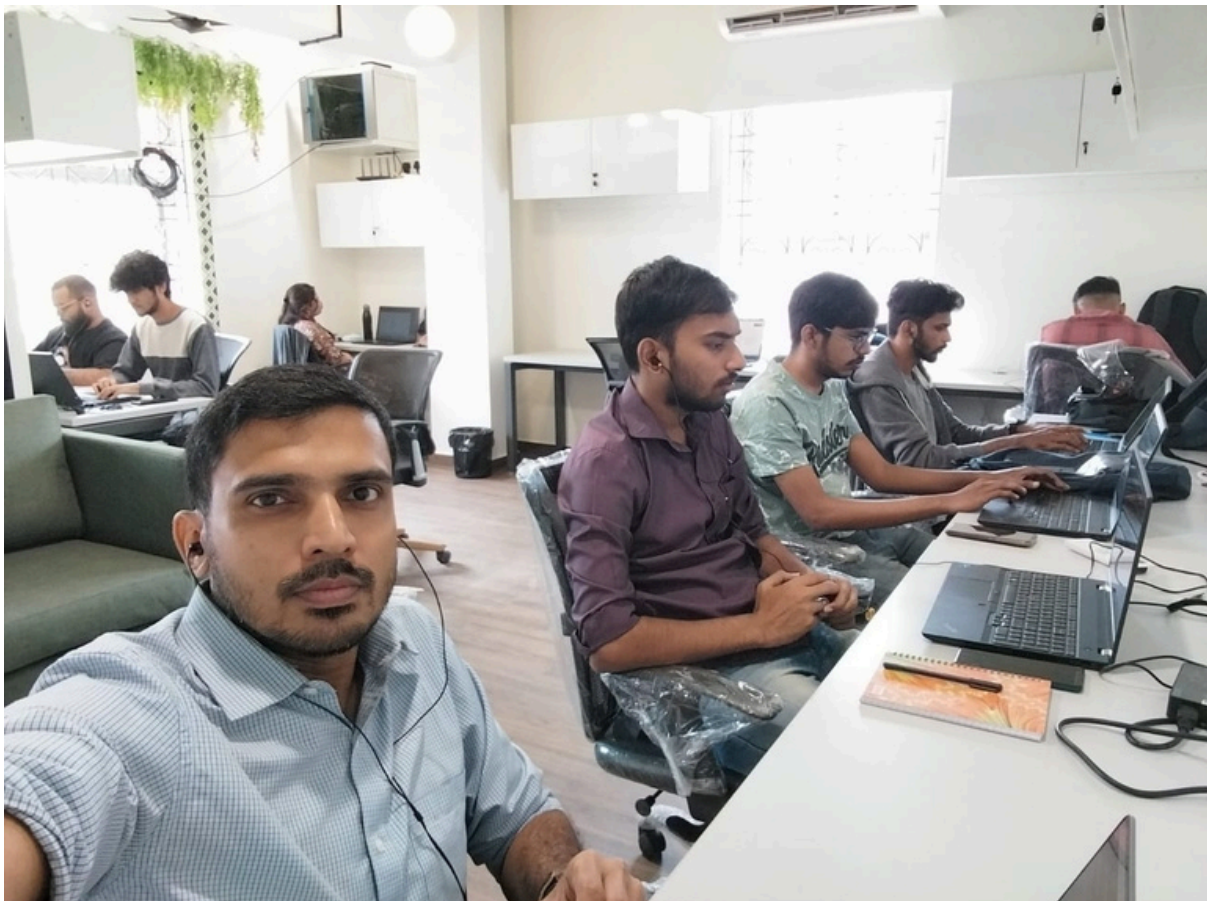
Properties

Name	Description	Default	Options
Type	The type of Input field user requires	phone_no	email, phone_no, url
Label	Input Label	Input	"Any String"
Color	The theme of the input	primary	primary, accent, warn
Hint	What hint you want to display to the user	" "	"Any String"
Size	How large should the Input be?	medium	Large, small, extra small
Disabled	Whether the input is Disabled or not	false	true, false
Error_msg	What error you want to display while validating	" "	"Any string"
Is_required	when field cannot be empty, some input from user is required	false	true, false
placeholder	The text to be displayed in the input area	" "	"Any string"
FormControlName	Form control element by name	Input_ph	"Any string"
prefix	what prefix to display in the input	" "	"Any String"
suffix	what suffix to display in the input	" "	"Any String"

Appendix II: Photos While You Are at Work



GYT 
WORKZ





THANK YOU