

Fantaclaus

Project report submitted in partial fulfillment of the requirement for
the degree of Bachelor of Technology

In

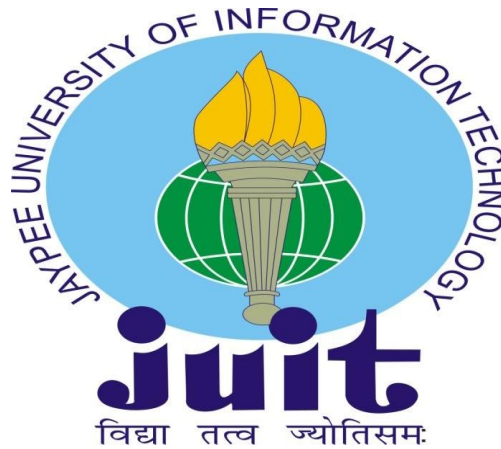
**Computer Science and Engineering/Information
Technology**

By

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UNDER THE SUPERVISION OF

Dr. Yugal kumar



Department of Computer Science & Engineering and Information
Technology

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DECLARATION

I hereby declare that this submission is my own work carried out at Fantaclus, Gurugram from February 2023 to June 2023 and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of B. Tech degree from a university or other institute of higher learning, except where due acknowledgment has been made in the text.

SUBMITTED BY:

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CERTIFICATE

This is to certify that the work which is being presented in the project report titled “**Fantaclus**” in the fulfillment of the requirements for the award of the degree of B.Tech in Computer Science And Engineering and submitted to the Department of Computer Science And Engineering, Jaypee University of Information Technology, Wagnaghat, Solan is an authentic record of work carried out by **Raghav Mangal (191429)** under the supervision of **Mr. Sukrit Goel (Founder)** and **Mr. Harsh Bohra (Senior System Architect)**, Fantaclus, Gurugram, India.

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The above statement made is correct to the best of my knowledge.



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I am highly indebted to Mr. Pankaj Kumar, Training & Placement Coordinator of our college for the facilities provided to accomplish this internship. I would also like to thank the Head of our Department Dr. Vivek Kumar Sehgal and the faculty for teaching us the skills required for this internship. And special thanks to my mentor in the college Dr. Yugal Kumar who supported me throughout the whole and guided me to achieve the best.

Finally, I must acknowledge the constant support and patience of my parents.

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CHAPTER 01

INTRODUCTION

1.1 Introduction

An internship is a professional teaching moment that provides students with real-world experience in their field of study or career objectives. An internship allows students to gain new skills while also exploring and advancing their professions. This paper describes my current internship with Fantaclaus in Gurugram. This internship report describes the actions that assisted me in meeting a number of my stated goals. For my internship as a Software Engineer Intern, I was assigned the profile of Software Engineer. During the initial months of the internship, I was requested to learn about the node.js, JavaScript language, mongodb, azure cloud services, which was followed by autonomous live assessment tasks provided by the mentor. Following the completion of this learning procedure. After the completion of this learning process, I was assigned some tasks related to the app of the company named “**Fantaclaus**”. I was asked to build the analytics services for the “**Fantaclaus**” app from scratch, research on the deployment architecture of the app on Azure cloud services and create automatic marketing solutions for the app and handle the social media handles of Fantaclaus.

1.2 Job Description

Software engineering is the application of engineering ideas to the conception, implementation, and technical administration of software. Software engineering was created to solve the issues associated with low-quality software efforts. When software surpasses deadlines, budgets, and quality expectations, problems develop. It ensures that the software is created consistently, correctly, on schedule, at a reasonable

cost, and in accordance with the specifications. Software engineering has become critical to keep up with the quickly changing demands of users and the context in which the program is supposed to operate.

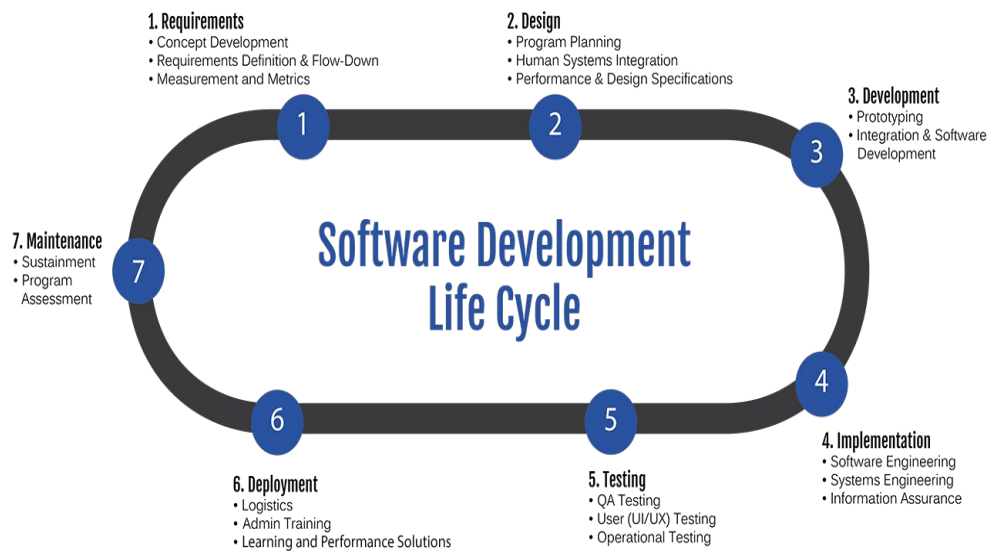


Fig 1: Software development cycle

The Software Engineer Trainee is in charge of assisting with software design and development. They collaborate with other team members to provide safe and trustworthy software solutions. This position's tasks and responsibilities are Application development (code, programming), Code debugging and testing New software applications, diagnosing, and resolving a wide range of technical obstacles collaborating with top executives identifying concerns, and providing solutions

1.3 Backend Development

Backend development is the most important part of web applications and services, encompassing the behind-the-scenes processes and infrastructure that enable seamless user experiences. This essential component of web development focuses on server-side operations,

including server configuration, database management, and application logic. In conclusion, backend developers are responsible for building the digital architecture that supports an application's front-end interface and ensures smooth, secure, and efficient performance.

A Backend Developer is responsible for setting up the server-side infrastructure that communicates with the front-end of a web application. This often involves setting up and

managing servers, deploying APIs, and handling data storage and retrieval. Backend development typically requires a strong understanding of programming languages, such as Python, Java, PHP, Ruby, and Node.js, to write efficient and maintainable code. Additionally, backend developers must be proficient in working with databases such as SQL and NoSQL to store, manage, and manipulate data.

In today's technology-driven world, the demand for skilled backend developers continues to increase as businesses increasingly rely on digital platforms and services. These professionals play a crucial role in ensuring the stability, security, and scalability of applications, which directly impacts user satisfaction and overall success. Backend developers must stay up-to-date with the latest technologies and best practices to create robust and future-proof solutions.

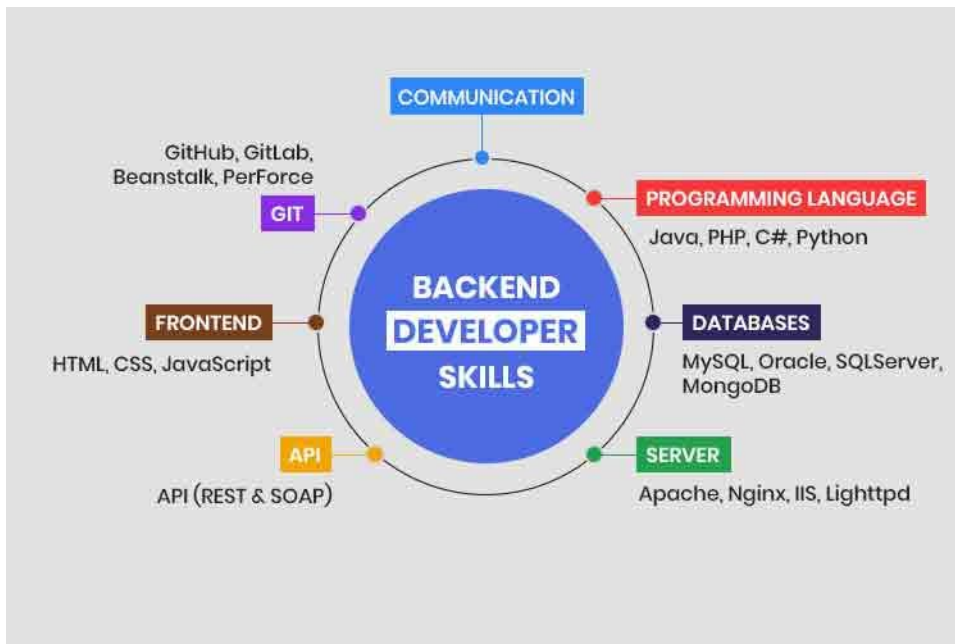


Fig 2: Backend Developer Skills

A Backend developer collaborates with front-end developers, UX/UI designers, and project managers to develop web applications that meet both functional and aesthetic requirements. Moreover, he is responsible for implementing security measures to protect sensitive user data and optimize server performance to minimize latency and ensure high availability. This multifaceted role requires strong problem-solving skills, attention to detail, and the ability to work under tight deadlines.

Furthermore, backend developers must possess excellent communication skills, as they often need to explain complex technical concepts to non-technical team members and clients. By translating the requirements of business stakeholders into effective digital solutions, backend developers play a significant role in driving innovation and maintaining a competitive edge in the digital landscape.

Backend development is an indispensable aspect of web development that focuses on creating robust, secure, and efficient server-side

infrastructure. With a strong foundation in programming languages, database management, and server administration, backend developers work closely with other development teams to bring web applications to life. As the digital world continues to evolve, the demand for skilled backend developers will continue to grow, making it a promising career path for those interested in working at the intersection of technology and creativity.

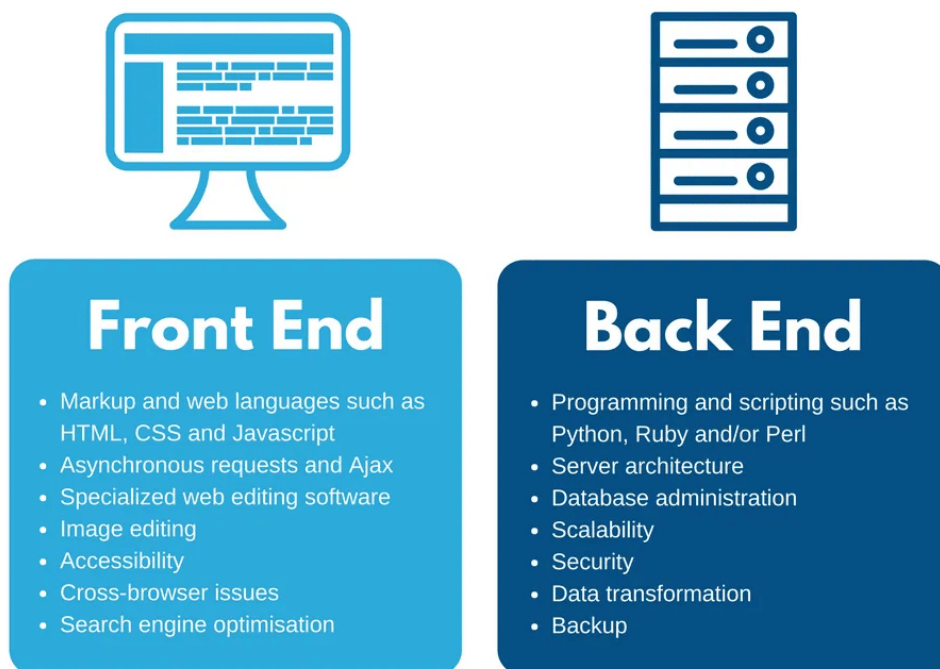


Fig 3: Backend development vs Frontend development

1.4 Backend Developer Requirements

A crucial component in web development, the backend developer plays an essential role in designing and maintaining the server-side framework that supports an application's user interface. To thrive in this position, backend developers need a wide range of abilities and expertise that allow them to create robust, secure, and expandable web applications.

- Backend developers need proficiency in at least one server-side programming language, such as Python, Java, PHP, Ruby, or Node.js. This expertise enables them to develop organized, easy-to-maintain, and high-performance code that serves as the foundation of a web application.
- Understanding database management systems, such as SQL (e.g., MySQL, PostgreSQL, SQL Server) and NoSQL (e.g., MongoDB, Couchbase, Cassandra), is crucial for backend developers. They must be capable of designing, implementing, and optimizing database schemas, as well as executing complex queries for data storage, retrieval, and manipulation.
- Having familiarity with web technologies and frameworks, including HTTP, RESTful APIs, and WebSocket, is essential for backend developers. They should also have experience working with popular server-side frameworks, such as Django, Ruby on Rails, Express.js, or Spring Boot, to streamline development processes and enhance application performance.

- Backend developers should be comfortable using version control systems, such as Git, to manage and track changes in the source code. This skill enables them to collaborate effectively with other developers, maintain clear documentation, and revert to previous code versions when necessary.
- Having a basic comprehension of security concepts and best practices is necessary for backend developers, as they are responsible for protecting sensitive user data and ensuring the honesty of web applications. This includes implementing encryption, authentication, and authorization mechanisms, as well as safeguarding against common security vulnerabilities, such as SQL injection and cross-site scripting (XSS).
- Backend developers must possess knowledge of server configuration, maintenance, and deployment processes. They should be able to work with various server environments, such as Linux or Windows, and be familiar with cloud computing platforms, like AWS, Azure, or Google Cloud, to deploy and scale applications.
- Backend developers must possess an understanding of performance optimization techniques to ensure fast and efficient web applications. This includes implementing caching strategies, optimizing database queries, and employing load balancing techniques to handle high traffic loads.
- Good analytical skills are crucial for backend developers as they encounter complex technical problems and must develop new solutions to address them.

- **Communication and Collaboration:** Having strong communication and collaboration skills is critical for backend developers, as they often collaborate with front-end developers, UX/UI designers, project managers, and other members of multidisciplinary teams.

- **1.5 Backend Development Programming Languages**

Backend programming languages are essential in the realm of software development, as they enable the development and administration of powerful and adaptable web applications. These languages form the foundation of the internet, ensuring smooth interaction between frontend user interfaces and server-side databases. A few of the widely-used backend programming languages consist of Python, PHP, Ruby, Java, and JavaScript (Node.js).



Fig 4: Backend development Languages – Python & node.js

Python, a flexible and highly-utilized programming language, is recognized for its straightforwardness and easy-to-read syntax. It boasts a vast collection of resources and frameworks, including Django and Flask, allowing developers to build robust web applications with little difficulty. The language's appeal has surged tremendously in the past few years, positioning it as a favored option for backend development.

JavaScript has long been a popular choice for frontend development, and its use has expanded into backend development through the advent of Node.js. This runtime environment enables developers to employ JavaScript for server-side programming, facilitating the creation of full-stack applications using only one language. Numerous frameworks, including Express.js and Koa.js, have emerged within the Node.js ecosystem, enhancing and simplifying the development experience.

Node.js backend development presents numerous advantages for both developers and organizations. Its adaptable and high-performance infrastructure, along with an extensive range of modules and libraries, makes it a fitting option for creating contemporary web applications. By adopting Node.js for backend development, companies can provide inventive and customer-focused solutions that can expand and adapt according to their requirements.

To sum up, backend programming languages play a crucial role in developing robust and interactive web applications. The selection of a language relies on aspects like project necessities, scalability demands, and the proficiency of the developer. Irrespective of the chosen language, a strong grasp of backend development concepts is vital for the effective development of web applications.

1.6 Objectives

The goal of the internship is to apply my technical expertise, ingenuity, and adaptability while adopting a progressive mindset to acquire new technologies and methodologies. Working alongside a diverse team, my goal is to create inventive solutions, sharpen my troubleshooting skills, and contribute to the development and implementation of top-notch software products that align with both business goals and user requirements.

CHAPTER 02

COMPANY DESCRIPTION

2.1 Fantaclus

Fantaclus is a groundbreaking AI-driven tool created specifically for YouTubers, designed to transform the way they connect with their audience via comments. Appreciating the importance of user engagement, Fantaclus simplifies the process of replying to comments swiftly and effectively, allowing YouTubers to concentrate on producing high-quality content while keeping a robust relationship with their followers.

Fantaclus' state-of-the-art AI technology can examine and classify comments based on emotions and sentiments, offering valuable information about the audience's likes and dislikes. This sophisticated feature empowers content creators to customize their material to better align with their viewers' preferences, subsequently enhancing user satisfaction and promoting channel growth.



Fig 5: Fantaclus Logo

Provide Apart from enhancing significant connections, Fantaclus delivers an exclusive comment analysis platform that graphically showcases the principal subjects and patterns arising from user conversations. This effortless-to-explore interface equips YouTubers with practical knowledge, making it an essential instrument for content creators who aspire to remain at the forefront and sustain a competitive advantage in the ever-changing realm of YouTube.

At Fantaclus, our objective is to offer a smooth and intuitive experience for YouTubers, assisting them in traversing the intricate domain of audience interaction effortlessly. By utilizing the capabilities of artificial intelligence, we endeavor to connect the creators and viewers, cultivating a more robust sense of community and guaranteeing the ongoing prosperity and expansion of YouTube channels globally.

2.1.1 Why Fantaclus

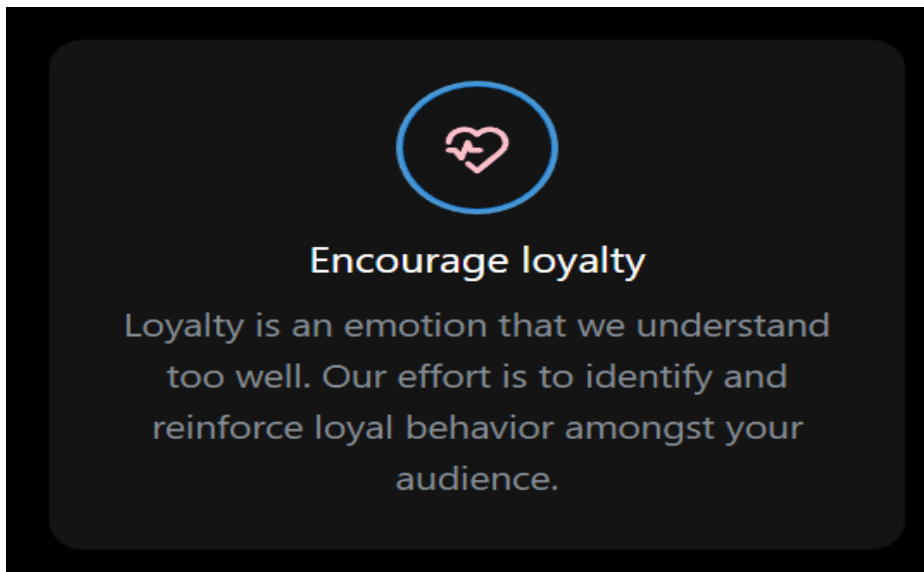


Fig 6: Encourage Loyalty

Encourage Loyalty: Fantaclaus emphasizes the importance of loyalty as a fundamental aspect of a flourishing online community. We comprehend and appreciate the significance of this sentiment. We acknowledge that cultivating loyalty within your audience is essential for the continuous expansion and accomplishment of a YouTube channel since devoted viewers are more inclined to interact with content, spread it among their acquaintances, and promote a constructive, encouraging environment.

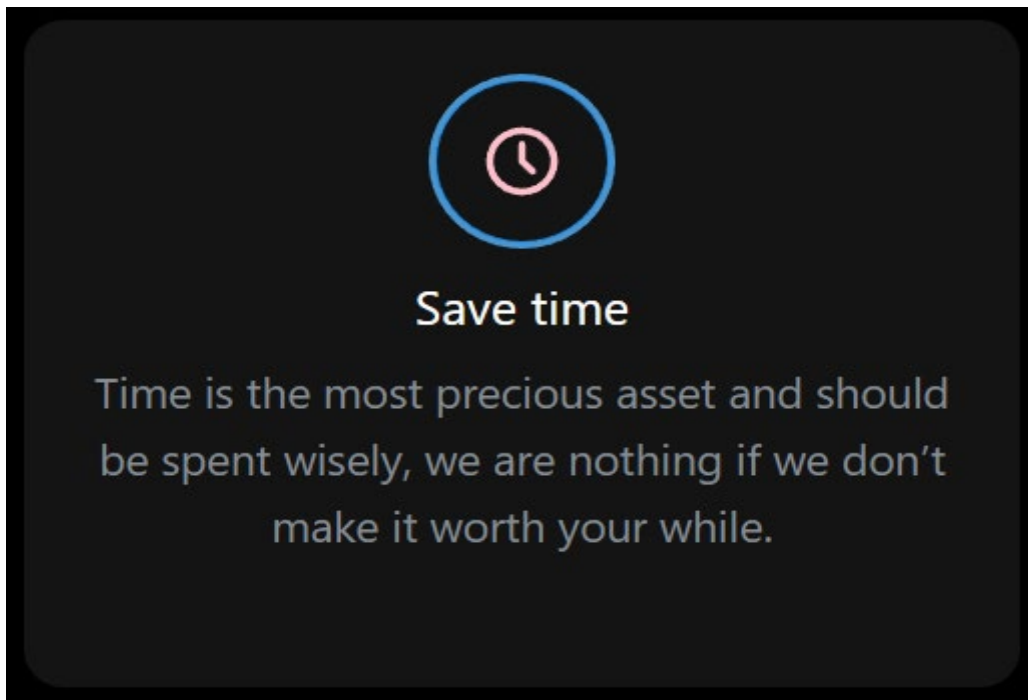


Fig 7: Save Time

Save Time: Fantaclus acknowledges the crucial significance of time as a non-renewable resource and aims to equip users with resources that promote effective time utilization. By emphasizing critical remarks and presenting ready-made replies, Fantaclus enables users to optimize their time usage, focusing on their priorities. Bear in mind that time is life's currency; spend it judiciously and enjoy the benefits of a satisfying and fruitful life.

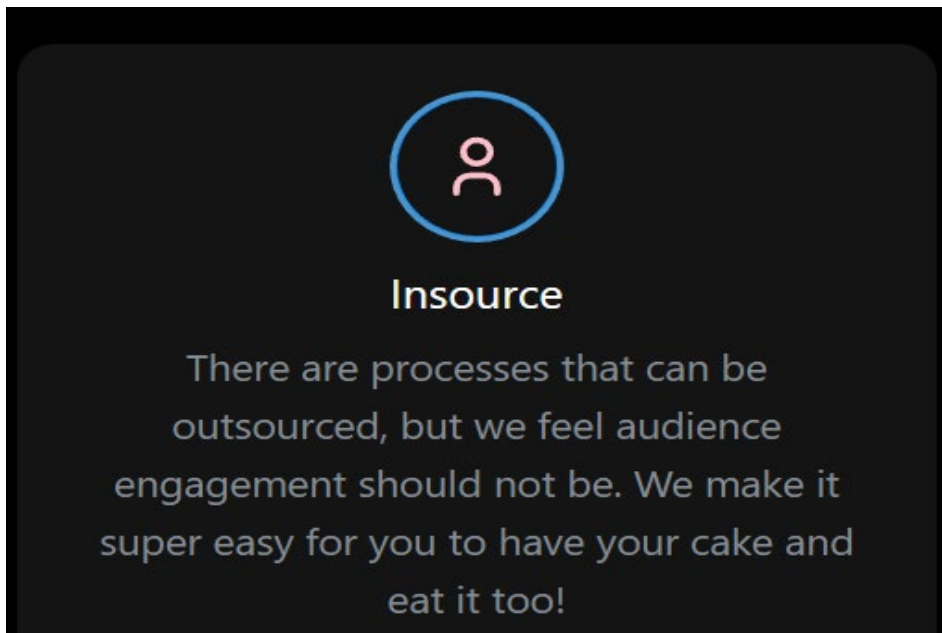


Fig 8: Insource

Insource: Without a doubt, assigning different elements of a project to external sources has its advantages, but retaining audience engagement as an internal duty is crucial. Employing resources like Fantaclus enables the efficient handling of digital interactions, guaranteeing that your audience experiences a sense of connection and involvement with your material. By taking this approach, you can cultivate a devoted fan base, boost the success of your project, and take pleasure in the assurance that your audience engagement is original, sincere, and completely free of plagiarism.

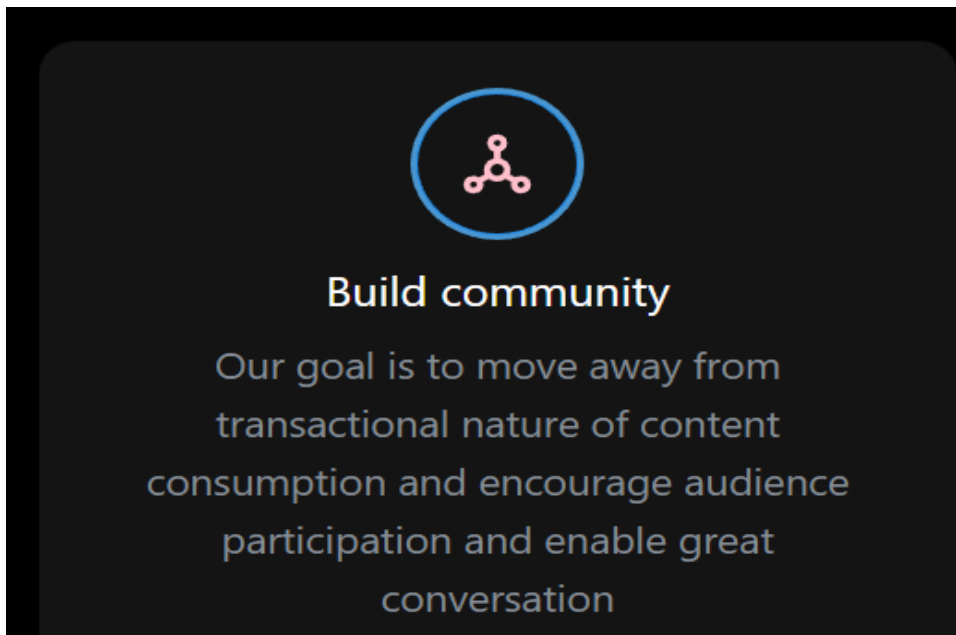


Fig 9: Build Community

Build Community: Fantaclaus' goal of moving away from the transactional nature of content consumption and encouraging YouTube audience participation holds significant potential to transform the way users interact with digital media. By fostering a sense of community and enabling great conversation, Fantaclaus can create a more fulfilling and enjoyable experience for viewers, as well as provide creators with the tools and insights needed to succeed in the competitive digital landscape.

CHAPTER 03

TOOLS AND TECHNOLOGIES USED

3.1 Node.js:

Node.js serves as a robust and flexible runtime environment tailored for server-side applications. Its event-driven, non-blocking I/O model, along with its single-threaded event loop architecture, allows it to effectively manage numerous simultaneous connections. Owing to its vast array of libraries and frameworks, Node.js is a prime option for developers aiming to create scalable and high-performance applications.

Moreover, Node.js boasts an expansive ecosystem of libraries and frameworks called the npm (Node Package Manager) registry, which streamlines and expedites the development process. The npm registry offers a diverse collection of open-source packages that can be seamlessly integrated into Node.js projects, sparing developers the time and effort required to create intricate code from the ground up.

Improved Performance and Scalability: Node.js takes advantage of the high-performance Google Chrome V8 JavaScript engine, known for its speed and efficiency. This allows developers to create server-side applications with quicker code execution. Moreover, Node.js employs a non-blocking, event-driven structure that enhances scalability. As a result, applications can effectively handle numerous concurrent

connections, making it suitable for addressing the increasing demands of contemporary web applications.

Strong Ecosystem and Community Support: One of the most notable benefits of Node.js is its use of JavaScript for both front-end and back-end development. This not only simplifies the development process but also decreases the learning curve for developers, as they can now employ a single language across the entire application stack. Ultimately, this leads to greater productivity, accelerated development cycles, and a reduced likelihood of errors and discrepancies throughout the codebase.

Effortless Synchronization with Microservices Framework: In recent times, the microservices framework has witnessed a surge in popularity since it empowers developers to create applications as an assembly of small, independent services. Node.js is an ideal fit for this structural design, facilitating smooth integration and administration of microservices. This further boosts the application's scalability, maintainability, and adaptability.

Enhanced Response Speed: Node.js employs a non-blocking I/O model, which enables it to manage multiple requests simultaneously, considerably decreasing response durations. Consequently, web applications created using Node.js can provide superior user experiences by offering quicker and more seamless interactions.



Fig 10: Node.js Logo

3.2 Express.js

Express, commonly referred to as Express.js, is a streamlined, adaptable, and minimalist web application framework designed for Node.js. This framework simplifies the creation of web applications and APIs by offering vital tools and features necessary for web development. Express has become a favorite among developers due to its ease of use and its role in the MEAN and MERN stacks. This article explores the many benefits of employing Express and its impact on web development.

Simple Node.js Integration: Simple Node.js Integration: Built on the foundation of Node.js, Express makes it effortless for developers to produce server-side applications utilizing JavaScript. This smooth integration enables developers to employ one programming language for both front-end and back-end development, minimizing the learning curve and boosting productivity.

Middleware Support: Middleware functions play a crucial role in managing requests and responses in web applications. Express provides built-in middleware functions and permits developers to create custom middleware to expand its capabilities. This modular strategy aids in controlling application flow and maintaining a neat and organized codebase.

Streamlined Routing Process: Express offers a powerful and user-friendly routing mechanism, which simplifies the creation and management of routes in web applications. Its routing system is compatible with various HTTP methods and accommodates dynamic URL parameters, making it a top choice for RESTful APIs.

Exceptional Performance: As a minimalist framework, Express is engineered to provide remarkable performance. Its lightweight nature ensures minimal resource consumption, resulting in quicker application response times.

Vibrant Community and Ecosystem: Express boasts a dedicated and dynamic community that actively participates in its ongoing development and support. With a plethora of plugins and extensions at their disposal, developers can effortlessly enhance the framework's capabilities. Furthermore, the abundant resources such as tutorials, documentation, and forums make learning and problem-solving a breeze for developers.

Diverse Template Engines: Express is compatible with a variety of template engines, including EJS, Pug, and Handlebars, which simplifies the process of generating dynamic HTML content for developers. These

template engines facilitate a clear distinction between the presentation layer and the application logic for developers.

Adaptability and Scalability: Express does not impose strict guidelines, granting developers the autonomy to design their applications according to their needs. This adaptability enables the creation of scalable applications capable of managing increasing traffic and resources. Furthermore, Express's modular architecture simplifies application maintenance and updating.



Fig 11: Express logo

3.3 Axios

Axios has emerged as a popular and reliable HTTP client library that enables developers to make HTTP requests to RESTful APIs from both browser-based applications and Node.js environments. This versatile library has several key advantages over traditional methods, such as Fetch API and XMLHttpRequest, and offers numerous features that

streamline and simplify the process of requesting and managing data over the web.

Easy-to-use API: Axios offers a simple and intuitive API that is easy to learn and implement. Its syntax is clear, making it accessible for developers of all skill levels. The simplicity of Axios allows developers to quickly integrate it into their projects and efficiently manage HTTP requests.

Promise-based: One of the main advantages of Axios is its use of Promises. Promises offer a more organized and readable approach to handling asynchronous operations compared to traditional callbacks. With Axios, developers can easily chain multiple requests, catch errors uniformly, and ensure the proper execution order of asynchronous functions.

Request and Response Interception: Axios offers the capability to intercept both requests and responses, allowing developers to modify or record data before it is transmitted or obtained. This function is especially beneficial for tasks such as incorporating authentication tokens into requests, managing errors universally, or monitoring response durations.

Automated JSON Data Conversion: Axios seamlessly transforms JSON data into JavaScript objects and vice versa, streamlining the handling of JSON-formatted information. This characteristic removes the necessity for manual parsing and stringifying, making it more convenient for developers to engage with APIs and handle data.

Compatibility with Client-side and Server-side: Axios functions smoothly in both web-based applications and Node.js settings, enabling developers to utilize the same library for front-end and back-end

development. This uniformity can result in a more efficient and well-organized development process.

Adjustable timeouts and retry attempts: Axios offers the capability for developers to set personalized timeouts for their requests, which can be beneficial in handling sluggish or unresponsive APIs. Furthermore, Axios incorporates automated retries for unsuccessful requests, enhancing the dependability of applications that depend on external services.

Abortable requests: Axios enables developers to terminate ongoing HTTP requests. This feature can be especially valuable in scenarios where users may leave a page or abort an action before an API request finishes, avoiding excessive data consumption and boosting application efficiency.

Extensive customization possibilities: Axios comes with numerous configuration settings that allow developers to optimize their HTTP requests based on particular needs. Some of these options include tailored headers, selecting the response type, URL parameters.



Fig 12: Axios logo

3.4 GitHub

GitHub, an online platform launched in 2008, serves as a collaborative space for developers and significantly contributes to the expanding realm of open-source software. As a vital resource for individual developers and large organizations alike, GitHub aids in managing, sharing, and participating in software projects. This report delves into GitHub's essential features, its influence on the software development field, and its role in reducing plagiarism in programming and development.

Managing Repositories: The primary purpose of GitHub is to offer a centralized location for hosting and organizing code repositories. Each repository can house numerous files, folders, and branches, enabling developers to effectively arrange and sustain their projects.

Controlling Versions: GitHub is built upon Git, a distributed version control system that monitors code modifications over time. This feature allows developers to cooperate on projects without jeopardizing each other's work and provides the option to revert to earlier code versions when needed.

Tracking Issues: GitHub incorporates a built-in issue tracking system that permits developers to report glitches, propose enhancements, and monitor progress on tasks. This functionality streamlines the development process by consolidating all relevant discussions and updates in a single location.



Fig 13: GitHub logo

3.4.1 Repository

A repository is a part where all of the project's files are stored. Each project has its own repository, which may be accessed through a different URL.

3.4.2 Forking a Repository

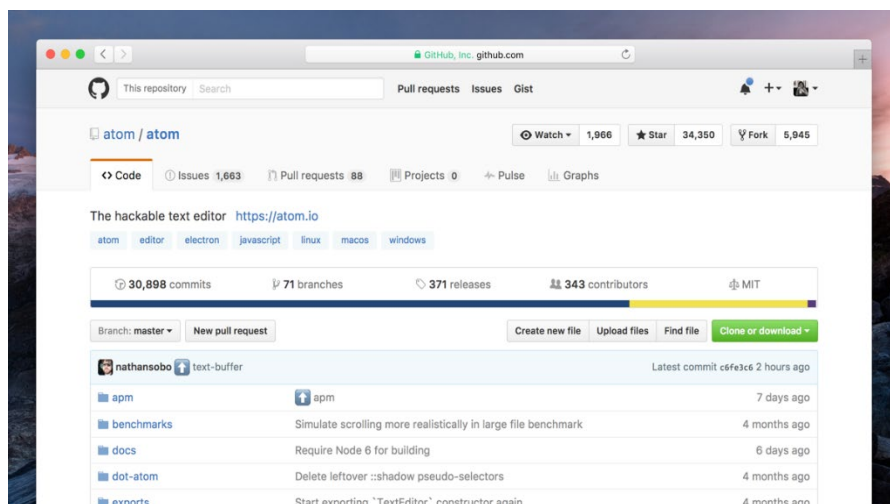


Fig 14: GitHub Repository Example

When you fork an existing project, you are creating a new one. This is a fantastic tool for encouraging the development of new apps and projects. If you find a project on GitHub that you'd want to contribute to, fork it, make your modifications, and then republish it as a new repo. If the repository from which you forked to create your new project is changed, you may quickly apply changes to your existing fork.

3.4.3 Committing the changes

Once you've staged the files you wish to add, you're ready to commit. Whether you commit using GitHub Desktop or the command line, the commit message is critical. Use short commit messages that summarize your change. Because

commit messages will guide you through your repository's history, they should be informative. In command-line commits, the following message format can be used:

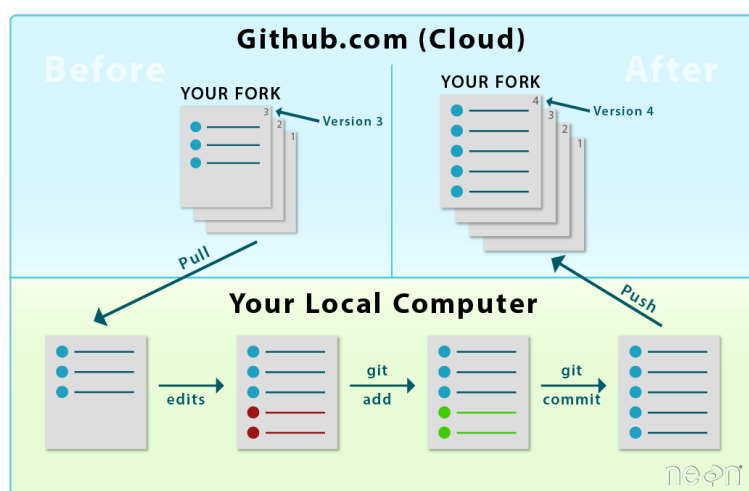


Fig 15: GitHub Commit Flow

3.4.4 Pull Requests

You've forked a repository, made a wonderful modification to the project, and want the original devs to notice it—and maybe incorporate it into the original project/repository. Create a pull request to do this. The original repository's authors can review your work and decide whether or

not to include it in the official project. When you submit a pull request, GitHub provides an efficient communication channel between you and the primary project's maintainer.

3.5 Microsoft Azure

Microsoft Azure provides a diverse cloud computing platform equipped with numerous services, tools, and resources, assisting businesses in developing, deploying, and managing applications. Two notable offerings include Azure Virtual Machines (VMs) and Azure Functions.



Fig 16: Microsoft Azure Logo

3.5.1 Azure Virtual Machines

A virtual machine (VM) is a software-based computer that emulates a physical computer, allowing users to operate multiple operating systems on a single physical device. In Microsoft Azure, these VMs are referred to as Azure Virtual Machines (AVMs). AVMs offer on-demand, adaptable computing resources, enabling businesses to effortlessly create and manage their applications.



Fig 16: Azure Virtual Machine

Essential Characteristics of Azure Virtual Machines

Adaptability: Azure VMs can be adjusted according to the varying needs of your applications, guaranteeing optimal performance and cost-effectiveness.

Versatility: Azure supports an extensive range of operating systems, programming languages, and frameworks, granting businesses the freedom to select the most appropriate tools for their applications.

Security: Azure VMs are constructed upon a secure foundation with multiple layers of defense, including network isolation, encryption, and access control.

Enhanced Reliability: Azure Virtual Machines (VMs) are engineered for increased dependability, incorporating built-in capabilities like automatic data backups, disaster recovery strategies, and fault tolerance measures. These features ensure the continuous availability and reliability of your applications.

3.5.2 Azure Functions Overview

Azure Functions is a serverless computing platform that enables developers to create and deploy event-driven applications without the need to manage the underlying infrastructure. The service streamlines app development by automatically handling server scaling, updates, and maintenance.



Fig 17 Azure Functions Logo

Key Attributes of Azure Functions

Event-Driven: Azure Functions automatically initiates and runs code in response to specific occurrences, such as data modifications, new messages in a queue, or a predetermined time.

Pay-As-You-Go: Azure Functions employs a pay-per-use pricing model, charging only for the computation time utilized during function execution. This makes it an economical option for event-driven applications.

Seamless Integration: Azure Functions effortlessly integrates with numerous Azure services and third-party applications, empowering developers to build comprehensive, end-to-end solutions.

Multilingual Compatibility: Azure Functions provides compatibility with a variety of programming languages, such as C#, JavaScript, Python, and Java, enabling developers to utilize their favorite languages and resources.

CHAPTER 04

LIVE PROJECT

4.1 Fantaclus analytics:

Fantaclus analytics is a very new and user-friendly functionality that has been implemented in our product named Fantaclus. Deep comment analytics of audience for YouTubers - Does comment sentiment analysis, emotion analysis and category analysis. Uses the user activity and data analytics on them to know YouTubers most loyal audience. All kinds of comment analytics and audience insights are accessible. Allows for a quick audience insights and creating content that your audience loves.

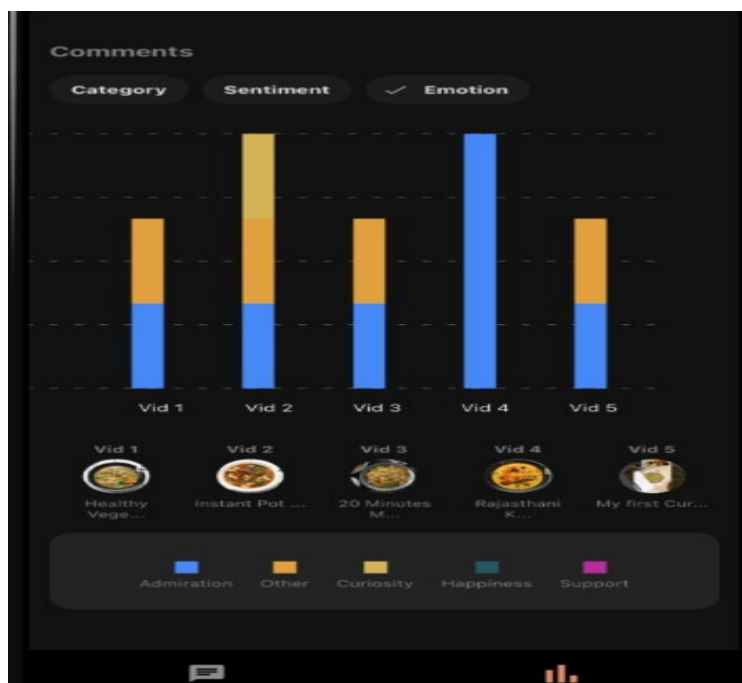


Fig 18: Comment Analytics by Emotion

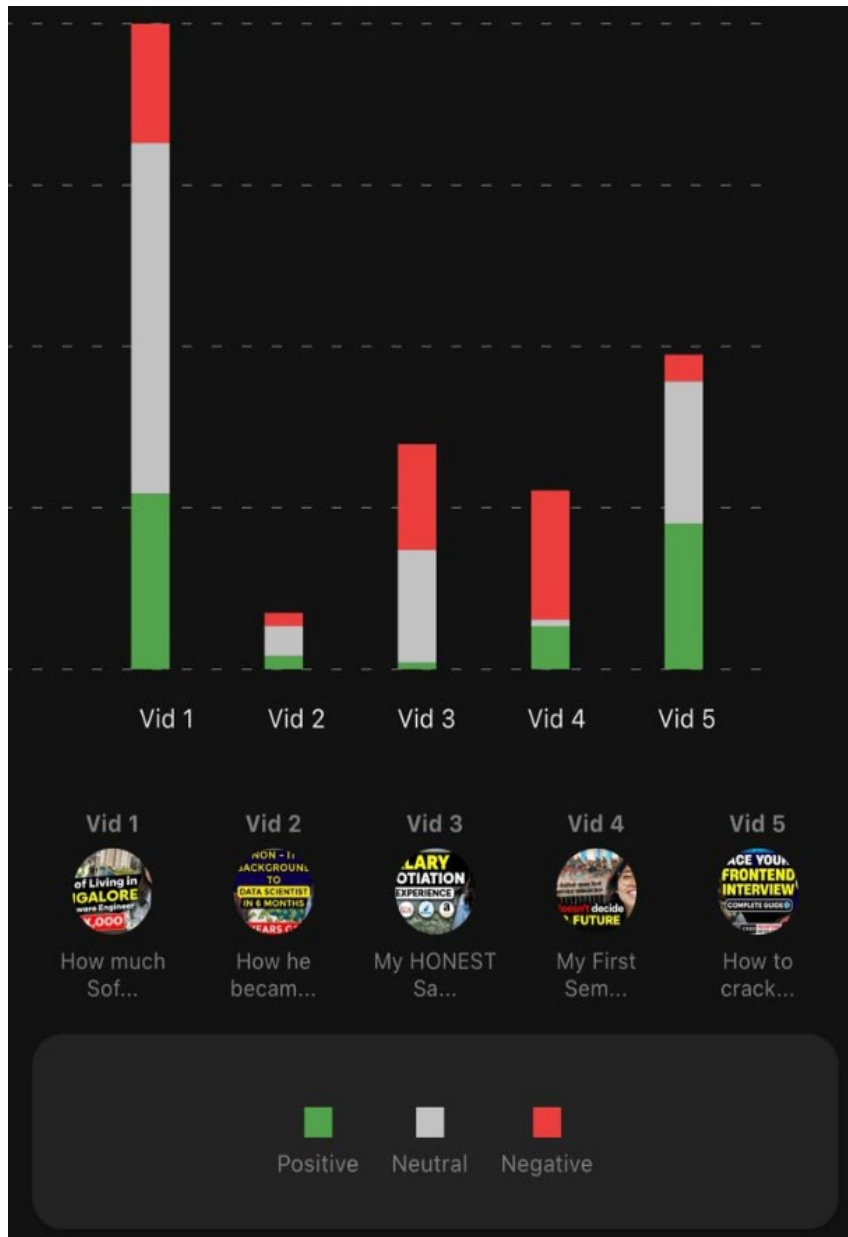


Fig 19: Comment Analytics by Sentiment

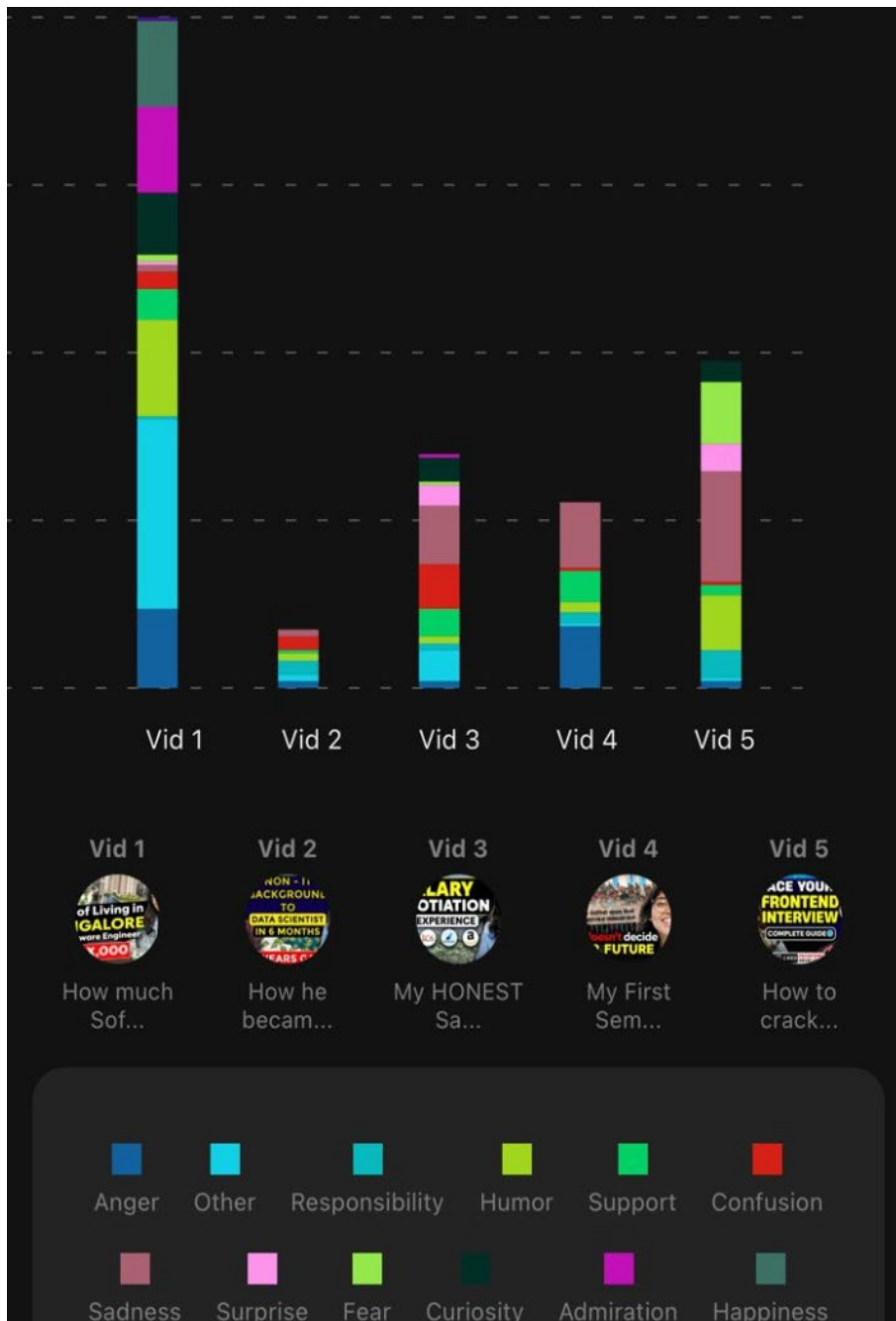


Fig 20: Comment By Category

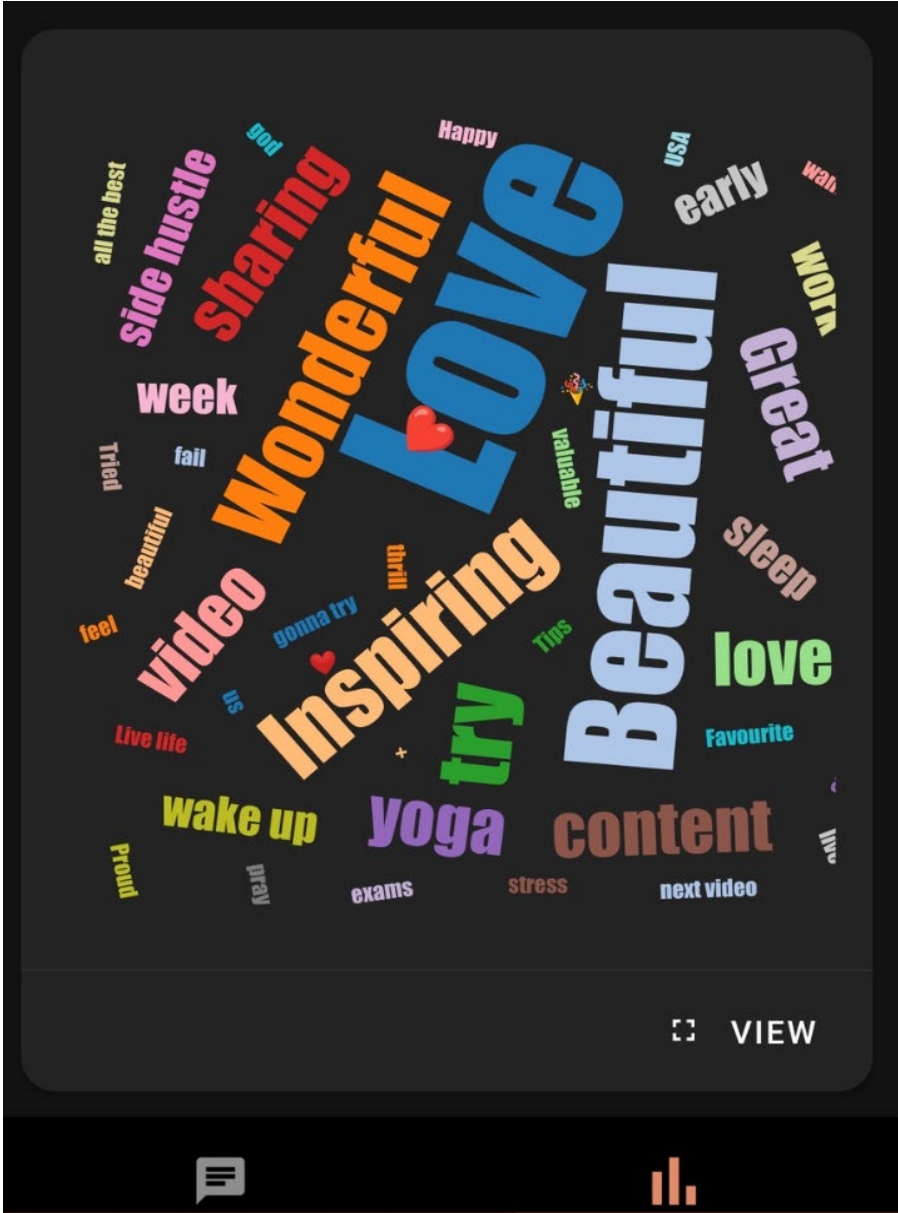


Fig 21: Wordcloud by Comment Sentiment

4.2 Fantaclus Comment Replying:

Provide YouTubers with most important feature of our app that is Comment replying. Which brings most important comments to YouTubers Attention first with personalized and contextual reply already generated for them to respond with along with it YouTuber can see more details about the user who has commented on his channel like is he subscriber or not , how many times he has commented before, comment date etc.

Comments can be filtered by there sentiments, category, emotion by time pr by action on them like the comments that they have responded to, ignored or unactioned.

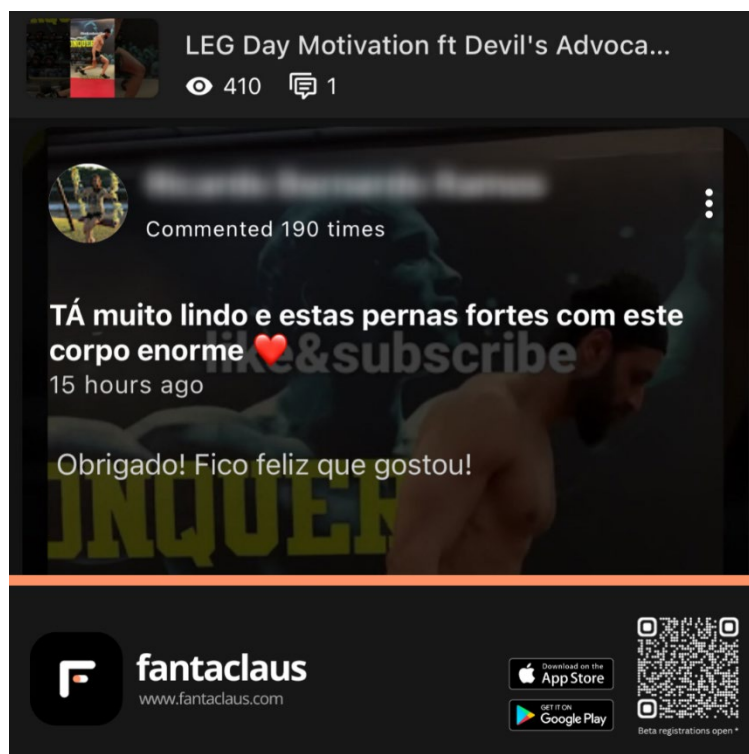


Fig 22: user comment with reply generated for him

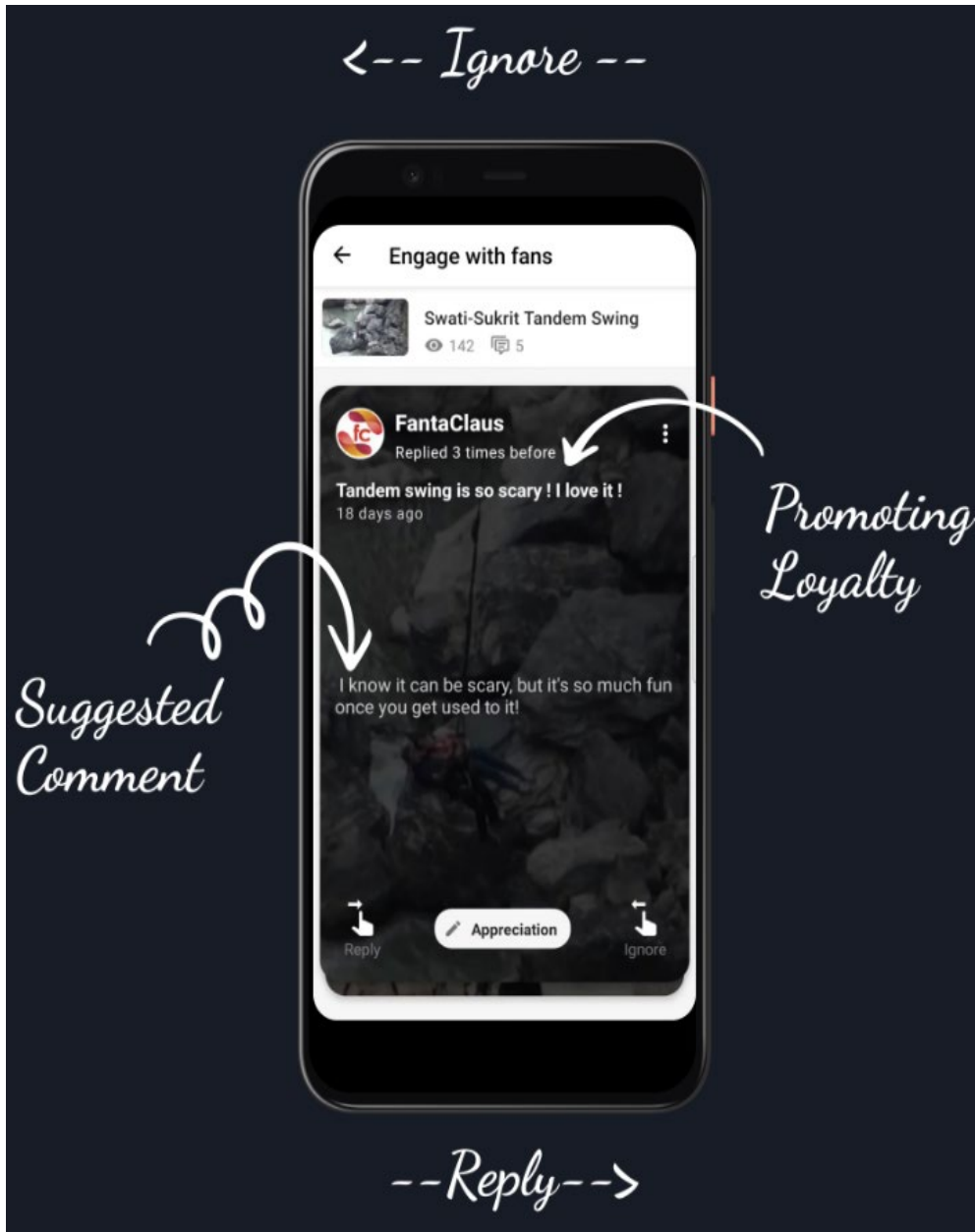


Fig23: User Actions on a Comment card

4.3 Deployment Architecture

I also researched and suggested deployment architecture for the main Fantaclaus app .

Studied Microsoft Azure cloud services.

App Services

DevOps

Software Architecture

4.4 Fantaclaus Website SEO

I also worked on Fantaclaus websites SEO and made user traffic increase by more than 100%

4.5 Fantaclaus Marketing

I also worked on automation of Fantaclaus App's Marketing.

Note: I couldn't describe in details about what I did due to company's privacy.

CHAPTER 05

CONCLUSION

5.1 Conclusion

Finally, this internship has been a fantastic and gratifying experience. I can honestly state that my time with Fantaclaus was quite useful to me. Needless to say, the technical aspects of my work aren't ideal and might be improved with more time. As someone with little prior expertise with Backend Development and overall Software Development, I believe the time I spent learning and comprehending was well spent, as it aided in the creation of a completely functional app service. Time management and self-motivation are two of the most important principles I've learnt.

5.1 Future Work

As a result, any features and technologies I develop in the future will have a huge impact on YouTubers by technologically elevating them and supporting them in easily Comment Replying through Generative AI and Data Analytics. As a consequence, further work will be done in the future to create a better Productivity tool for YouTubers, as well as a more accurate and more Personalized Replies.

5.2 Mentor's Review

He performed admirably during training; he is a quick learner who takes less time to comprehend concepts. At the same time, he has

exceptional problem-solving skills, making him an invaluable asset to our organization.

Harsh Bohra

Senior Software Architect,

References

1. Fantaclaus website: <https://fantaclaus.com/>
2. Fantaclaus Play Store : <https://lnkd.in/dzrfgx73>
3. Fantaclaus App Store: <https://lnkd.in/d9C2vecE>
4. Node.js website: <https://nodejs.org/en>
5. Express.js Website: <https://expressjs.com/>
6. MongoDB Website: <https://www.mongodb.com/>