



Internship Report

Internship Report



Full-stack digital development(DEVOFS201)

University year: 2022-2023

Project-Name: MeetInMind

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-

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Dedication:

Nourddine



This is a wonderful opportunity to express my deep appreciation for the individuals who have played a significant role in my life, guiding and supporting me along the way.

First and foremost, I want to convey my heartfelt gratitude to my beloved parents. Their unwavering support, encouragement, and endless belief in me have been instrumental in my journey. I cannot express enough how much I love and cherish them. Without their presence, my existence would lack purpose and meaning.

I am also deeply grateful to my extended family, including my dear grandmothers, uncles, aunts, and cousins. Your constant presence and support have brought immense joy and strength to my life. Your love and care have made me feel blessed and cherished.

To my circle of friends, you have been my pillars of strength and a source of unwavering support. Through both joyful and challenging times, you have stood by my side, offering laughter, encouragement, and companionship. The memories we have created together are etched in my heart forever. From late-night conversations to spontaneous adventures, our bond remains unbreakable. I am forever grateful for the cherished friendships we share.

I want to express my deepest appreciation to my respected teachers and mentors. Your guidance, wisdom, and dedication have played a pivotal role in shaping my academic journey. Your belief in my abilities and the knowledge you have imparted have fueled my growth and development. I am immensely grateful for the inspiration and encouragement you have provided, pushing me to strive for excellence.

I would also like to extend my gratitude to the colleagues and staff at the company where I completed my internship. Thank you for welcoming me into your team and providing a valuable learning experience. Your support, guidance, and willingness to share your expertise have greatly contributed to my professional growth. The positive work environment and the opportunities to collaborate with you have been instrumental in shaping my skills and knowledge.

In conclusion, I wholeheartedly dedicate my appreciation and gratitude to all the remarkable individuals mentioned above. Each and every one of you has left an indelible mark on my life, and I am forever grateful for your presence and support.

Dedication:

Ibrahim



If I were to dedicate our work to certain individuals, this would be the perfect opportunity to express our feelings towards them and convey how their presence and support have made our existence fruitful.

To my dear parents, FATIMA ZAHRAE and MUSTAPHA, who have always supported me, encouraged me, and pushed me to go the distance, and who have taught me to never give up. I want to let them know that I love them dearly and that my existence would have no meaning without them.

To my dear sisters HAFSA and KAOUTHAR, to my brother MOHAMED, you are the beings I cherish the most, and you are my pride. My feelings for you cannot be summarized in a few words.

To my entire family, my dear grandmothers, my dear uncles and aunts, my dear cousins, you are always by my side.

To my friends, my constant source of laughter, support, and companionship. You have been there through thick and thin, lifting my spirits on gloomy days and celebrating the triumphs with unwavering joy. Each moment we have shared is etched in my heart, forming a tapestry of unforgettable memories that I hold dear. From late-night conversations to spontaneous adventures, our bond remains unbreakable, and I am forever grateful for the treasured friendships we have built.

To my esteemed teachers and mentors, who have guided and shaped my academic journey. Your wisdom, knowledge, and dedication have been invaluable in my growth and development. I am grateful for the inspiration and encouragement you have provided, pushing me to reach new heights. Your belief in my abilities has fuelled my determination to excel.

To the colleagues and staff at the company where I completed my internship, thank you for welcoming me into your team and providing me with a valuable learning experience. Your support, guidance, and willingness to share your expertise have been instrumental in expanding my knowledge and skills in the professional realm. I am grateful for the opportunities I had to collaborate with you and for the positive work environment that fostered my personal and professional growth.

Once again, I extend my heartfelt appreciation and dedication to all the individuals mentioned above. Your contributions and influence have shaped me into the person I am today, and I am forever grateful for your presence in my life.

Acknowledgments:

At the end of our internship, we would like to express our gratitude to all the individuals whose advice and suggestions have made our work both informative and enjoyable. Before delving into this experience, we would like to extend our heartfelt thanks to those who have provided assistance and contributed directly or indirectly to the development of this research.

To Mr. OUSSAMA RAHMOUNI, our academic supervisor, we are immensely grateful for his unwavering support, availability, and methodological guidance. His mentorship and expertise have been invaluable in shaping the trajectory of our research and providing the necessary framework for success. His insightful feedback, constructive criticism, and encouragement have played a vital role in refining our work. We are truly fortunate to have had him as our supervisor, and we extend our deepest appreciation for his contributions to our academic and professional development.

We would also like to extend our sincere thanks to Mr. EL ASRI OUSSAMA, Software Engineer at FDSolutions, for his invaluable support and guidance during our internship. His expertise and willingness to share his knowledge have been instrumental in enhancing our understanding of software development and problem-solving. We are grateful for his continuous availability and on-demand assistance, as well as his insightful consultations that have contributed to the success of our project.

Lastly, we want to extend our heartfelt appreciation to the esteemed members of the jury for their invaluable time and effort in carefully reviewing and assessing this report. Your dedication and expertise in evaluating the work of others are instrumental in ensuring the quality and integrity of academic endeavors. We are truly grateful for the constructive feedback, insightful comments, and critical analysis provided, as they have undoubtedly contributed to the refinement and advancement of our research.

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Introduction:

Professional networking websites are online platforms that connect individuals from various industries and fields. These websites serve as a virtual meeting place for professionals to exchange ideas, share experiences, and establish relationships with other like-minded individuals.

The primary reason for building a professional networking website is to help professionals connect and grow their careers. In-person networking can be a challenge for many individuals, especially those who are introverted or have busy schedules. Networking websites make it easier for professionals to connect with others in their industry or field, regardless of their location or schedule.

One of the main problems that professional networking websites aim to solve is the difficulty in finding career opportunities. Traditional job search methods often involve relying on job postings or networking events, which can be time-consuming and ineffective. However, with the rise of professional networking websites, job seekers can now connect with potential employers and recruiters directly through the platform, making the job search process more efficient.

Another problem that professional networking websites aim to solve is the lack of professional development opportunities. Many professionals struggle to find opportunities to develop their skills or advance their careers. Networking websites offer a wealth of resources and tools for professionals to develop their skills, including online courses, webinars, and industry-specific content.

Finally, professional networking websites aim to solve the problem of isolation and disconnection in the workplace. Many individuals work remotely or in geographically dispersed teams, which can make it challenging to establish relationships and build a sense of community. Networking websites provide a platform for individuals to connect and collaborate, regardless of their location or work arrangement.

In conclusion, professional networking websites provide a valuable service to individuals by helping them connect, find career opportunities, and develop their skills. These platforms have become an essential tool for anyone looking to advance their career or establish themselves in their industry or field.

ANALYSIS:

I - Introduction

The purpose of this document is to outline the requirements and specifications for the development of a social media application similar to LinkedIn. This application aims to provide a platform for users to connect professionally, share posts, join groups, send messages, upload files, create events, and manage their profiles. The application will be available for both web and mobile platforms (iOS and Android).

II - Specifications

The professional networking website will serve as a virtual meeting place for professionals from diverse industries and fields, enabling them to connect, share experiences, and build relationships. The main objective of the website is to facilitate career growth and networking opportunities for professionals, especially those who face challenges with traditional in-person networking methods.

Users will be able to create accounts by providing necessary personal and professional information. They will have the option to create comprehensive profiles showcasing their work experience, education, skills, and career aspirations.

The website will offer robust search functionality, allowing users to find and connect with professionals based on specific criteria such as industry, location, skills, and interests. Users will have the ability to send connection requests and establish professional relationships with other users. Additionally, a recommendation system can be implemented to suggest potential connections based on users' profiles and preferences.

The website will provide a platform for job seekers to search and apply for job opportunities posted by employers and recruiters. Employers and recruiters will have the capability to post job listings, review applications, and manage the hiring process through the website. Advanced search options and filters will be available to help users narrow down job listings according to their preferences.

A wide range of professional development resources will be offered on the website, including online courses, webinars, and industry-specific content. Users will be able to access virtual events, workshops, and training programs to enhance their skills and knowledge. The platform may also include features to track users' progress and achievements in their professional development endeavors.

ANALYSIS:

To facilitate effective communication and collaboration, the website will provide messaging features that enable users to connect, share ideas, and collaborate on projects. Users will have the option to join professional groups or communities based on their interests or industry, fostering interaction and knowledge exchange. Tools for content sharing, discussions, and virtual meetings may be implemented to enhance engagement and collaboration among users.

Companies will have the ability to create dedicated groups within the website, allowing their employees to connect and collaborate in a private setting. Companies can leverage these groups to make announcements regarding new formations, hiring opportunities, or other relevant updates. Meeting features can be integrated to facilitate virtual meetings and discussions within the company groups.

Ensuring user privacy and data security will be a priority for the website. Robust security measures will be implemented, and compliance with relevant data protection regulations will be upheld. Users will have control over the visibility of their profile information and will be able to manage their privacy settings according to their preferences.

The website will be designed with a responsive layout, ensuring compatibility across various devices and screen sizes. Mobile-friendly features and optimizations will be implemented to deliver a seamless user experience on mobile devices.

To gain insights into user engagement and website performance, analytics tools will be integrated. These tools will provide information on user activity, popular content, and job application trends. Reporting features may be included to generate detailed reports based on the collected data.

Regular maintenance activities will be performed to ensure the stability, security, and optimal performance of the website. Continuous updates and improvements will be implemented to enhance user experience, address user feedback, and incorporate new features in line with industry trends and user needs.

ANALYSIS:

III- Data Dictionary

● User

Field name	Date type	Field length	Constraint	Description
user_id	INT	10	primary key	user id, auto generated
username	VARCHAR	50	not null, unique	Unique username for a user
first_name	VARCHAR	50	not null	First name of the user
last_name	VARCHAR	50	not null	Last name of the user
age	VARCHAR	10	not null	Age of the user
email	VARCHAR	255	not null	Email address of the user
password	VARCHAR	255	not null	Password of the user
phone_number	VARCHAR	20	not null	Phone number of the user
role	VARCHAR	50	not null	Role of the user
company_name	VARCHAR	50	not null	Name of the user's company
image_url	VARCHAR	255	not null	URL of the user's profile image
created_at	DATETIME		not null	Timestamp for when the user account was created
updated_at	DATETIME		not null	Timestamp for when the user account was last updated

● Post

Field name	Date type	Field length	Constraint	Description
post_id	INT	10	primary key	Unique identifier for a post, auto generated
user_id	INT	10	Foreign key	Referencing the user who created the post
file_id	INT	10	Foreign key	Referencing the file attached to the post
created_at	DATETIME		not null	Timestamp for when the post was created
updated_at	DATETIME		not null	Timestamp for when the post was last updated

ANALYSIS:

● File

Field name	Date type	Field length	Constraint	Description
file_id	INT	10	primary key	Unique identifier for a file, auto generated
message_text	VARCHAR	255	not null	Optional text message to accompany the file
file_url	VARCHAR	255	not null	URL of the file
constraint	VARCHAR	50	not null	Constraint for the file, e.g., image, video, audio

● Like

Field name	Date type	Field length	Constraint	Description
like_id	INT	10	primary key	Unique identifier for a like , auto generated
post_id	INT	10	Foreign key	referencing the post that was liked
user_id	INT	10	Foreign key	referencing the user who liked the post
body	VARCHAR	255	not null	Optional text message accompanying the like
date	DATE		not null	Date when the like was made
created_at	DATETIME		not null	Timestamp for when the like was created
updated_at	DATETIME		not null	Timestamp for when the like was last updated

● Comment

Field name	Date type	Field length	Constraint	Description
comment_id	INT	10	primary key	Unique identifier for a comment user id, auto generated
post_id	INT	10	Foreign key	referencing the post that was commented on
user_id	INT	10	Foreign key	referencing the user who made the comment
body	VARCHAR	255	not null	Text of the comment
date	DATE		not null	Date when the comment was made
created_at	DATETIME		not null	Timestamp for when the comment was created
updated_at	DATETIME		not null	Timestamp for when the comment was last updated

ANALYSIS:

● Message

Field name	Date type	Field length	Constraint	Description
message_id	INT	10	primary key	user id, auto generated
user_id_1	INT	10	Foreign key	referencing the first user in the message exchange
user_id_2	INT	10	Foreign key	referencing the second user in the message exchange
file_id	INT	10	Foreign key	referencing the file attached to the message
created_at	DATETIME		not null	Timestamp for when the like account was created
updated_at	DATETIME		not null	Timestamp for when the like account was last updated

● Announceme

Field name	Date type	Field length	Constraint	Description
announcement_id	INT	10	primary key	Unique identifier for an announcement
user_id	INT	10	Foreign key	referencing the user who made the announcement
meeting_id	INT	10	Foreign key	referencing the meeting to which the announcement belongs
Description	VARCHAR	255	not null	Description of the announcement

● Group

Field name	Date type	Field length	Constraint	Description
group_id	INT	10	primary key	user id, auto generated
group_name	VARCHAR	255	NOT NULL	Name of the group
moderator_id	INT	10	Foreign key	referencing the user who is the moderator of the group
description	VARCHAR	255	Not null	Description of the group
created_at	DATETIME		not null	Timestamp for when the like group was created
updated_at	DATETIME		not null	Timestamp for when the like group was last updated

ANALYSIS:

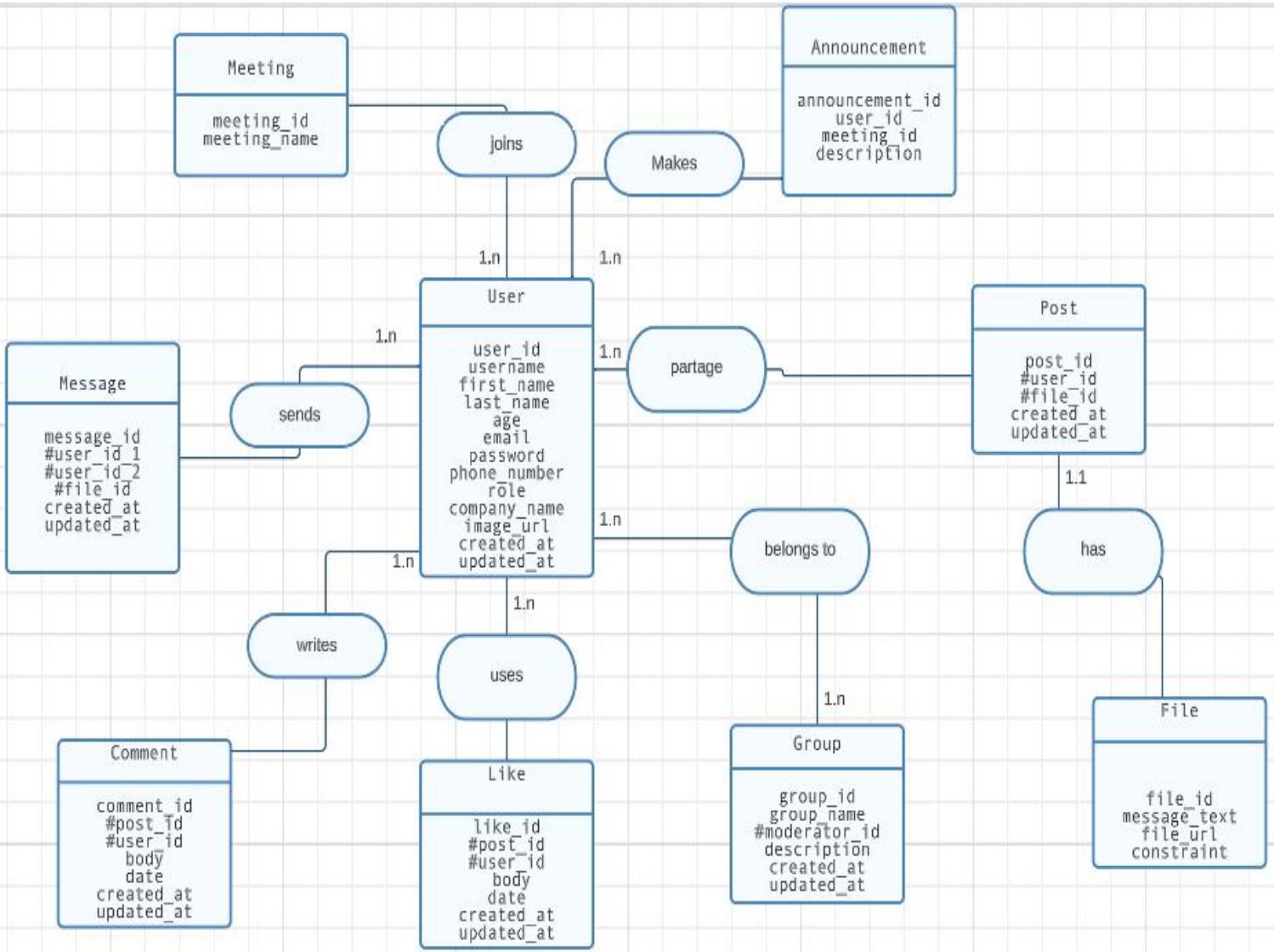
● Meeting

Field name	Date type	Field length	Constraint	Description
meeting_id	INT	10	Foreign key	referencing the meeting to which the announcement belongs
Meeting_name	VARCHAR	255	not null	Description of the announcement

ANALYSIS:

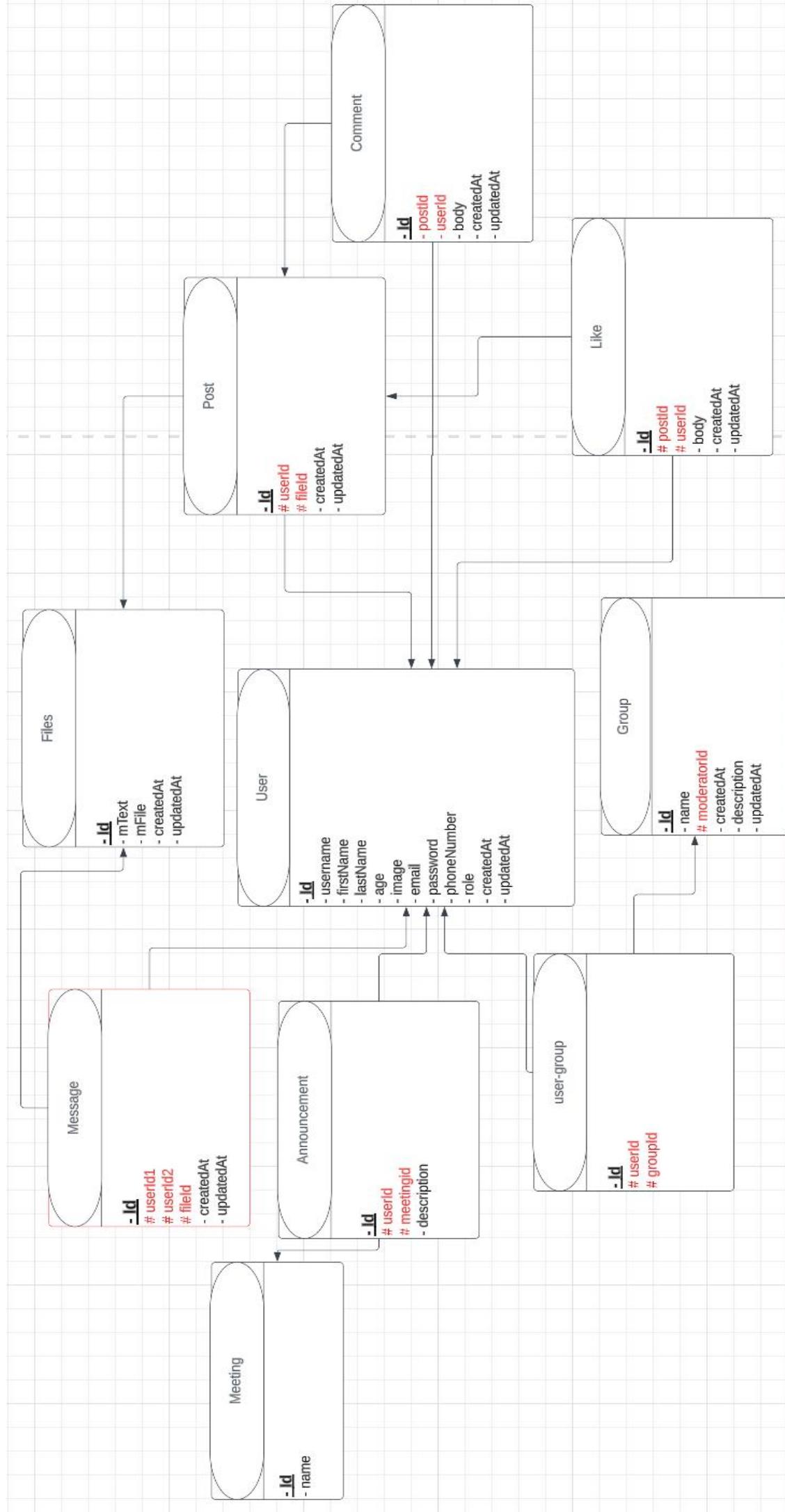
IV- Merise

IV.1 MCD:



ANALYSIS:

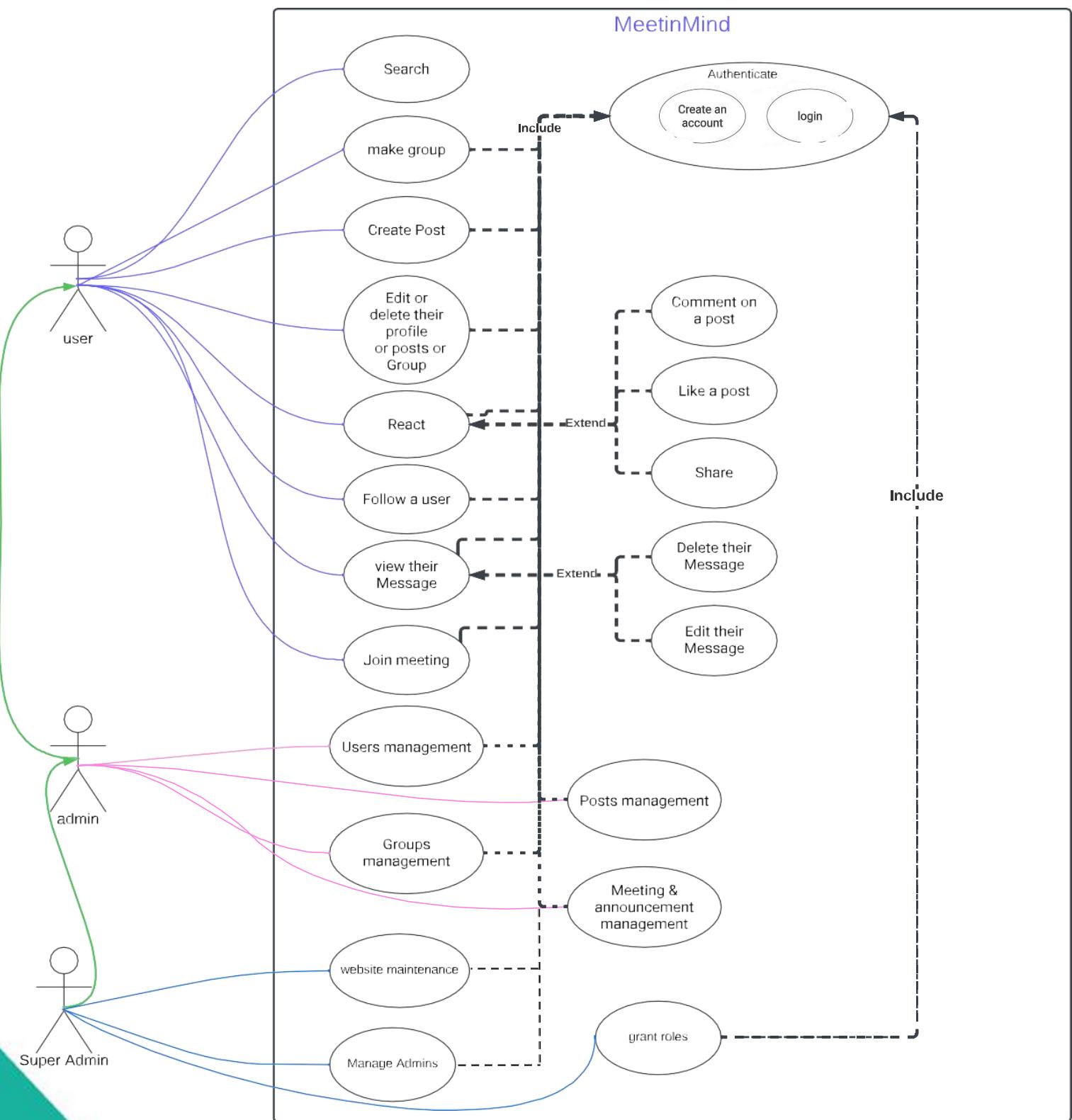
IV.1 MLD:



ANALYSIS:

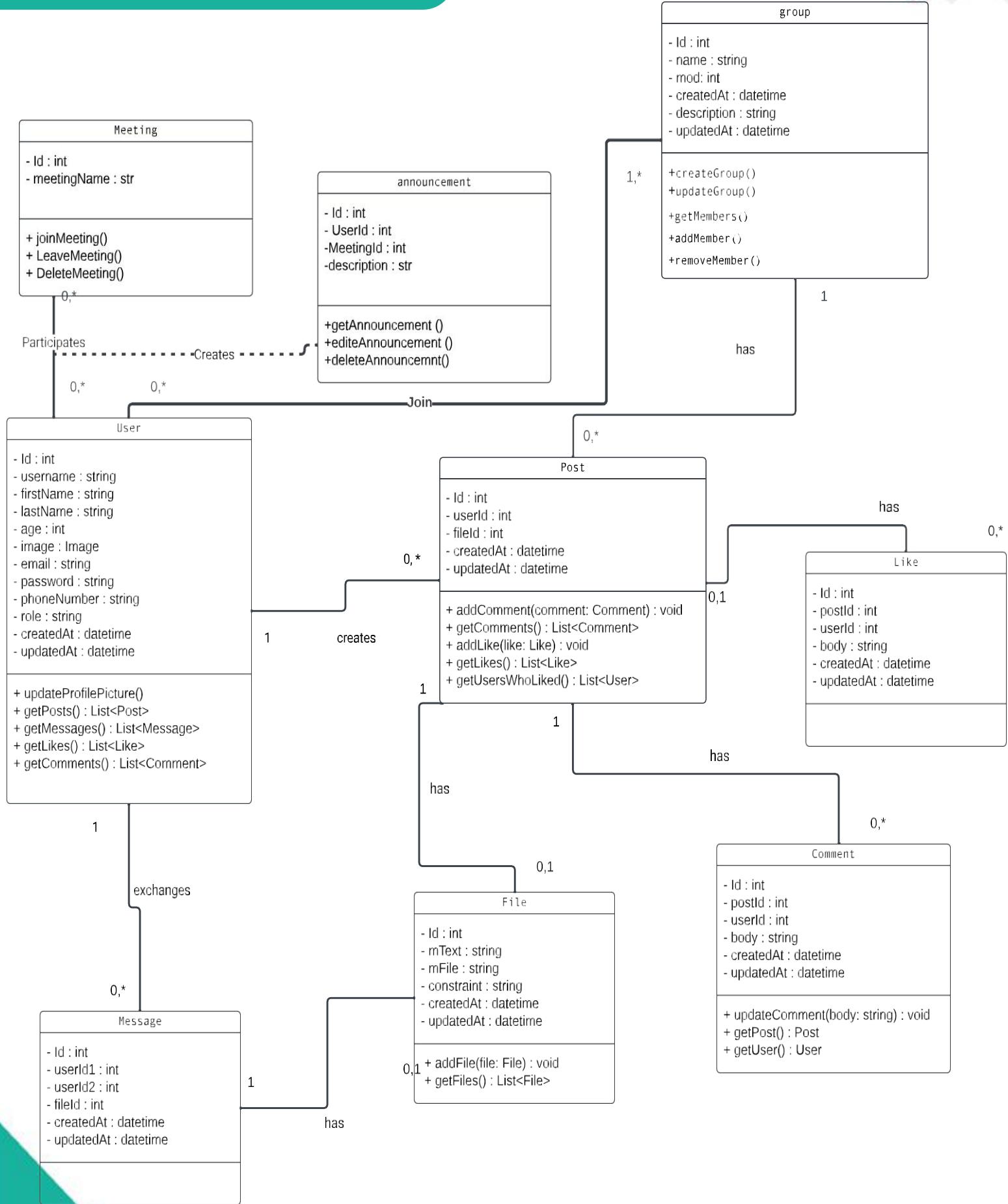
V- UML

V.1 UseCase diagramme:



ANALYSIS:

V.2 Class diagramme:



ANALYSIS:

VI - Effective Project Management with Jira

VI.1 Introduction:



The project management process involves utilizing Jira, a popular project management tool, to effectively manage and track the progress of the project. The project consists of six different versions, each representing a distinct phase or iteration of development.

Within each version, the project is further organized into epics. Epics are high-level user stories or groups of related features that contribute to achieving specific project goals or objectives. They serve as a way to structure and prioritize the work within each version.

For each epic, a backlog is created. The backlog represents a prioritized list of tasks or user stories that need to be completed to fulfill the requirements of the epic. These tasks can include development, testing, bug fixing, or any other necessary activities.

The Jira platform is used to manage and visualize the epics and their associated backlogs. It provides features such as creating and assigning tasks, setting priorities, tracking progress, and generating reports. Jira's flexibility allows for efficient collaboration and communication among team members, ensuring transparency and accountability throughout the project.

By utilizing Jira, the project team can effectively plan, organize, and execute the project's different versions, epics, and associated backlogs. This streamlines the development process, facilitates efficient task management, and enables the team to deliver high-quality results within each version of the project.

VI.2 BackLog:



ANALYSIS:

VI.2.1 Version 1.0.0

VERSIONS Create version X EPICS Create epic X Backlog 7 of 42 issues visible Clear all filters

All issues > 1.0.0 > 1.0.1 > 1.0.2 > 1.0.3 > 1.0.4 > 1.0.5 Issues without versions

All issues > users management > Profile Management > posts management > Comment management > likes management > share management > groups management > ...

EPICS > users management > Profile Management > posts management > Comment management > likes management > share management > groups management > ...

Create epic X > users management > Profile Management > posts management > Comment management > likes management > share management > groups management > ...

Backlog 7 of 42 issues visible Clear all filters

... Create sprint

1.0.0 users management NOUR-9 🔍 12

1.0.0 users management NOUR-10 🔍 10

1.0.0 users management NOUR-11 🔍 8

1.0.0 users management NOUR-12 🔍 18

1.0.0 Profile Management NOUR-21 🔍 14

1.0.0 Profile Management NOUR-22 🔍 5

1.0.0 Profile Management NOUR-23 🔍 17

As an admin, I want to have the ability to manage user accounts, including user registration, a 1.0.0 users management NOUR-9 🔍 12

As an admin, I want to be able to generate user analytics and reports.

As an admin, I want to have the ability to export user data for further analysis or integration.

As a user, I want to have control over my account settings and privacy options.

As a user, I want to have a profile page where I can showcase my professional information.

As a user, I want to be able to edit and update my profile information.

As a user, I want to have privacy settings to control the visibility of certain profile information.

+ Create issue

ANALYSIS:

V1.2.2 Version 1.0.1

VERSIONS	Create version	X	EPICS	Create epic	X	Backlog	15 of 42 issues visible Clear all filters	
All issues			> posts management	▶		As a user, I want to be able to create posts on the professional networking website.	1.0.1	posts management NOUR-13 ➤ 11
> 1.0.0			> Comment management	▶		As a user, I want to be able to search and filter posts based on specific criteria.	1.0.1	posts management NOUR-15 == 13
> 1.0.1			> likes management	▶		As an admin, I want to have the ability to moderate and remove inappropriate or spam posts.	1.0.1	posts management NOUR-16 ➤ 20
> 1.0.2			> share management	▶		As a user, I want to be able to edit and delete my posts on the professional networking website.	1.0.1	posts management NOUR-24 == 12
> 1.0.3			> groups management	▶		As a user, I want to be able to share posts from other users within the professional network.	1.0.1	share management NOUR-25 ➤ 13
> 1.0.4			> Messages management	▶		As a user, I want to have options to share posts publicly, within specific groups, or with selected users.	1.0.1	share management NOUR-26 == 19
> 1.0.5			Issues without versions			As a user, I want to be able to track the number of times my shared posts have been viewed.	1.0.1	share management NOUR-27 ❁ 19
			> Analytics and Reporting Management	▶		As a user, I want to be able to like posts created by other users within the professional network.	1.0.1	likes management NOUR-28 ❁ 18
						As a user, I want to see the number of likes received on my own posts.	1.0.1	likes management NOUR-29 == 15
						As a user, I want to be able to filter and sort posts based on the number of likes they have.	1.0.1	likes management NOUR-30 ➤ 10
						As an admin, I want to have the ability to monitor and moderate shared posts to ensure compliance.	1.0.1	share management NOUR-32 ❁ 14
						As a user, I want to have options to restrict or allow others to share my posts.	1.0.1	share management NOUR-33 ➤ 16

ANALYSIS:

VI.2.3 Version 1.0.2

VERSIONS	Create version	EPICS	Create epic	Backlog
All issues		> groups management	▶ Create issue	5 of 42 issues visible Clear all filters
> 1.0.0		> Messages management	▶ Create issue	
> 1.0.1		> Analytics and Reporting Management	▶ Create issue	
> 1.0.2		> Meeting management	▶ Create issue	
> 1.0.3		> Announcement management	▶ Create issue	
> 1.0.4				
> 1.0.5				
Issues without versions				
Issues without epics				

ANALYSIS:

V1.2.4 Version 1.0.3

Create sprint

Backlog 4 of 42 issues visible Clear all filters

VERSIONS	CREATE VERSION	EPICS	CREATE EPIC	ALL ISSUES
All issues		> groups management		> As a user, I want to be able to send and receive messages from other users within the platform.
> 1.0.0		> Messages management		> As a user, I want to have a messaging inbox to organize and manage my conversations.
> 1.0.1				> As a user, I want to be able to search and filter my messages for easy retrieval.
> 1.0.2				> As an admin, I want to have the ability to review and moderate reported messages.
			+ Create issue	
				Issues without versions
				Issues without epics

ANALYSIS:

VI.2.5 Version 1.0.4

ANALYSIS:

VI.2.6 Version 1.0.5



VERSIONS Create version x EPICS Create epic x Backlog 4 of 42 issues visible Clear all filters Create sprint ...

All issues > 1.0.0 > 1.0.1 > 1.0.2 > 1.0.3 > 1.0.4 > 1.0.5 Issues without versions

> groups management > Messages management > Analytics and Reporting Management > Meeting management > Announcement management Issues without epics

As an admin, I want to be able to create and publish announcements on the profession... 1.0.5 Announcement manag... NOUR-55 ↲ 5

As a user, I want to be able to view and receive announcements from the website adn... 1.0.5 Announcement manag... NOUR-56 ➤ 5

As an admin, I want to be able to schedule announcements to be published at a speci... 1.0.5 Announcement manag... NOUR-57 ➤ 10

As an admin, I want to be able to target specific user groups or segments with annou... 1.0.5 Announcement manag... NOUR-58 ↲ 20

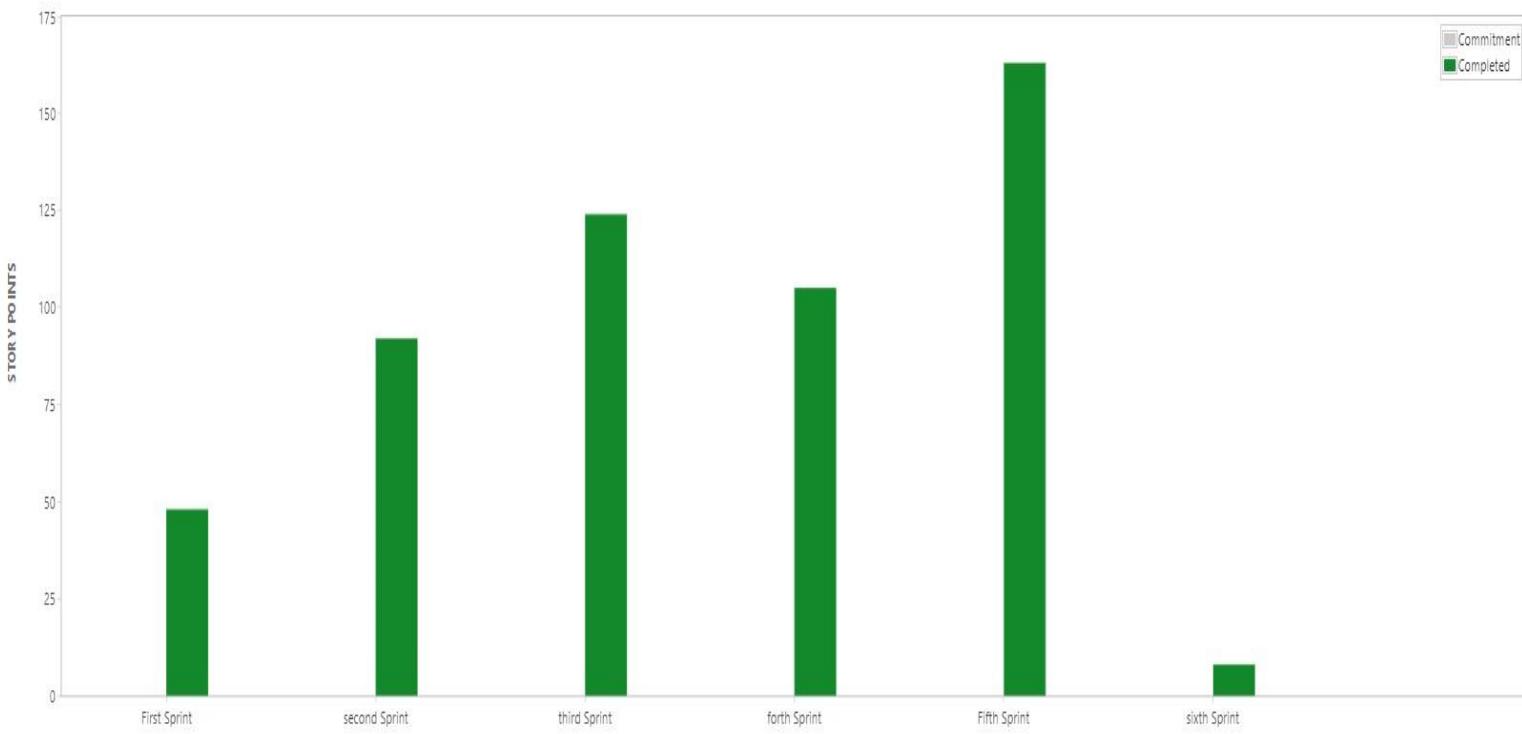
+ Create issue

ANALYSIS:

VI.3 Sprint



In the project we dividing the work into six sprints over a three-month period. Sprints are time-bound iterations that allow us to focus on specific tasks and deliver incremental value. Each sprint involves selecting and completing a set of user stories or tasks from the backlog. We use story points to estimate and prioritize the work effectively. Regular sprint planning, daily stand-up meetings, and sprint reviews help us track progress and make necessary adjustments. By visualizing our sprint progress with a burndown chart, we ensure timely completion of project goals. This Agile approach promotes productivity, collaboration, and continuous improvement throughout the project.



Sprint	Commitment	Completed
First Sprint	0	48
second Sprint	0	92
third Sprint	0	124
forth Sprint	0	105
Fifth Sprint	0	163
sixth Sprint	0	8

ANALYSIS:

VI.4 diagrammes



VI.4.1 PERT

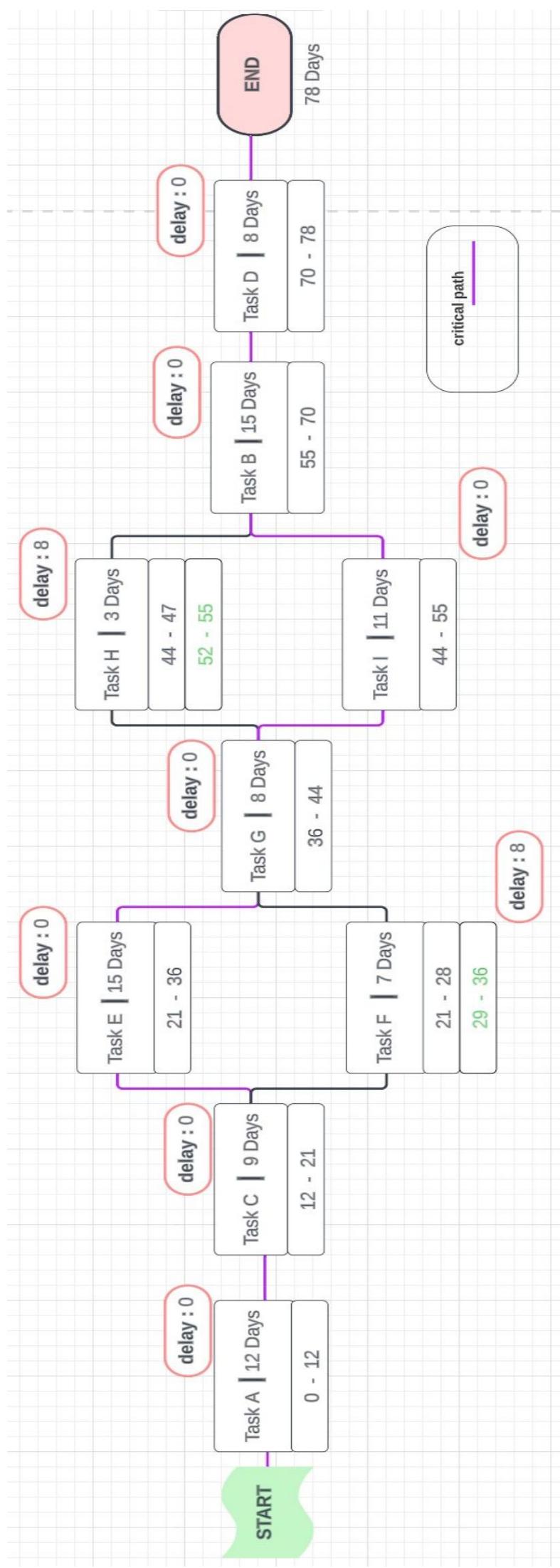


III.4.1.1 planning

Task ID	Task Description	Predecessors	Start Date	End Date	Duration (Workdays)
A	Announcement Management	-	2023-03-01	2023-03-12	12
B	Meeting Management	-	2023-04-24	2023-04-30	15
C	Messages Management	A	2023-03-12	2023-03-21	9
D	Groups Management	B	2023-04-30	2023-05-07	8
E	Posts Management	C,D	2023-03-21	2023-04-05	15
F	Users Management	C	2023-03-21	2023-03-28	7
G	Share Posts Management	E	2023-04-5	2023-04-13	8
H	Likes Post Management	G	2023-04-13	2023-04-16	3
I	Comment Post Management	G	2023-04-13	2023-04-24	11

ANALYSIS:

VI.4.1.2 PERT diagramme

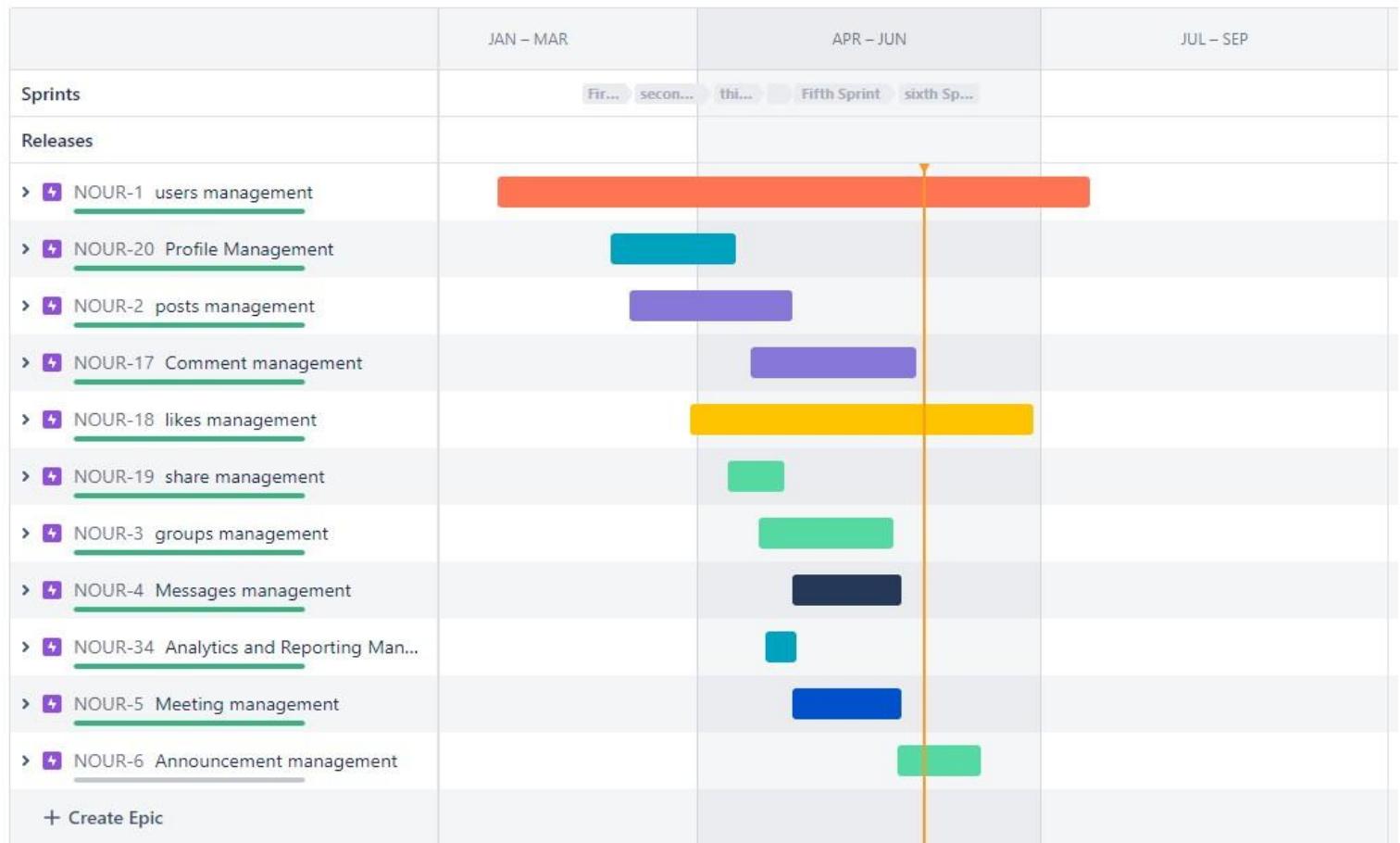


ANALYSIS:

VI.4.2 GANTT



The Gantt diagram enables us to track the progress of individual tasks, identify dependencies, and manage resource allocation effectively. By clearly illustrating the start and end dates of each task, it helps us visualize the project's overall timeline and identify potential bottlenecks or scheduling conflicts.



ANALYSIS:

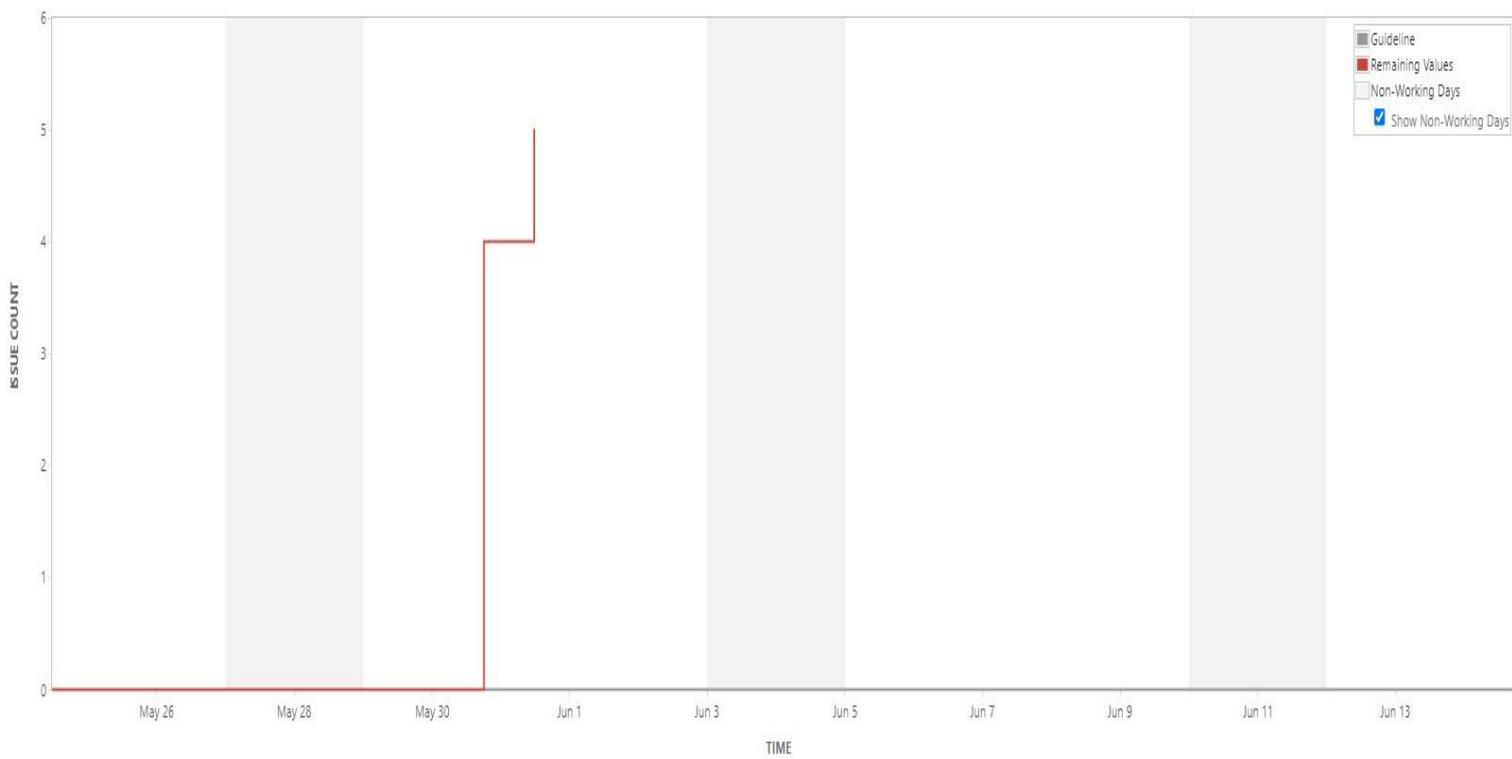
VI.5 BurnDown



Our Burn Down Chart provides a visual representation of the progress made during the last sprint. The chart illustrates the remaining work (in terms of story points or tasks) over time, allowing us to track and monitor the team's efficiency and progress towards completing the sprint's objectives. By observing the trend of completed work versus planned work, the Burn Down Chart helps us identify any deviations and make data-driven decisions to ensure successful sprint completion.

sixth Sprint ▾ Issue Count ▾

...



ANALYSIS:

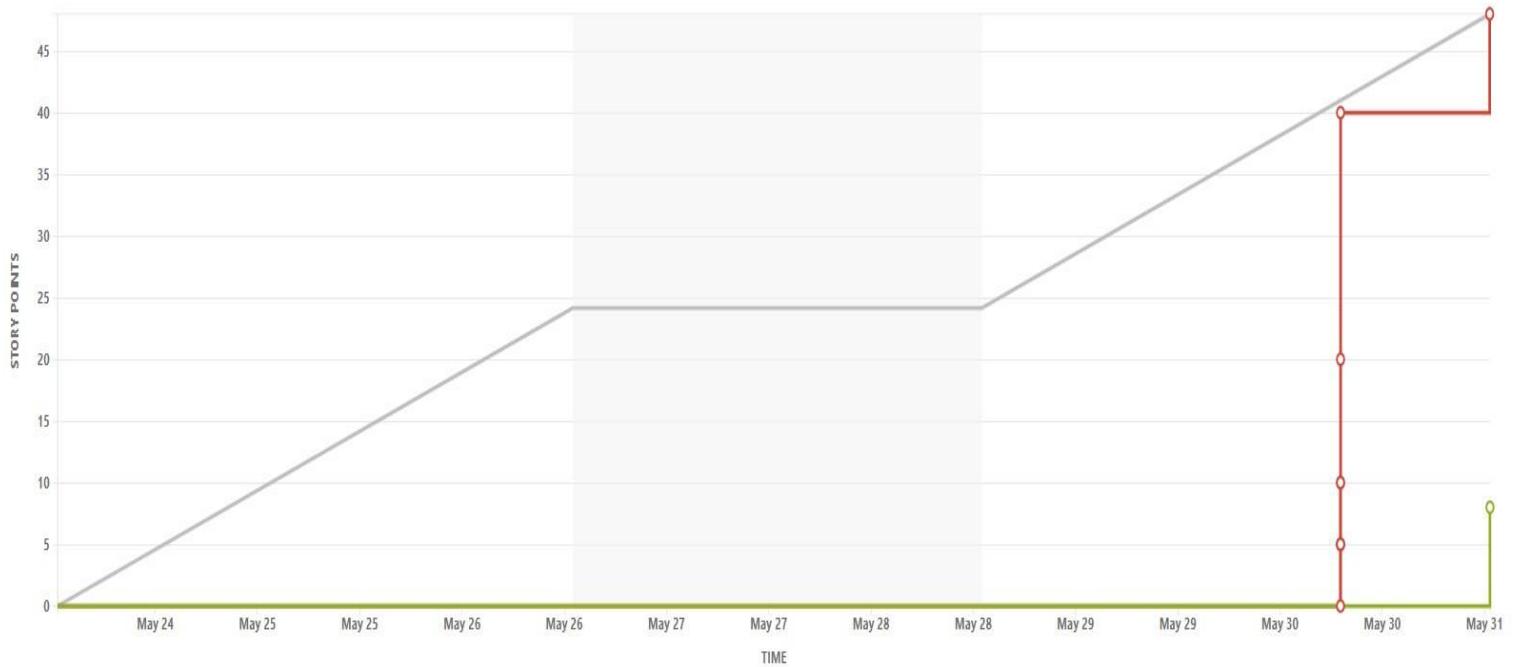
VI.6 BurnUp



Our Burn Up Chart provides a visual representation of the progress achieved during the last sprint. The chart showcases the cumulative completed work (in terms of story points or tasks) over time, enabling us to track the team's productivity and measure the progress towards meeting the sprint's objectives. By visualizing the increase in completed work alongside the planned scope, the Burn Up Chart helps us gauge the project's overall progress and make informed decisions to ensure successful sprint delivery.

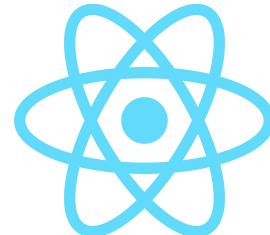
sixth Sprint ▾ Story Points ▾

Work scope
Completed Work
Scope projection
Guideline



Reasation:

I. Technology Benchmarking and Evaluation

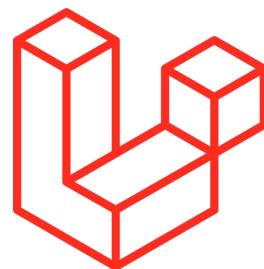


Jitsi

Jitsi is a free and open-source video conferencing platform. It enables secure communication through features like audio/video calling, screen sharing, and chat. Jitsi can be easily integrated into web applications and offers customization options. With its focus on privacy and encryption, Jitsi is trusted for virtual meetings and collaboration.



I.1 Technologies used



Mysql

MySQL is a widely adopted open-source relational database management system. It provides a reliable and scalable solution for storing and retrieving structured data. With support for advanced querying and transaction processing, MySQL is a popular choice for various applications, thanks to its performance and extensive community support.

Laravel

Laravel is a powerful PHP framework known for its elegant syntax and developer-friendly features. It follows the MVC pattern and simplifies common tasks like routing, database management, and authentication. Laravel's comprehensive ecosystem and active community make it a top choice for building modern web applications..

Reasons:

II .Benchmarking

II.1 FrontEnd Benchmarking:



01

Angular

- Developed and maintained by Google.
- Full-featured framework with a steep learning curve.
- Supports two-way data binding.
- Offers powerful tools for large-scale applications.
- Has a structured architecture and strong community support.
- Provides a comprehensive set of features out-of-the-box.

02

React.js

- Developed and maintained by Facebook.
- Popular for building user interfaces (UIs).
- Utilizes a virtual DOM for efficient rendering.
- Supports one-way data binding.
- Offers component-based architecture, enabling code reusability.
- Has a vast ecosystem with numerous libraries and community support.
- Provides flexibility to choose additional tools and libraries.

03

Vue.js

- Progressive JavaScript framework.
- Designed to be incrementally adoptable.
- Offers easy integration into existing projects.
- Emphasizes simplicity and ease of use.
- Provides two-way data binding.
- Has a gentle learning curve and offers excellent documentation.
- Offers seamless integration with existing projects.

04

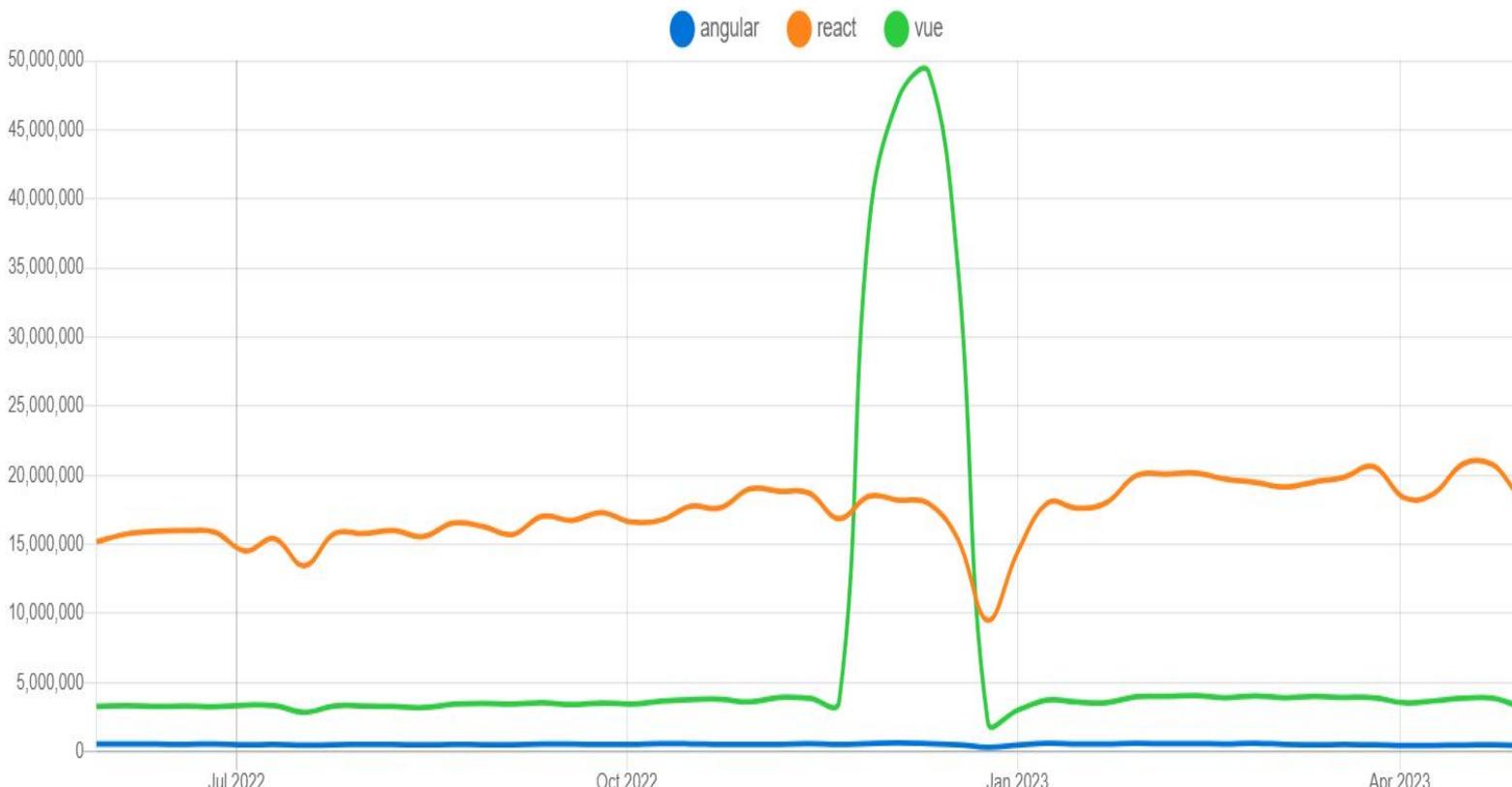
Ember.js

- Opinionated framework with conventions over configuration.
- Provides an out-of-the-box solution for building ambitious web applications.
- Offers powerful features for routing, data management, and testing.
- Favors convention-based development.
- Has a steep learning curve but provides strong developer tooling.
- Offers a large and active community.

Reasation:

II.2 statistic FrontEnd technology:

The download trends of popular front-end frameworks Angular, React, and Vue on the npm registry over the past year reveal interesting insights about their popularity and adoption by developers.



Reasons:

II.3 Benchmarking Comparison for our tech React.js



I

Performance: React.js is known for its efficient rendering performance. It utilizes a virtual DOM, which updates and renders only the necessary components when changes occur. This approach minimizes the amount of DOM manipulation required, resulting in faster and smoother user interfaces.

Component-Based Architecture: React.js follows a component-based architecture, allowing developers to create reusable UI components. This promotes code reusability, modularity, and easier maintenance. With React's component-based approach, developers can efficiently manage complex UI structures and build scalable applications.

II

III

Vast Ecosystem: React.js has a vast ecosystem of libraries, tools, and community support. This ecosystem provides a wide range of resources to enhance development productivity and accelerate the creation of feature-rich applications. React's popularity ensures continuous updates, improvements, and new libraries being developed by the community.

IV

Virtual DOM: React.js uses a virtual DOM, which is a lightweight copy of the actual DOM. This allows React to efficiently compare the changes made to the virtual DOM with the real DOM, minimizing the number of actual DOM manipulations needed. As a result, React can optimize rendering and deliver a smoother user experience.

Reasons:

II.4 Arguments for Choosing React.js



I

Flexibility and Scalability: React.js offers great flexibility, allowing developers to choose their preferred tools, libraries, and architectural patterns. This flexibility enables seamless integration with existing projects and gives developers the freedom to customize and extend React's functionalities. Additionally, React's component-based architecture promotes scalability, making it suitable for building both small and large applications.

Large and Active Community: React.js has a large and active community of developers, which means there is ample support, resources, and learning materials available. The community-driven nature of React ensures continuous improvement, updates, and a wealth of third-party libraries and components. This vibrant community provides assistance, shares knowledge, and contributes to the overall growth of React.js.

II

III

Reusability and Code Maintainability: React.js promotes code reusability through its component-based architecture. Developers can create independent and reusable components, reducing redundant code and making maintenance easier. React's modular approach also enables teams to collaborate efficiently and work on different components concurrently.

IV

Strong Industry Adoption: React.js has gained widespread adoption and is used by many major companies and organizations. This industry adoption demonstrates React's reliability, stability, and suitability for building production-grade applications. Choosing React.js can align your project with industry standards and best practices.

Reasons:

II.5 BackEnd Benchmarking:



01

Express.js

- Strengths: Lightweight, minimalistic, and highly scalable framework.
- Weaknesses: Lack of built-in features and conventions compared to other frameworks.
- Performance: Excellent performance due to its non-blocking, event-driven architecture.

02

Django

- Strengths: Comprehensive framework with a rich set of built-in features and robust security.
- Weaknesses: Requires familiarity with Python and can be considered heavyweight for smaller projects.
- Performance: Offers excellent performance with its efficient object-relational mapping (ORM) and caching mechanisms.

03

Laravel

- Strengths: Elegant syntax, extensive built-in features, and a vibrant ecosystem of packages.
- Weaknesses: May require additional configuration for complex projects and can be resource-intensive.
- Performance: Provides good performance with its caching mechanisms, database query optimization, and support for asynchronous tasks.

04

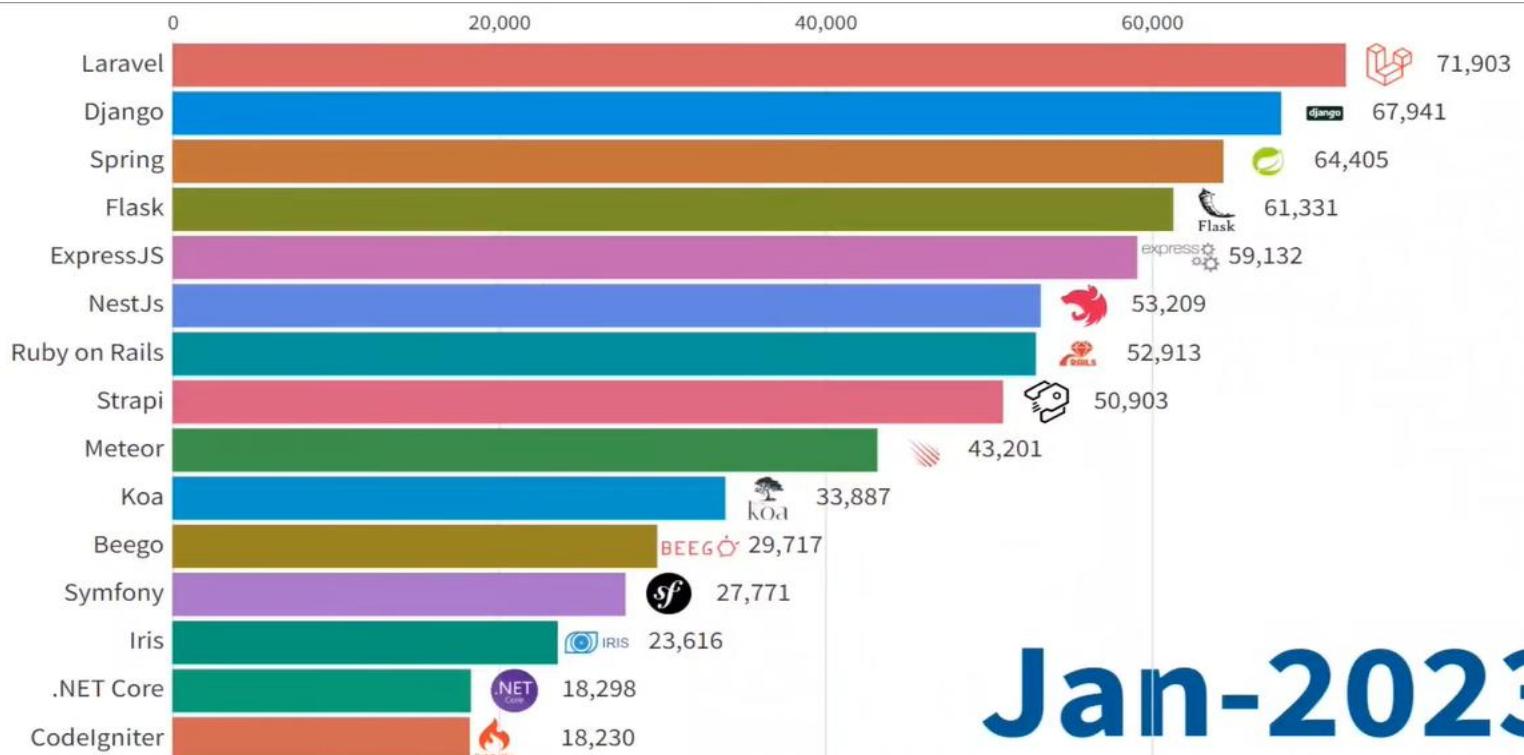
Symfony

- Strengths: Highly flexible and modular framework, extensive feature set, and excellent documentation.
- Weaknesses: Steeper learning curve compared to some other frameworks.
- Performance: Offers good performance with its caching mechanisms, optimized routing, and database query optimization.

Reasation:

II.6 statistic BackEnd technology:

The following chart presents a comparison of the most popular backend technologies based on the number of stars of their repositories exported from GitHub Archive. The number of stars is an indicator of the popularity and community engagement surrounding each technology. This chart aims to provide insights into the current trends and preferences among developers in the backend development landscape. By examining the number of stars, we can gauge the level of interest and adoption of each technology within the developer community. Please note that the number of stars may not solely indicate the quality or performance of a technology, but rather its popularity and recognition among developers.



Jan-2023

Reasons:

II.7 Benchmarking Comparison for Laravel



I

Performance: Laravel exhibited excellent performance in terms of response time and handling concurrent requests. Its efficient routing system and caching mechanisms contributed to its fast execution speed.

II

Scalability: Laravel demonstrated high scalability, allowing seamless expansion of applications to handle increasing traffic and user load. It efficiently managed database queries and offered caching mechanisms to optimize performance.

III

Developer Productivity: Laravel's elegant syntax and comprehensive documentation significantly enhanced developer productivity. Its robust set of features, such as built-in authentication, database migrations, and ORM (Object-Relational Mapping), streamlined the development process.

IV

Ecosystem and Community: Laravel benefits from a vast ecosystem with numerous packages and libraries available through Composer. Its strong community support ensures regular updates, bug fixes, and continuous improvements.

V

Testing and Debugging: Laravel provided excellent testing support, facilitating unit testing and integration testing. Its debugging tools and error handling mechanisms eased the identification and resolution of issues during development.

Reasons:

II.8 Arguments for Choosing Laravel



I

Robust and Feature-Rich: Laravel offers a rich set of features out-of-the-box, including routing, caching, database management, and authentication. It provides a solid foundation for building secure and scalable applications.

Developer-Friendly: Laravel's elegant syntax and intuitive design patterns make it developer-friendly, allowing for efficient and maintainable code. Its comprehensive documentation and active community support ensure a smooth development experience.

II

III

Performance and Scalability: The benchmarking comparison demonstrated Laravel's strong performance and scalability, showcasing its ability to handle high traffic loads and concurrent requests effectively.

IV

Ecosystem and Community Support: Laravel benefits from a thriving ecosystem with a wide range of packages and libraries available through Composer. Its large and active community ensures ongoing support, regular updates, and access to helpful resources.

V

Testing and Debugging Capabilities: Laravel's testing tools and error handling mechanisms simplify the testing and debugging processes, leading to more reliable and stable applications.

Reasons:

II.9 Databases Benchmarking:



01

MySQL

- **Strengths:** Widely used, robust and stable, excellent performance, strong community support, rich feature set.
- **Weaknesses:** Limited scalability for large datasets, may require additional configuration for high availability.
- **Performance:** Offers high performance with efficient indexing, query optimization, and support for caching.

02

Oracle

- **Strengths:** Enterprise-grade database, scalable and highly reliable, advanced security features, comprehensive toolset.
- **Weaknesses:** Higher licensing costs, can be complex to manage and configure.
- **Performance:** Provides excellent performance for large-scale applications with optimized storage management and advanced query optimization.

03

PostgreSQL

- **Strengths:** Powerful open-source database, supports complex queries and advanced data types, extensible with custom functions.
- **Weaknesses:** May have slower performance compared to other databases for certain use cases.
- **Performance:** Offers good performance with efficient indexing, query optimization, and support for parallel execution.

04

MongoDB

- **Strengths:** Flexible document-oriented database, scalable, high availability, supports horizontal scaling.
- **Weaknesses:** Not suitable for highly structured data, may require additional effort for data consistency and complex querying.
- **Performance:** Provides excellent read and write performance, particularly for use cases that require flexible schema and horizontal scalability.

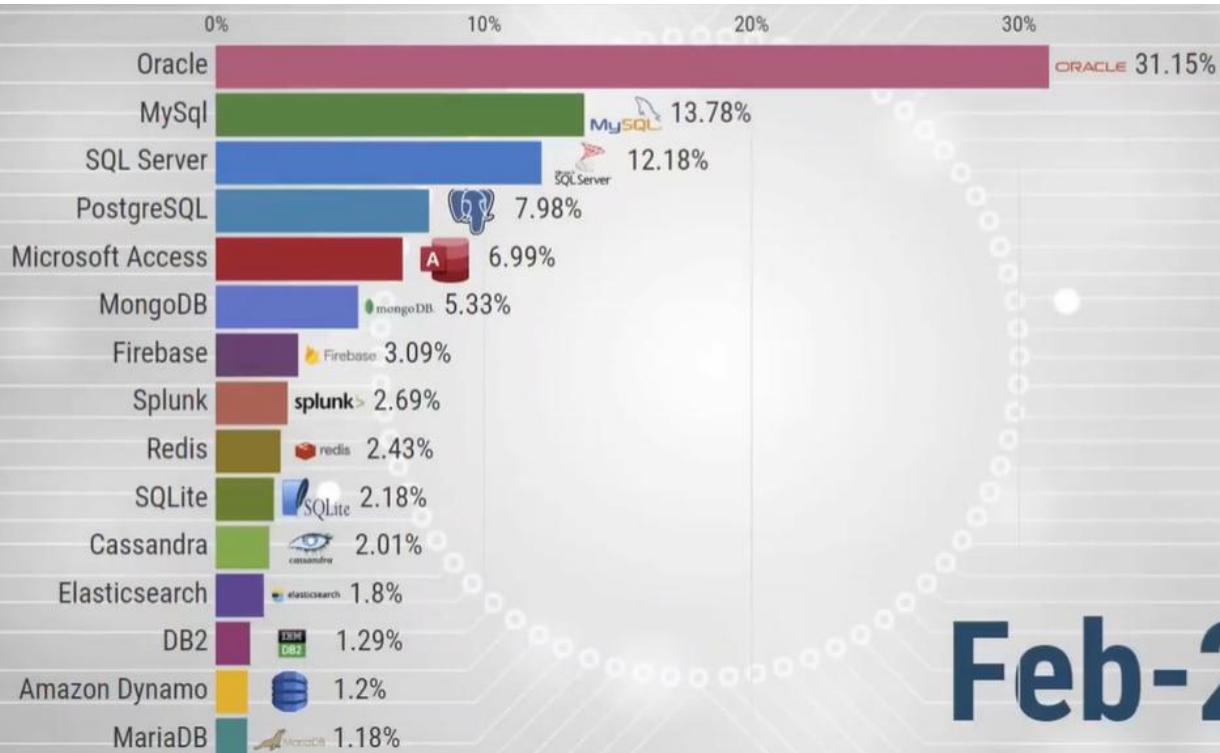
Reasation:

II.10 statistic Databases:



According to the TOPDB Top Database index the most popular database is Oracle with 26.79%. In second position is My Sql with 19.24% and in third position is Sql Server with 12.21%.

Oracle is not only the most searched database in 2022, it has been the most searched database in the world since at least 2006. In the top five positions besides Oracle, MySQL and SQL Server is PostgreSQL with a 6.48 percent valor and followed by Microsoft Access with 6.42 percent. The first version of Microsoft Access was released in November 1992 by Microsoft. Currently, the latest version launched is the 2019 version.



Feb-2023

Reason:

II.11 Benchmarking Comparison for MySQL

When benchmarking MySQL, a popular relational database management system, against other databases, several factors should be considered. Here is a comparison highlighting MySQL's performance and features:

I

Performance: MySQL has consistently shown strong performance in handling large datasets and complex queries. Its optimized query execution engine, indexing capabilities, and efficient caching mechanisms contribute to its speed and scalability.

Reliability and Stability: MySQL is known for its reliability and stability in production environments. It has a proven track record in handling critical workloads and ensuring data integrity. With its transactional support and robust backup and recovery mechanisms, MySQL provides a reliable foundation for data storage.

II

Flexibility and Compatibility: MySQL is highly flexible and compatible with various operating systems, programming languages, and frameworks. It supports a wide range of data types and offers excellent interoperability with other technologies. This flexibility makes it suitable for diverse application requirements.

III

Scalability: MySQL offers scalability options to handle growing workloads. With features like replication, sharding, and clustering, MySQL allows for horizontal and vertical scaling, ensuring performance as the data and user base expand.

IV

V

Community and Support: MySQL benefits from a large and active community of users and developers. This vibrant community provides valuable support, frequent updates, and extensive documentation. The availability of resources and community-driven contributions adds to the strength and reliability of MySQL.

Reasons:

II.11 Arguments for Choosing MySQL



When considering a database for your project, the following arguments support choosing MySQL as the preferred option:

I

Wide Adoption and Community Support: MySQL has been widely adopted by organizations of all sizes, resulting in a large and active community. This ensures continuous development, frequent updates, and extensive support resources, including documentation, forums, and tutorials.

II

Mature and Proven Technology: MySQL has been in development for over two decades and has proven its reliability and stability in countless production environments. Its long-standing presence in the market signifies a mature technology with robust features and industry-standard practices.

III

Ecosystem and Tooling : MySQL integrates seamlessly with popular programming languages, frameworks, and platforms. It has extensive support for various data access protocols and APIs, allowing for smooth integration with existing systems and applications.

IV

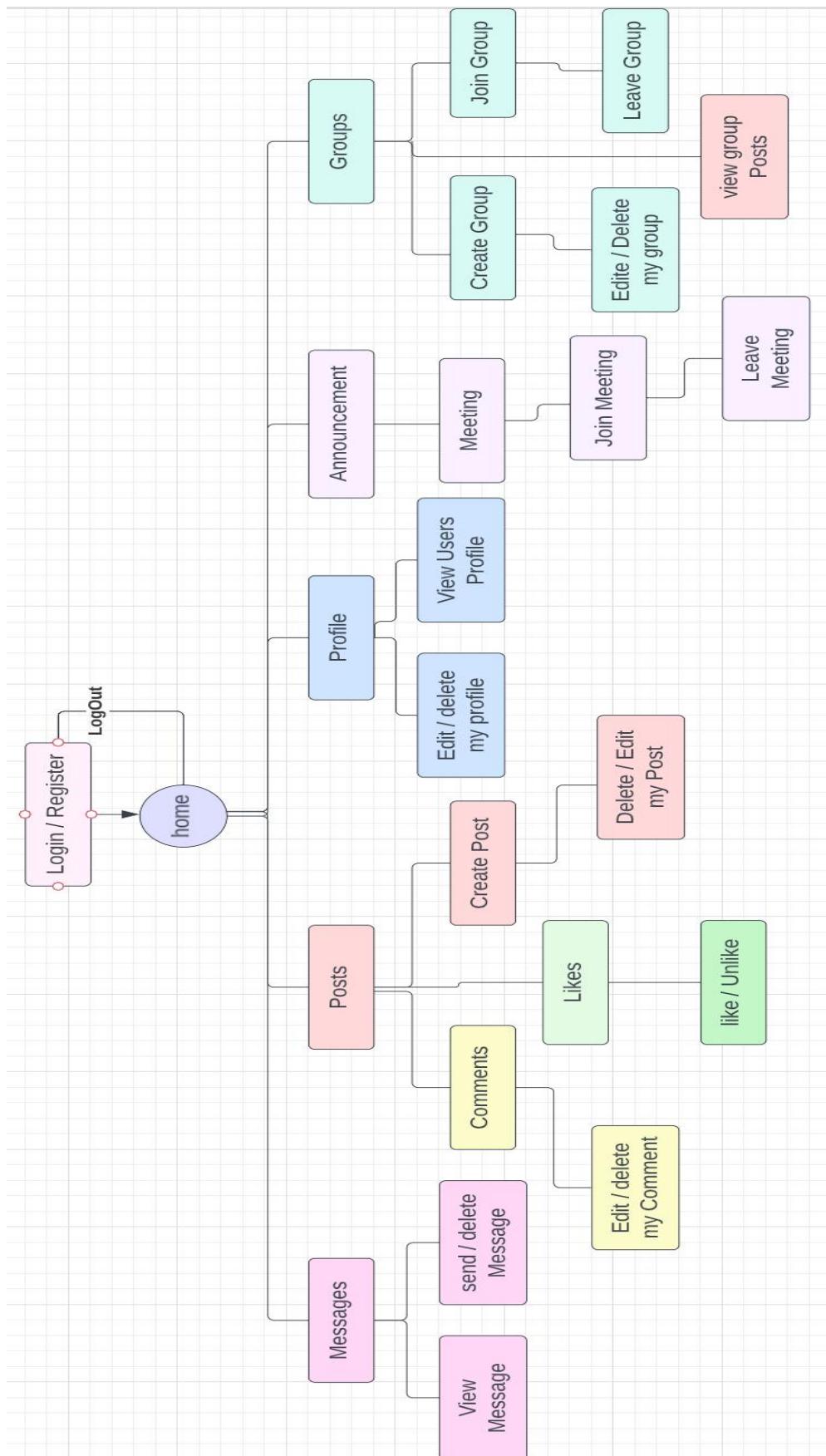
Seamless Integration and Compatibility: MySQL integrates seamlessly with popular programming languages, frameworks, and platforms. It has extensive support for various data access protocols and APIs, allowing for smooth integration with existing systems and applications.

V

Ecosystem and Tooling: MySQL benefits from a rich ecosystem of tools and libraries that enhance its capabilities. From administration and monitoring tools to frameworks and ORMs (Object-Relational Mapping), the MySQL ecosystem offers a wide range of options for efficient database management and development.

User Manual:

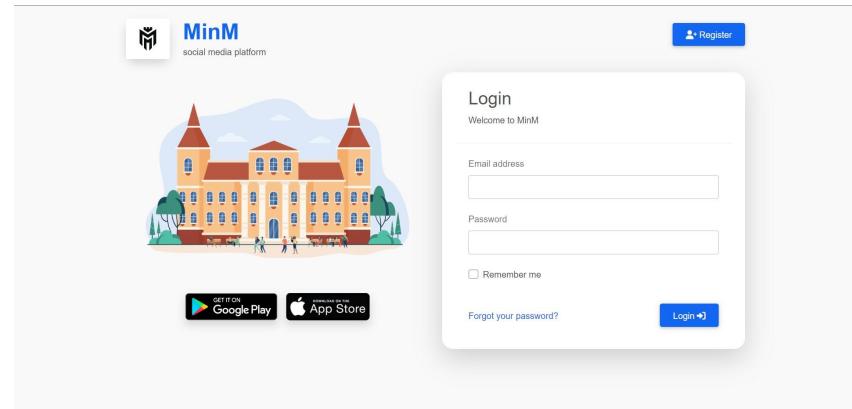
I . navigation diagram



User Manual:

II . the final screensnavigation diagram

Login page for users



Admin Login

The admin login page has a header "Admin Login" and a logo. It contains fields for "Email" and "Password", a "Remember me" checkbox, and buttons for "Forgot your password?", "LOG IN", and "LOG OUT".

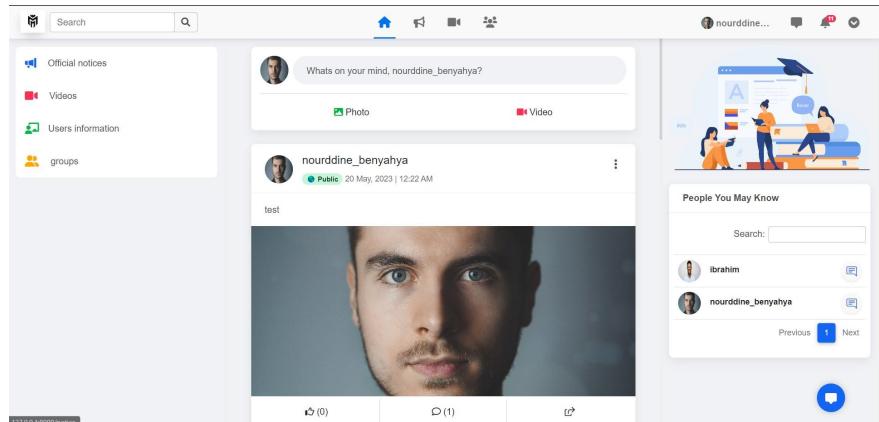
Admins login page

Sign up pages

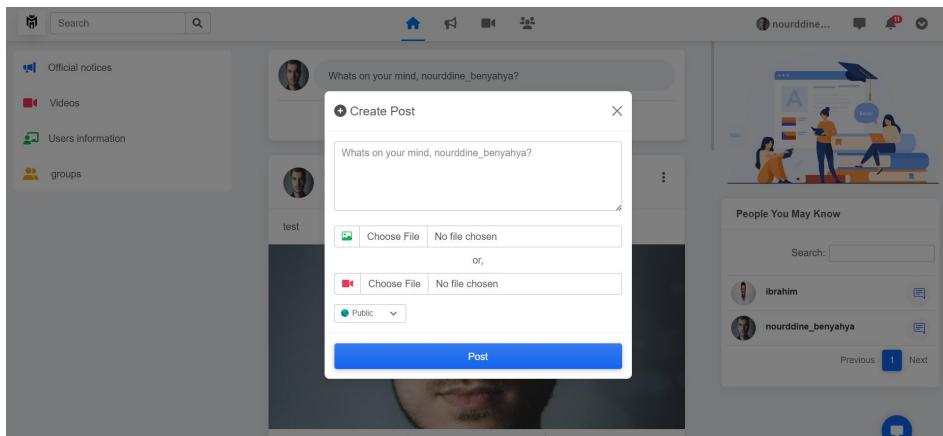
The sign up page includes the MinM logo and fields for "Name", "Email", "Password", "Confirm Password", and "Photo". It features a file input field for "Photo" with the placeholder "Choose File | No file chosen", a "REGISTER" button, and a link "Already registered?".

User Manual:

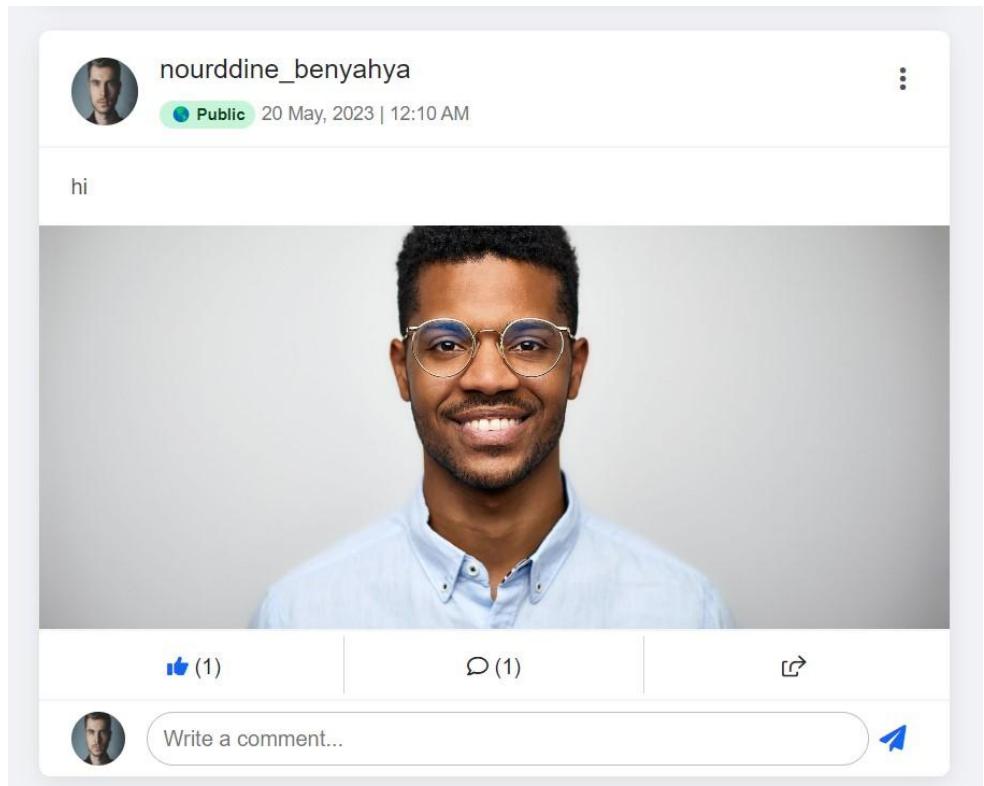
Home page interface



Creating post with attach files option

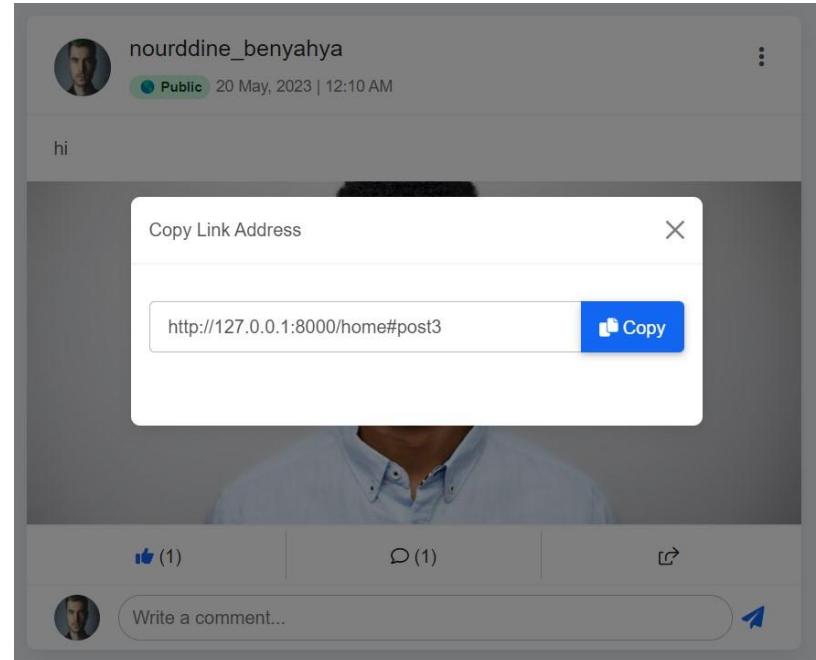


How posts appear



User Manual:

Share pop-up tab



A screenshot of a social media platform's main feed. On the left, there are navigation links for "Official notices", "Videos", "Users information", and "groups". The main area shows a post with a graduation-themed image. Below the image, there is a "Comments" section. A reply box is open, showing a comment from "nourddine_benyahya" saying "hi" and another from "ibrahim" saying "that me". There are "Previous" and "Next" buttons at the bottom of the comment list. To the right, there is a "People You May Know" section with a search bar and a list of users.

Reply to other people's comments and make some of your own

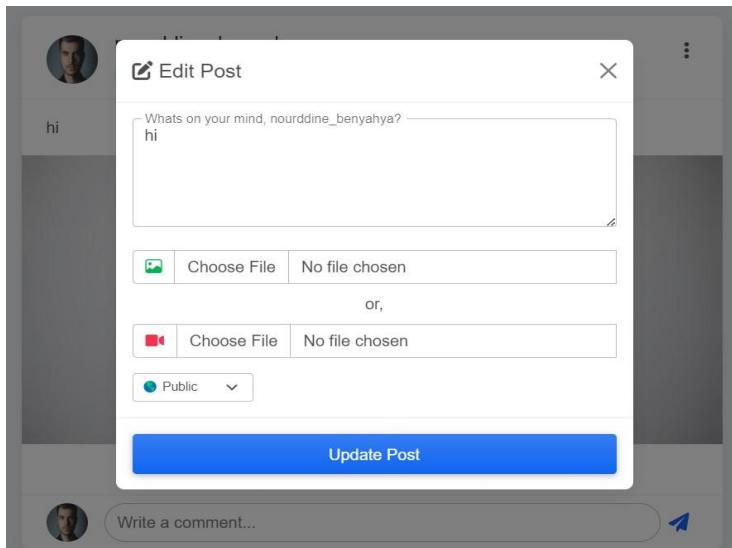
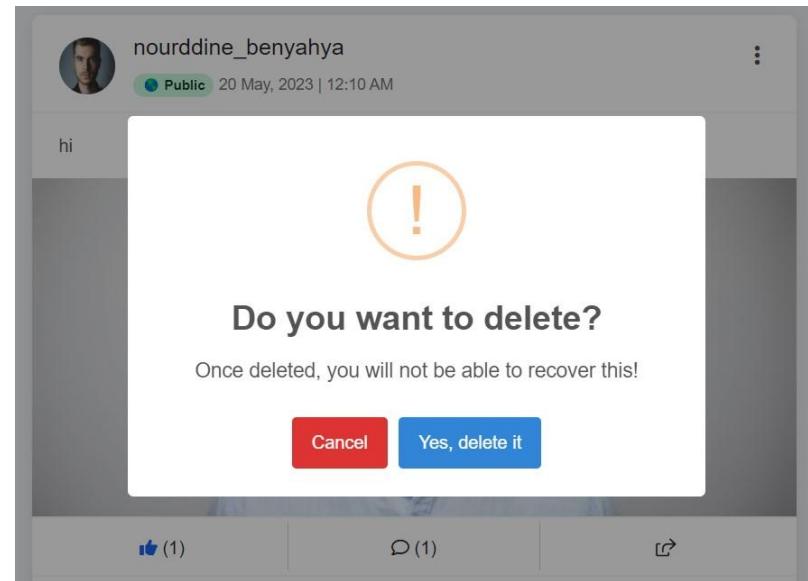
Item's options for Post

Edit

Delete

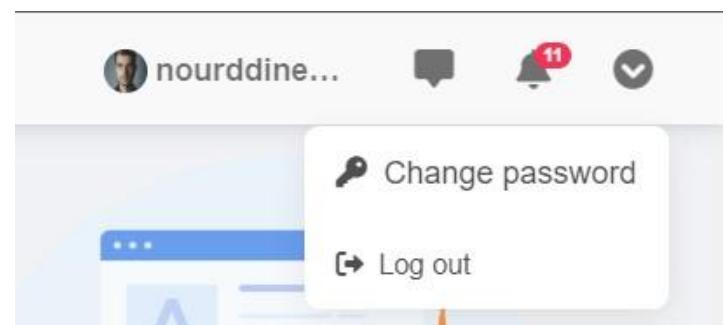
User Manual:

Post deletion confirmation



Tab to commit changes to a post

Options tab



User Manual:

Change your password with double verification

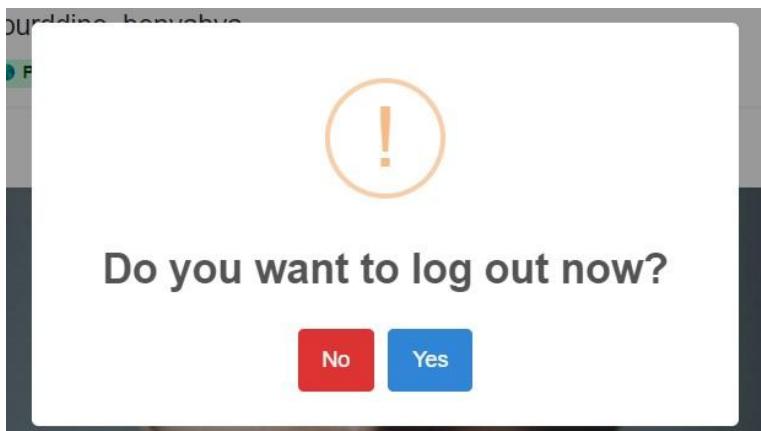
Change Password

Current Password

New Password

Confirm Password

Change Password



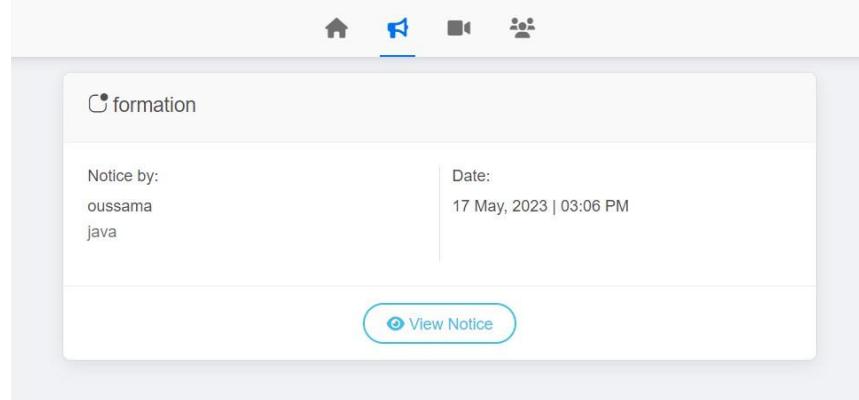
Log out confirmation pop-up

Profile page

A screenshot of a user profile page. The header shows the username "nourddine_benyahya" and an email address. Below the header is a circular profile picture of a man. The main content area includes sections for "Activities" (Number of posts, Number of likes earned, Number of comments received, Joined), a status update from the user, and a post from another user.

User Manual:

Notifications page



Notice tab with option to join

formation

Notice by:

Date:

Notice Details

formation

java cours

oussama
java

[Close](#) [Join](#)

Meetings page



User Manual:

Pov from inside a meeting



Watch, like or comment on video

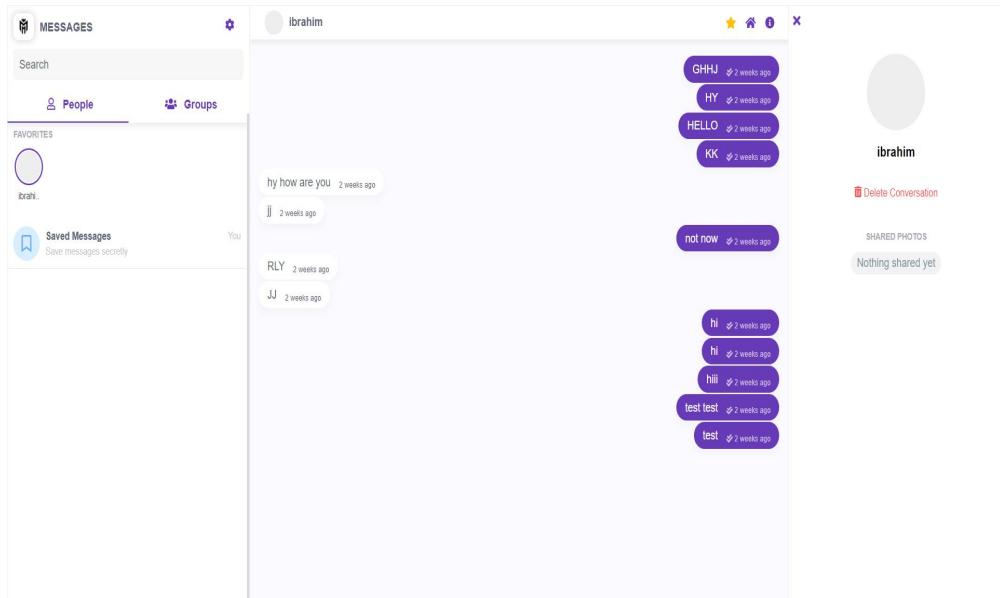
A screenshot of a video player interface. At the top are navigation icons: a house, a speaker, a video camera, and a user icon. Below is a video thumbnail of a rabbit in a grassy field. To the right of the thumbnail is the text '(19 May, 2023 | 02:41 PM)'. Underneath the thumbnail is the word 'hehe'. At the bottom are interaction buttons: a blue thumbs-up icon with '(2)', a blue speech bubble icon with '(1)', and a blue button labeled 'View video'.

Viewing the video up close

A screenshot of a video player interface showing a close-up of a rabbit in a grassy field. At the top left is a profile picture of a person named 'ibrahim'. Next to it are buttons for 'Public' and the date '19 May, 2023 | 02:41 PM'. The video frame shows the rabbit's face and upper body. At the bottom left is a play button and the text '0.00 / 0.05'. At the bottom right are volume and settings icons. Below the video frame is a 'Description' section with the text 'hehe'.

User Manual:

Message exchanging interface



Are you sure you want to delete this?
You can not undo this action

Cancel

Delete

Change your them according to
multiple colour variations

Remove message confirmation

Upload New

Dark Mode



Cancel

Save Changes

User Manual:

Admin dashboard

The Admin dashboard interface includes a top navigation bar with a search bar and user icons. Below the bar, a main dashboard area displays four key metrics: Current Groups (0), Current Notices (1), Current Users (2), and Total Posts (4). The 'Groups' section shows a chart with one data point at 1. The 'Public & Private Posts' section shows a large blue circle placeholder.

User's data Table for admin

Users Information					
ID.	Photo	Name	Status	Email	Joined
1		ibrahim	Offline	dev.coders.creation@gmail.com	17 May, 2023
2		nourddine_benyahya	Offline	nourddine.benyahya02@gmail.com	17 May, 2023

Showing 1 to 2 of 2 entries

Previous 1 Next

Detailed notices page for admin

Notice							
Notices							
ID.	Subject	Notice by	Description	Status	Action		
1	formation	oussama Designation: java	java cours	Public Created: 17 May, 2023 03:06 PM			

Showing 1 to 1 of 1 entries

Previous 1 Next

User Manual:

Make new notice with added option for time of publishing

The screenshot shows a web-based application interface for managing notices. On the left, there's a sidebar with navigation links: 'Search', 'core', 'Dashboard', and 'Notices' (which is highlighted in blue). The main area has a title 'Notice' and a sub-section 'Notices' with buttons for 'Copy', 'CSV', 'Excel', and 'PDF'. Below this is a table with columns 'ID.', 'Subject', 'Notice by', and 'Description'. A single entry is shown: ID 1, Subject 'formation', Notice by 'khalid teacher', and Description 'cour php'. At the bottom of the table, it says 'Showing 1 to 1 of 1 entries'. Overlaid on this is a modal window titled 'Create New Notice'. It contains fields for 'Subject' (set to 'formation'), 'Notice by' (set to 'khalid teacher'), 'Description' (set to 'cour php'), and a checkbox 'Publish now' which is checked. At the bottom of the modal are 'Reset' and 'Add Notice' buttons.

technical sheet for the administrator

I . the runtime environment

In this section, we will explore the runtime environment employed for our project. The runtime environment consists of the software and technologies necessary for the successful execution of our application. In particular, we will focus on XAMPP,NodeJs, as key components of our runtime environment.

I.1 XAMPP



XAMPP is the most popular software package which is used to set up a PHP development environment for web services by providing all the required software components. During the process of software deployment, most of the web servers use almost similar components, so use of XAMPP provides easy transition from local server to live server. XAMPP is a AMP stack which stands for Cross platform, Apache, MySQL, PHP, perl with some additional administrative software tools such as PHPMyAdmin (for database access), FileZilla FTP server, Mercury mail server and JSP Tomcat server.

Other commonly known software packages like XAMPP are WAMP, LAMP, and others.

The XAMPP server is used to test PHP pages. It works as local server. It contains a MySQL database to manage or save data on a local server.

Steps to install XAMPP



- In the web browser, visit Apache Friends and download XAMPP installer.

XAMPP for Windows 7.1.30, 7.2.20 & 7.3.7

Version	Checksum	Size
7.1.30 / PHP 7.1.30 What's Included?	md5 sha1	Download (64 bit) 144 Mb
7.2.20 / PHP 7.2.20 What's Included?	md5 sha1	Download (64 bit) 148 Mb
7.3.7 / PHP 7.3.7 What's Included?	md5 sha1	Download (64 bit) 149 Mb

[Requirements](#) [Add-ons](#) [More Downloads »](#)

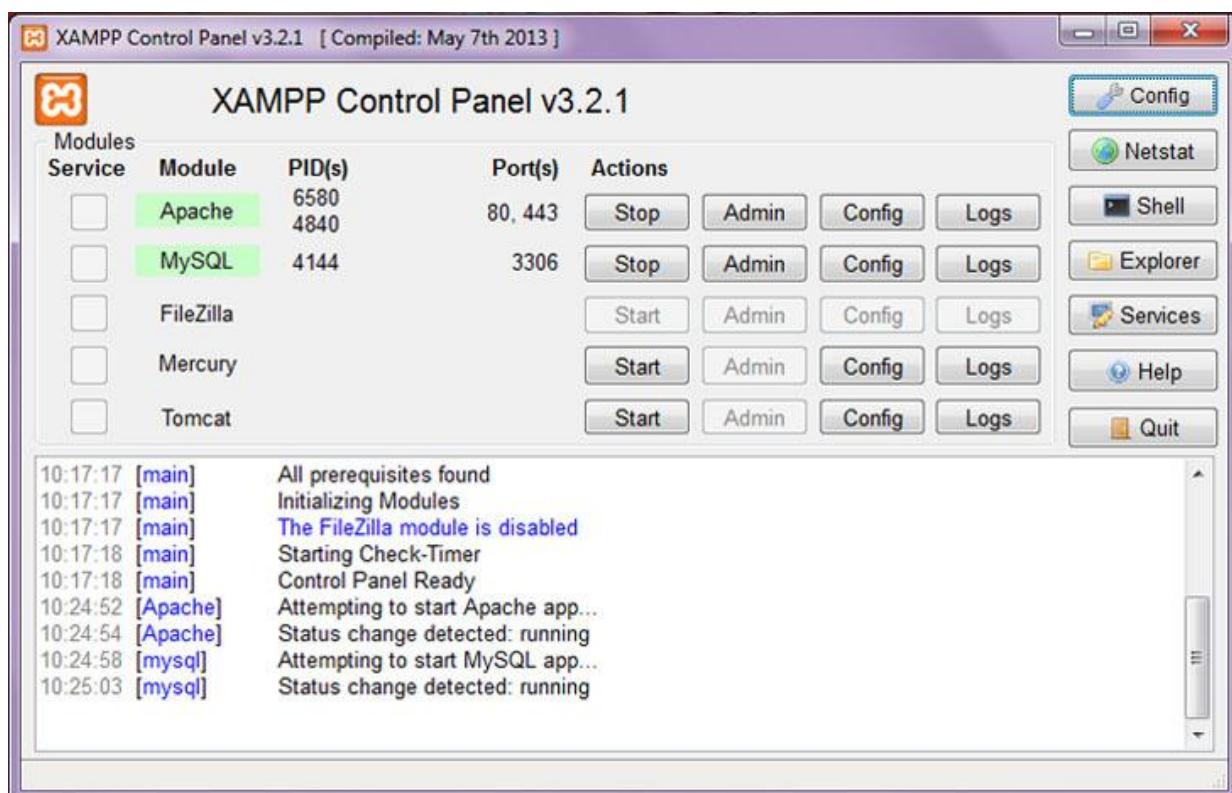
Windows XP or 2003 are not supported. You can download a compatible version of XAMPP for these platforms [here](#).

technical sheet for the administrator

- During the installation process, select the required components like MySQL, FileZilla ftp server, PHP, phpMyAdmin or leave the default options and click the Next button.



- Uncheck the Learn more about bitnami option and click Next button.
- Choose the root directory path to set up the htdocs folder for our applications. For example 'C:\xampp'.
- Click the Allow access button to allow the XAMPP modules from the Windows firewall.
- After the installation process, click the Finish button of the XAMPP Setup wizard.
- Now the XAMPP icon is clearly visible on the right side of start menu. Show or Hide can be set by using the control panel by clicking on the icon.
- To start Apache and MySql, just click on the Start button on the control panel.



technical sheet for the administrator

I.2 Node Js



The Node can be installed in multiple ways on a computer. The approach used by you depends on the existing development environment in the system. There are different package installer for different environments. You can install Node by grabbing a copy of the source code and compiling the application. Another way of installing Node is by cloning the GIT repository in all the three environments and then installing it on the system.

Steps to install NodeJs

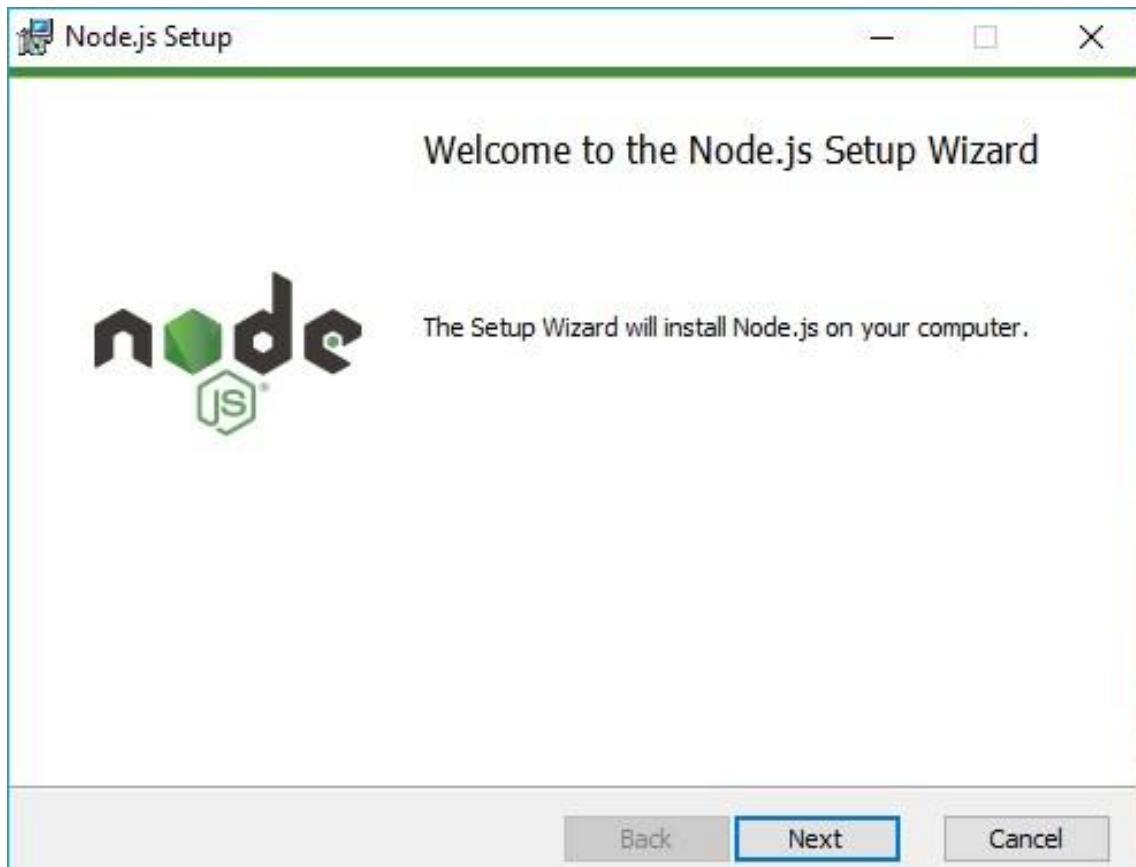


- The first step to install Node.js on windows is to download the installer. Visit the official Node.js website i.e) <https://nodejs.org/en/download/> and download the .msi file according to your system environment (32-bit & 64-bit). An MSI installer will be downloaded on your system.

The screenshot shows the Node.js Downloads page. At the top, there's a navigation bar with links: HOME, ABOUT, DOWNLOADS (which is highlighted), DOCS, GET INVOLVED, SECURITY, NEWS, and FOUNDATION. Below the navigation bar, there are two main sections: 'LTS Recommended For Most Users' and 'Current Latest Features'. Under 'LTS', there's a 'Windows Installer (.msi)' link with the file 'node-v10.15.3-x64.msi'. Under 'Current', there's a 'macOS Installer (.pkg)' link with the file 'node-v10.15.3.pkg' and a 'Source Code' link with the file 'node-v10.15.3.tar.gz'. At the bottom left, there's a table with rows for 'Windows Installer (.msi)', 'Windows Binary (.zip)', 'macOS Installer (.pkg)', and 'macOS Binary (.tar.gz)'. The 'Windows Binary (.zip)' row has columns for '32-bit' and '64-bit'. The 'macOS Binary (.tar.gz)' row also has columns for '32-bit' and '64-bit'. On the right side of the page, there's a note: 'Activate Windows Go to Settings to activate Windows.'

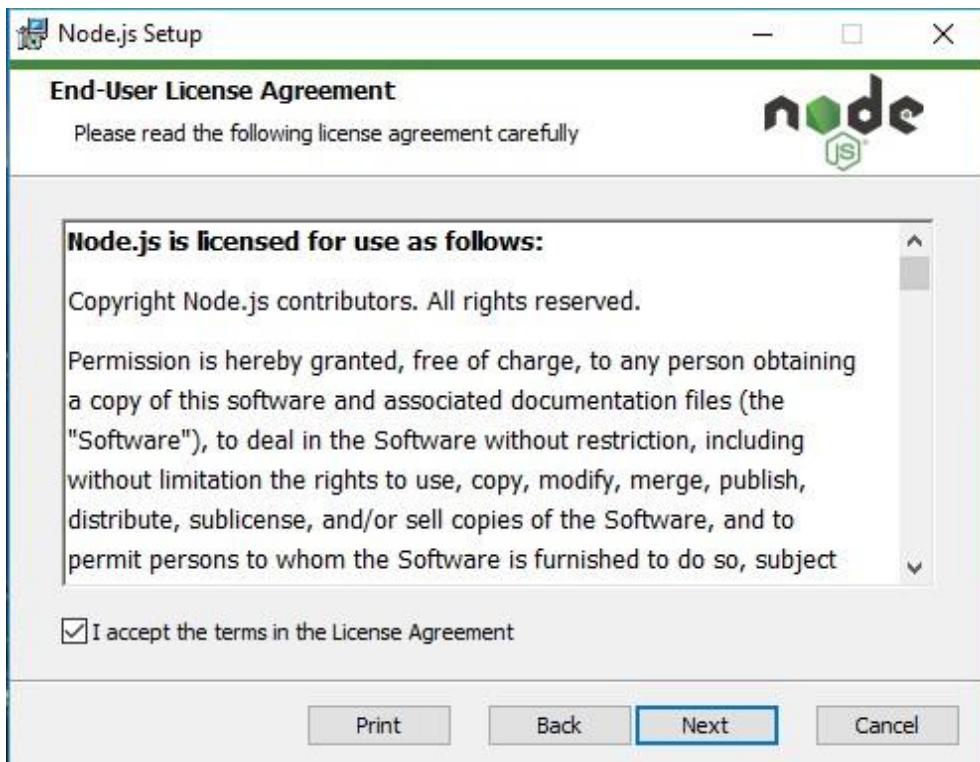
technical sheet for the administrator

- Now you need to install the node.js installer on your PC. You need to follow the following steps for the Node.js to be installed:-
- Double click on the .msi installer.
- Welcome To Node.js Setup Wizard.
- Select “Next”

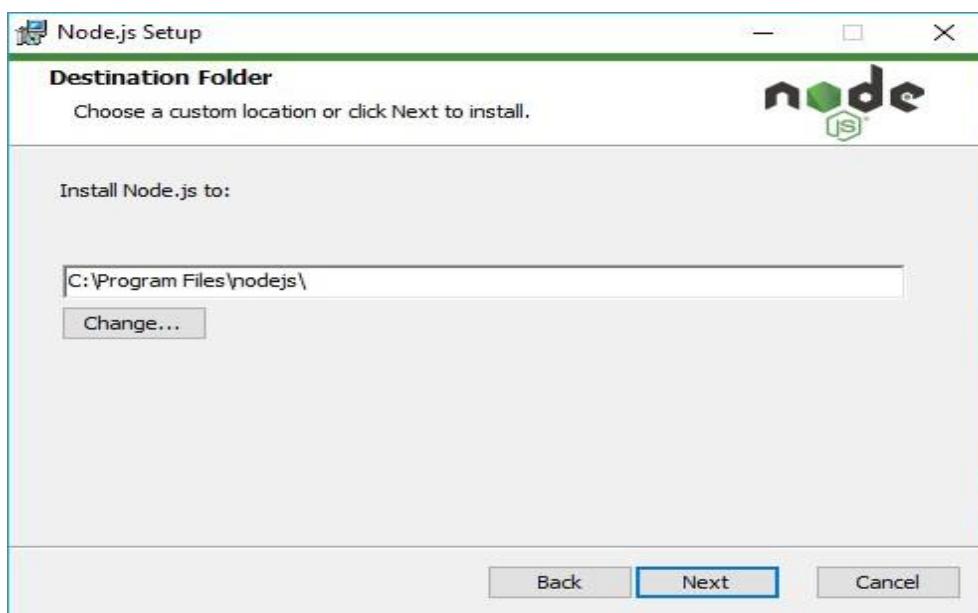


technical sheet for the administrator

- After clicking “Next”, End-User License Agreement (EULA) will open.
- Check “I accept the terms in the License Agreement”
- Select “Next”

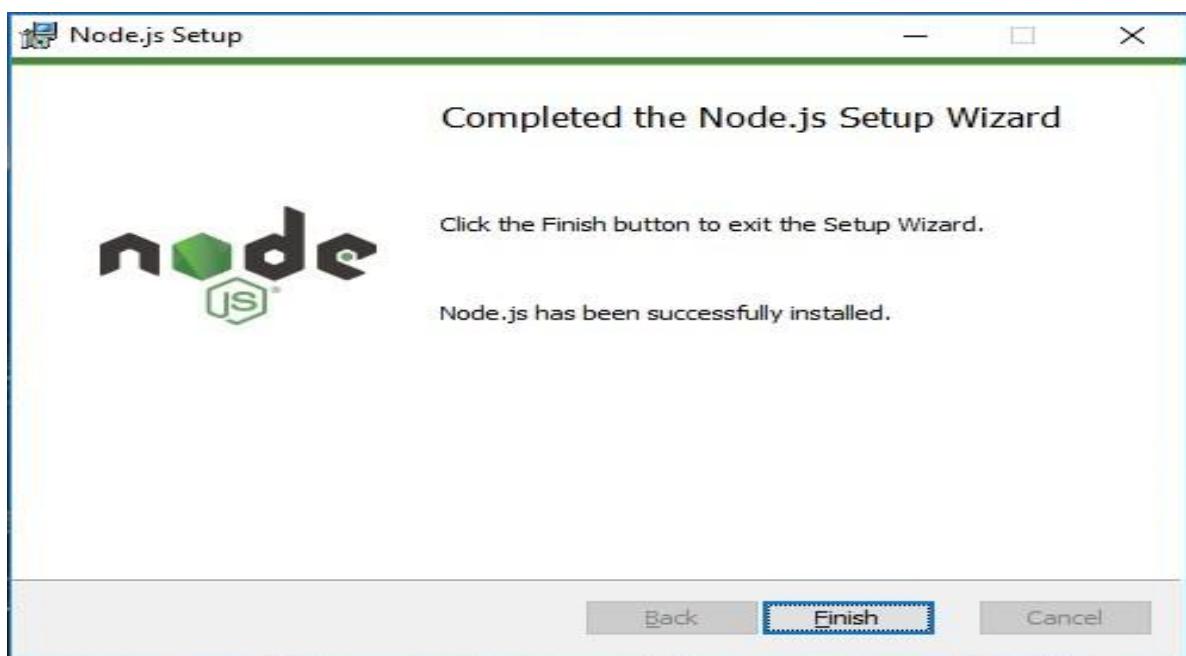
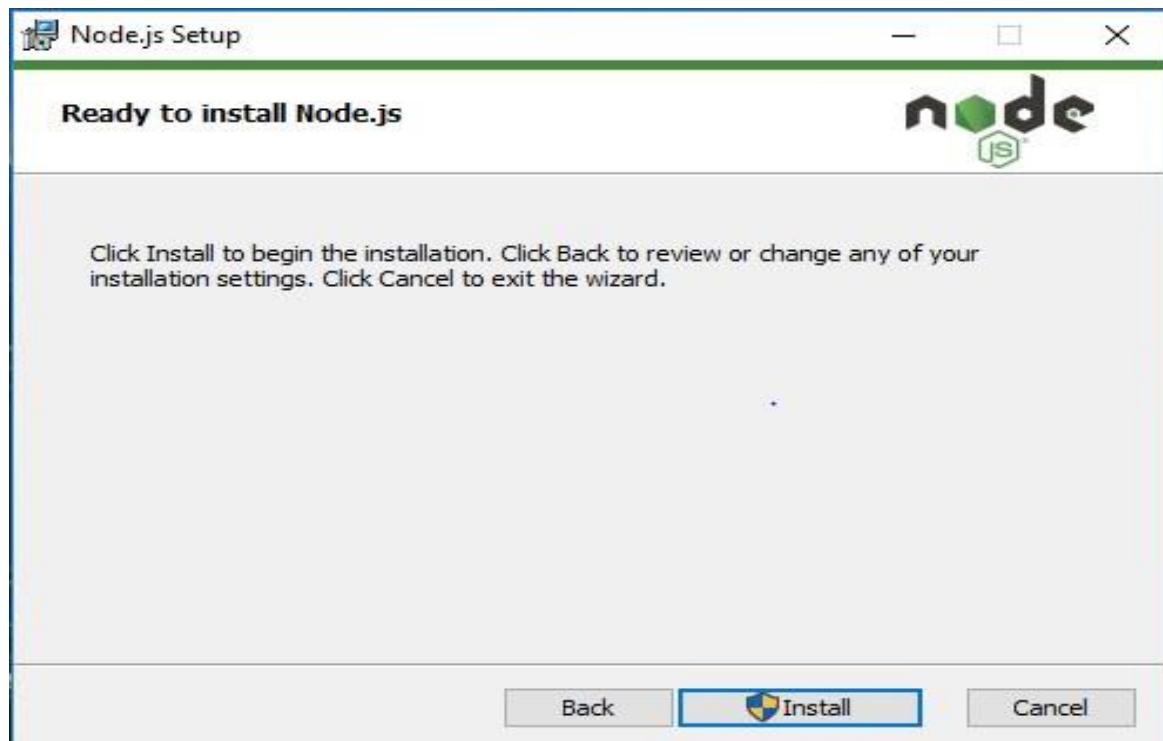


- Set the Destination Folder where you want to install Node.js & Select “Next”



technical sheet for the administrator

- Select “Next” and Click “install”



technical sheet for the administrator

I.2 Composer

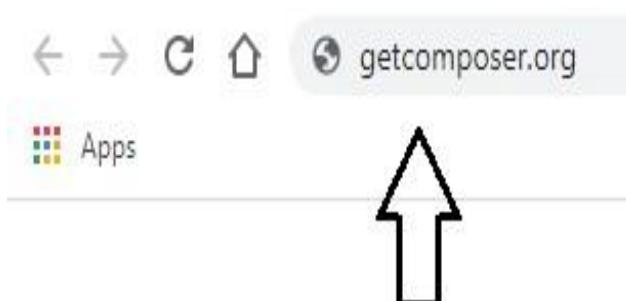


Composer is essentially a package manager for PHP. A package manager is, it allows anyone to import codebases into the project & keep them up to date. It just helps you to manage those dependencies.

ReactJs



- Navigate to the official composer website.
- Then click on the Download button.



A Dependency Manager for PHP

Latest: 2.1.12 ([changelog](#))



[Getting Started](#)

[Download](#)

[Documentation](#)

[Browse Packages](#)

[Issues](#)

[GitHub](#)

technical sheet for the administrator

- Then click on the Composer-Setup.exe & download the file.
- Then click on “Install for all users”

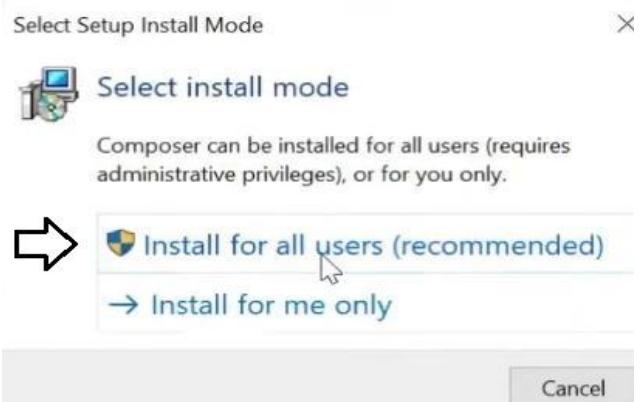


Download Composer

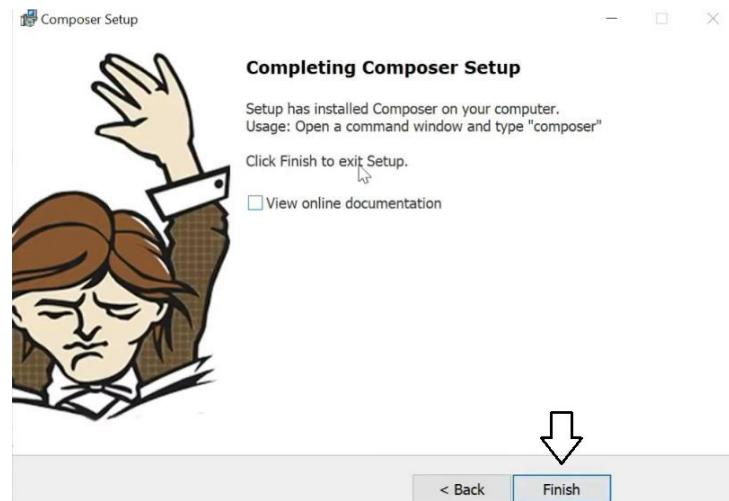
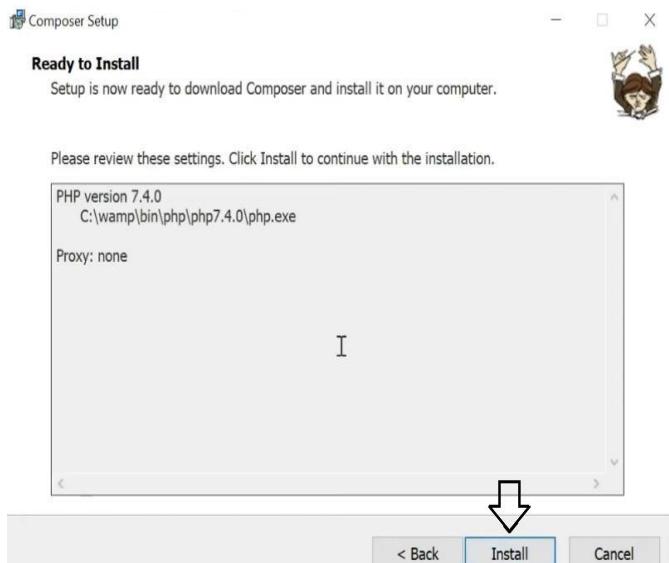
Windows Installer

The installer - which requires that you have PHP already installed - will download Composer and install it on your computer. You can then set an environment variable so you can simply call `composer` from any directory.

Download and run [Composer-Setup.exe](#) it will install the latest composer version.



- Do not make any changes & click Install.
- Click Finish, Composer is installed successfully.



The conclusion

During my internship, I had an exceptional learning experience and gained a wealth of knowledge. I encountered various challenges throughout the project, but as a developer, it is common to face obstacles in any given project. However, we were able to overcome most of them, while some required more time and effort to resolve.

The internship provided me with invaluable opportunities to enhance my technical skills and expand my understanding of software development. I had the privilege of working with cutting-edge technologies such as Laravel and React This hands-on experience allowed me to apply the theoretical knowledge gained during my studies and reinforced my understanding of software development principles.

The collaborative environment within the team fostered knowledge sharing and encouraged continuous growth. Working alongside experienced professionals exposed me to industry best practices, effective communication strategies, and efficient problem-solving techniques. I am grateful for the mentorship and guidance I received throughout the internship, as it played a crucial role in my development as a developer.

While the journey was not without its challenges, I am proud of the accomplishments we achieved as a team. The obstacles we encountered taught me the importance of resilience, adaptability, and perseverance in the face of complex problems. It was through these challenges that I developed a stronger problem-solving mindset and learned to approach difficulties with a systematic and analytical approach.

Overall, the internship has been a transformative experience for me. I have gained valuable technical skills, enhanced my problem-solving abilities, and cultivated a deeper passion for web development. I am extremely grateful for the opportunity to have been a part of this internship and to have worked with such talented individuals. I look forward to applying the knowledge and experience gained in my future endeavors as a professional developer.

A large, abstract graphic element in the upper right corner consisting of several overlapping rectangles in shades of teal, dark blue, and light grey, creating a layered effect.

**Thank you for Reading our
Internship Report**