Requirement Gathering and Analysis Phase

Technology Stack (Architecture & Stack)

Date	13th July 2024
Team ID	SWTID1719938419
Project Name	Social Media App (MERN)
Maximum Marks	

Technical Architecture:

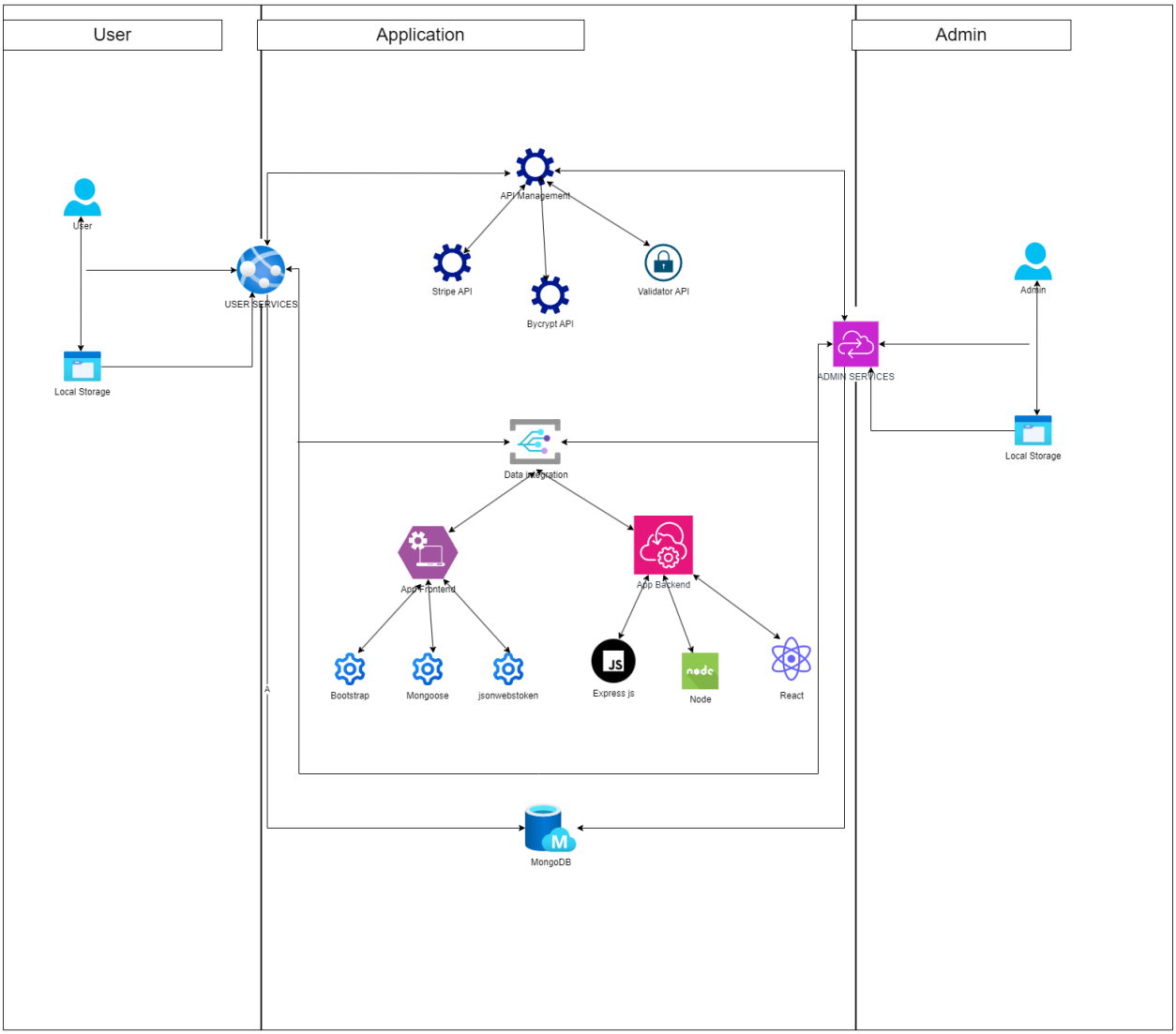

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How users interact with the social media app, such as through a web UI, mobile app, or chatbot.	HTML, CSS, JavaScript, React Js etc.
2.	Application Logic-1	Logic for adding, updating, and displaying social media posts and user profiles.	Express, Node.
3.	Application Logic-2	Logic for user registration, authentication, and session management.	Node, Restful API.
4.	Application Logic-3	Logic for users to browse posts, like, comment, and share content.	Restful API, Express.
5.	Application Logic-4	Logic for processing payments for premium features or subscriptions on the platform.	Node, Express.
6.	Database	Data Type, Configurations etc.	MongoDB (NoSQL).
7.	File Storage	File storage requirements	Local Filesystem.
8.	External API-1	The Payment Methods API allows you to accept a variety of payment methods through a single API.	Stripe API.
9.	External API-2	Simple API to help you check your password strategy.	Bcrypt API.
10.	External API-3	API validator is used for checking to see if an API meets certain requirements.	Validator API.

Table-2: Application Characteristics:

1.	Open-Source Frameworks	React for dynamic user interfaces, Express.js for robust backend APIs, Bootstrap for responsive design, Mongoose for MongoDB interactions, jsonwebtoken for authentication, and Stripe API for secure online payments.	React, Express js, Bootstrap, Mongoose, jsonwebtoken, Stripe API.
2.	Security Implementations	Generation and verification of JSON Web Tokens (JWTs) for secure user authentication and session management.	jsonwebtoken (JWT).
3.	Security Implementations	Hashing and salting passwords before storing them in the database to prevent unauthorized access in case of data breaches.	Bcrypt.
4.	Scalable Architecture	Supports horizontal scaling by adding more instances of servers to distribute incoming traffic.	Node js, Express js.
5.	Availability	MongoDB allows users to access data from database anytime.	MongoDB.
6.	Performance	Application is built using javascript and asynchronous programming which will increase the overall performance of the application.	Express js, node, restful.