Requirement Gathering and Analysis Phase Technology Stack (Architecture & Stack)

Date	
Team ID	
Project Name	WebApp_OTT
Maximum Marks	

Table-1: Components & Technologies for Movie App (Frontend)

S.No	Component	Description	Technology/Tool(s)
1	User Interface	How user interacts with the application (UI)	HTML, CSS, JavaScript, React.js
2	Application Logic-1	Logic for handling the app's internal functionality	JavaScript (React Components, React Hooks, Redux, etc.)
3	External API-1	API to fetch movie data (e.g., movie details, genres, etc.)	The Movie Database (TMDb) API, or OMDB API
4	External API-2	API for authentication or user login (optional)	Firebase Authentication, OAuth, or custom API for login
5	External API-3	API for search functionality (movie search, filters)	The Movie Database (TMDb) API (search queries)

6	External API-4	API for ratings or reviews (optional)	Yelp API, IMDb API, or TMDb ratings API
7	External API-5	API for movie trailers or videos	YouTube API, TMDb API (for embedded trailers)
8	External API-6	API for location-based movie showtimes (optional)	Google Maps API, Fandango API (if applicable)
9	File Storage	File storage requirements (for caching, media)	LocalStorage, IndexedDB (for offline storage)
10	Cloud Database	Database for storing user preferences, ratings, etc.	Firebase Realtime Database, Firestore (if necessary)
11	Infrastructure (Server / Cloud)	Deployment of front- end app in production	Netlify, Vercel, AWS S3, GitHub Pages, or any static hosting

Table-2: Application Characteristics for Movie App (Frontend)

S.No	Characteristics	Description	Technology/Tool(s)
1	Open-Source Frameworks	List the open-source frameworks used for the front-end	React.js, React Router, Redux (optional for state management)
2	Security Implementations	Security measures to protect data and interactions (client- side)	HTTPS, Content Security Policy (CSP), OWASP security best practices, Input validation (prevent XSS)
3	Scalable Architecture	Scalability considerations (app performance under increasing users)	Stateless app (frontend), CDN for static assets, Lazy Loading with React, Code Splitting

4	Availability	Justify availability of the application for users in different regions	Static hosting (Netlify, Vercel), use of global CDN (Cloudflare)
5	Performance	Performance design considerations (app speed, caching, request handling)	Caching strategies (localStorage, IndexedDB), Lazy Loading, CDN for faster static asset delivery