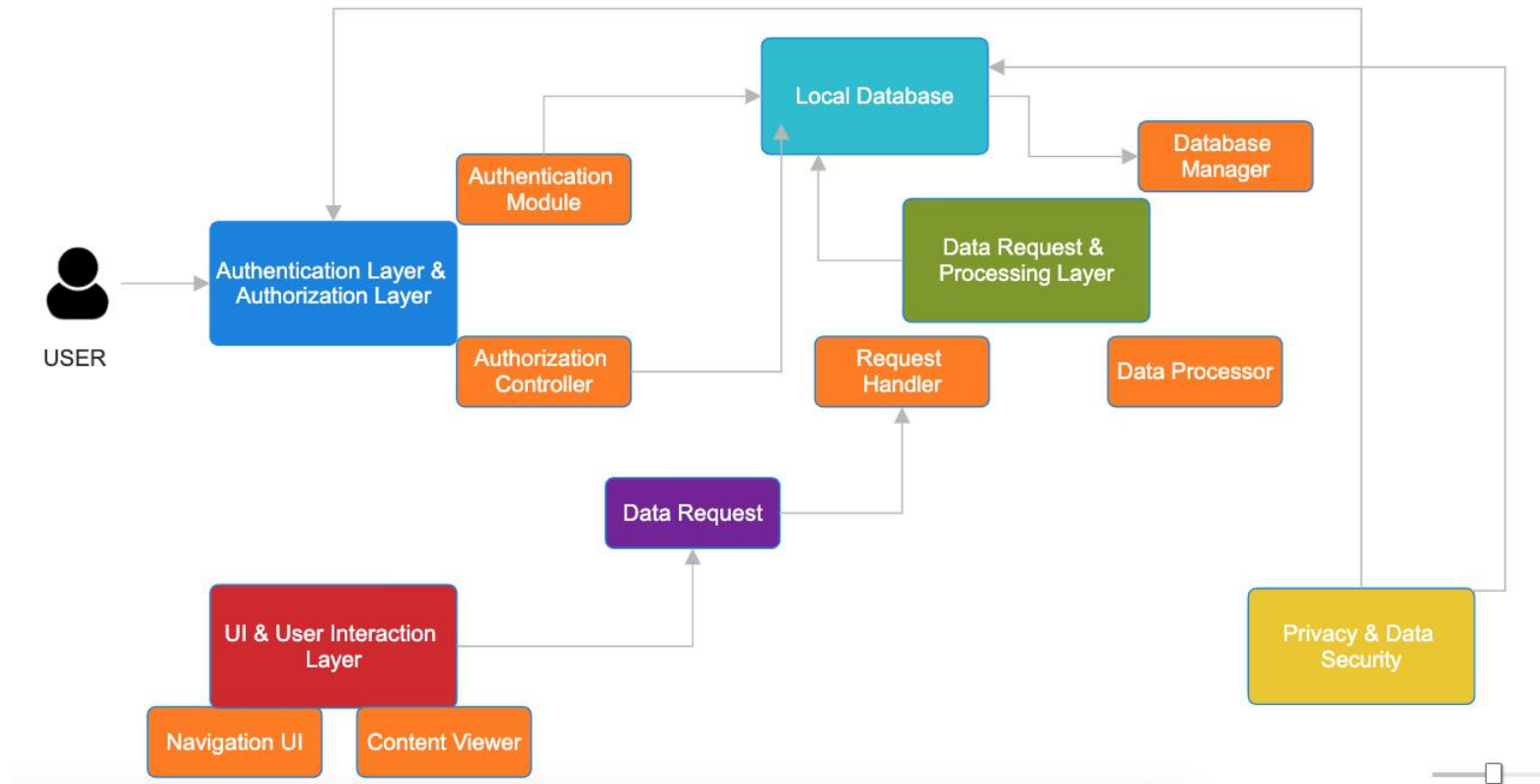


## Project Design Phase-II

### Technology Stack (Architecture & Stack)

Date	9 November 2023
Team ID	SI-GuidedProject-589174-1697038709
Project Name	Podcast Plus: A Redux-Inspired Podcast App
Maximum Marks	4 Marks

### Technical Architecture:



**Table-1 : Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	The user interface is how users interact with your application. It can include web UI, mobile app, and potentially other interfaces	Kotlin for android
2.	User Authentication	User authentication ensures secure access to the app. It typically involves authentication protocols and token-based authentication	OAuth 2.0, JWT (JSON Web Tokens), OpenID Connect, user authentication libraries
3.	Content Discovery Engine	This engine provides personalized podcast recommendations to users based on their preferences and behavior	Machine learning algorithms, recommendation systems, Python
4.	Episode Streaming	Episode streaming involves delivering podcast episodes to users for listening	HTTP Live Streaming (HLS), media streaming technologies
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	User Profile Management	User profile management handles user data, preferences, and profile information	Database (SQL or NoSQL), User CRUD operations, User Profile API
7.	Comment and Rating System	This system allows users to engage with podcasts by leaving comments, ratings, and reviews	Backend API, Database, User Interaction Components
8.	Subscription and Payment Processing	Manages premium subscriptions and payment transactions	subscription management
9.	Content Management and Hosting	Manages podcast episodes and metadata, including storage and distribution	Cloud storage, Content Management System (CMS), Database, Content API.
10.	Recommendation Engine	Provides highly rated podcast recommendations to users	Machine learning algorithms, recommendation algorithms (collaborative filtering, content-based filtering), data processing

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	User-Friendly Interface	The app should provide an intuitive and user-friendly interface for easy navigation and content discovery	UX/UI Design, Responsive Design
2.	Personalization	Personalization allows users to receive content recommendations based on their preferences and behavior	Machine Learning, User Profiles
3.	Content Discovery	Effective content discovery features help users find and explore new podcasts that align with their interests	Recommendation Algorithms, AI (Artificial Intelligence), Search
4.	Platform Compatibility	The app should work seamlessly on a variety of devices and platforms	Platform Development Frameworks, Responsive Design
5.	Analytics and Insights	Gathering and analyzing user data to provide insights for content improvement	Data Analytics Tools, User Behavior Tracking, Data Storage
6.	Content Moderation	Implementing content moderation to ensure the quality and appropriateness of user-generated content	Moderation Tools, User Reporting Mechanisms, Reporting System

