

Project Design Phase-II Technology Stack (Architecture & Stack)

Date	26 October 2023
Team ID	Team-591074
Project Name	WanderLust App
Maximum Marks	4 Marks

Technical Architecture:

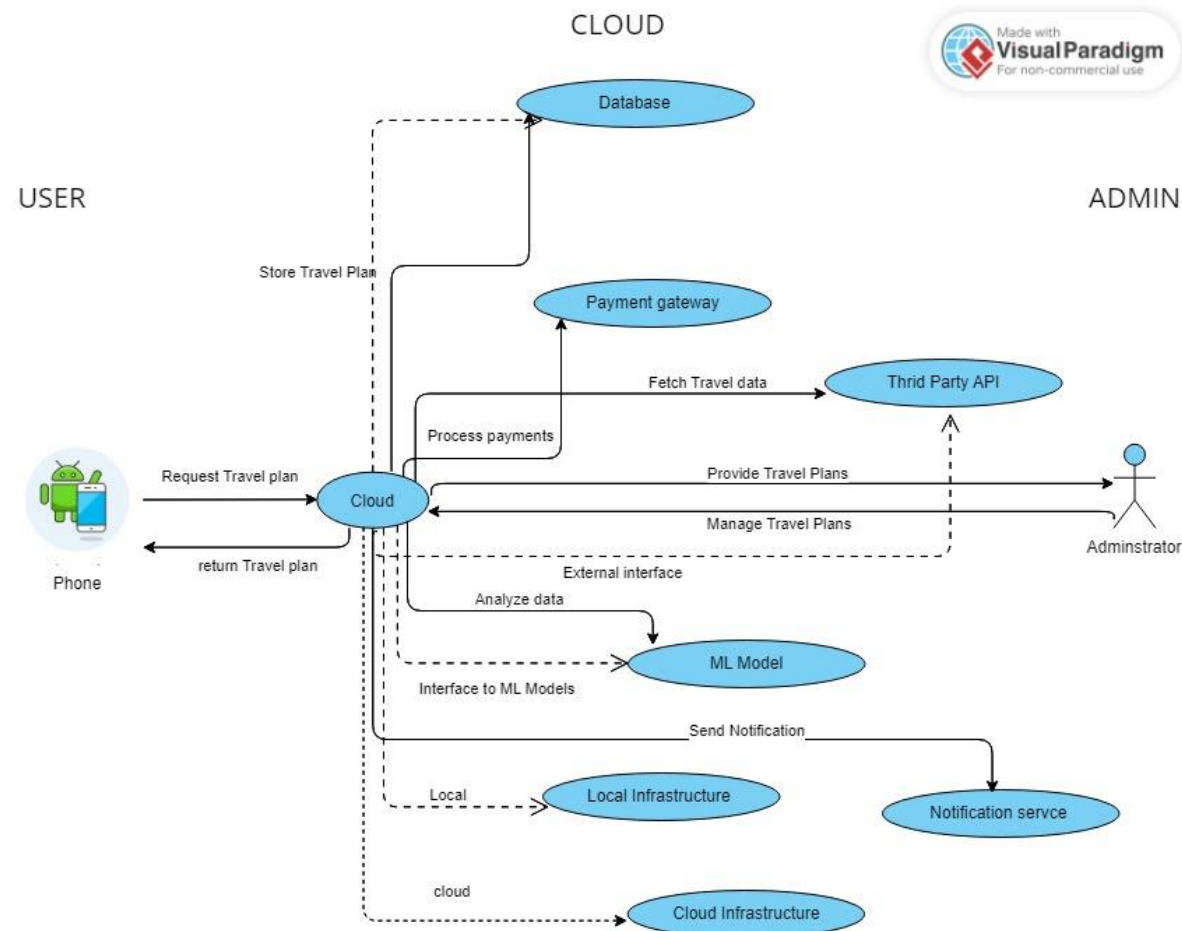


Table-1: Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	User interacts with the app through the amazing and user-friendly UI. Icons are there for better user experience.	Jetpack Compose, Canva, Magic Studio (ai tool)
2.	Application Logic-1	First user logs in to the app if he has an account, if he/she doesn't have the account then he is sent to the sign-up page. Regular expression logic is used to verify passwords and usernames.	Kotlin
3.	Application Logic-2	Navigation between pages, from login to home page. And many other pages using a back button or clickable events.	Kotlin
4.	Application Logic-3	Data retrieving from previous page while displaying the details of travel plan.	Kotlin
5.	Database	We used various datatypes like varchar, number for data storage.	SQLite, Room
6.	Cloud Database	Our database can be extended to cloud when the user wants to store the travel plans.	Google Drive
7.	File Storage	File storage requirement is to store the files of the travel plan which includes all the details of the members, travel medium etc along with the details of his all the plans and interests.	Local Filesystem
8.	External API-1	The API is useful for the user to understand the weather situation in the place he/she is going to travel in the app itself.	IBM Weather API
9.	External API-2	The API is useful to verify the DOB the user along with identity and for various other purposes.	Aadhar API
10.	Infrastructure (Server / Cloud)	To improve availability, backup, recovery of data. For further scalability etc this cloud infrastructure is used.	AWS

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	The android studio is used to build the good UI using the language Kotlin along with jetpack compose to build the app. Then, the app is committed on the GitHub.	Kotlin, Android Studio, GitHub
2.	Security Implementations	The user sets the password, which is useful in controlling their own data.	Kotlin
3.	Scalable Architecture	Data, application, and presentation is well done using the Android studio	Android Studio
4.	Availability	Using load balancers along with autoscaling to improve the availability of the app to reduce the unavailability when demand increases.	AWS EC2
5.	Performance	Number of requests per sec is the availability of the app and the response time can be reduced using the cloud services which ensure the maximum availability for a good cost.	AWS