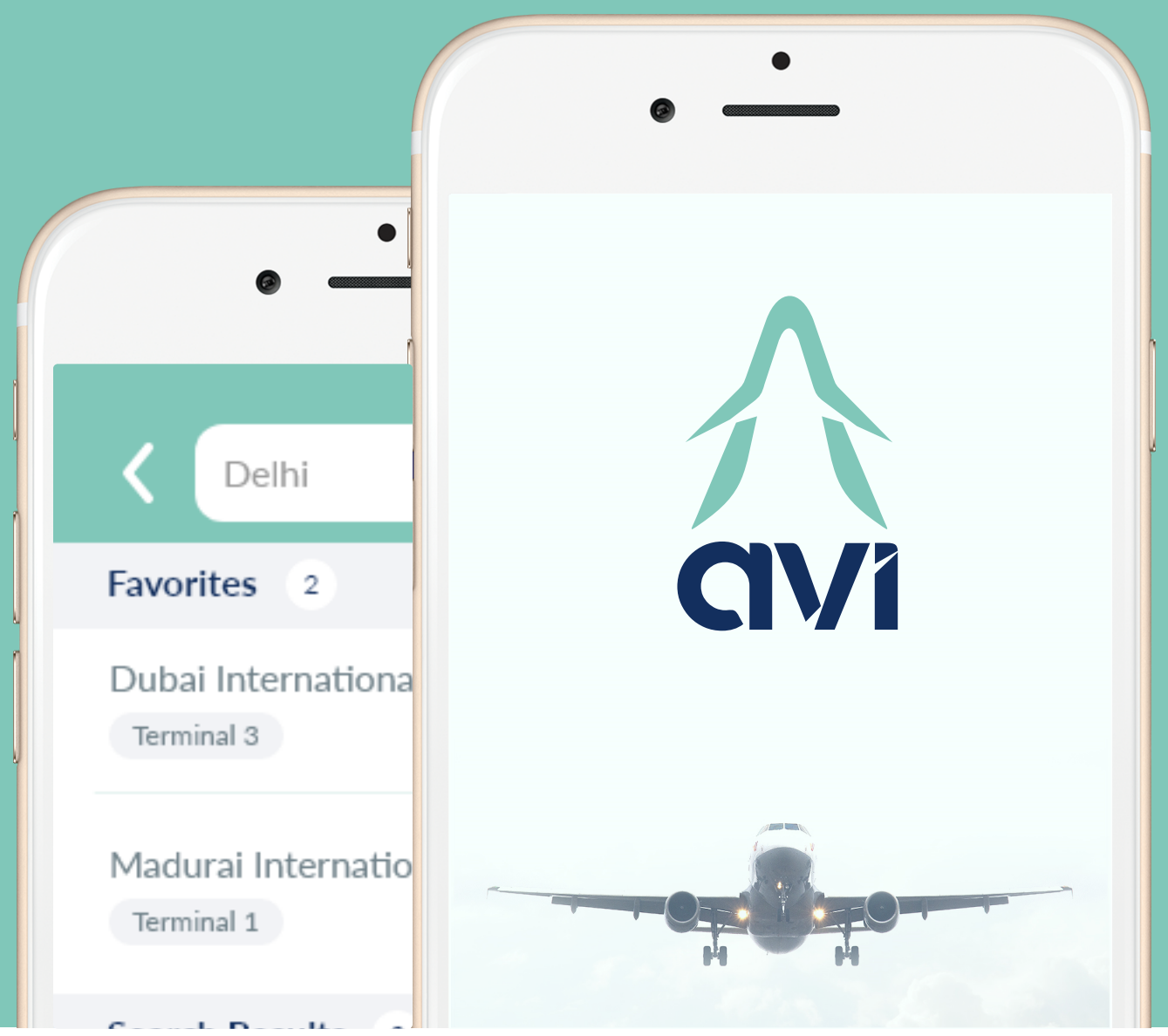
Case Study
Mobile Application Development-AVI



The Client

People enjoy traveling and exploring new places. Earlier people used to travel through Roadways or Railways a lot. Nowadays because of the rise in the economic factor and the cheaper rates of flights, people are fond of travelling through Airways.

But the major issue here is the wait for the flight. People have to reach the airport 2 to 3 hours before the scheduled time of boarding so that they can complete all the formalities before boarding the flight. The users face difficulties in searching for lounges, restaurants, etc.

Scope

AVI has come up with an idea of developing a mobile application that helps the passengers to utilize the waiting time in airports efficiently by letting them aware about the available facilities like lounges, floor plan, and restaurant with offers/discount, online food ordering and so on. The app will also be having features like Live flight tracker, Check for flight status to make sure that the passengers are in the track of the live status. The app will have the following major functionalities.

- Live Flight Tracker
- Check for Flight Status
- Check Flight Ticket Pricing & Availability
- Scan Flight Ticket
- Airport Floor Plan
- Restaurant with Offers/Discounts
- Lounges
- Food ordering

Goal

The main goal of AVI is to provide a mobile application that will allow the users to utilize their wait time in the airport to know more about the nearby Restaurants, Lounges, Check flight status, Live flight tracking, Get offers/discounts in the Restaurants, etc. AVI would like to keep the users engaged and provide them with loads of information on what will be mandatory for the users during their wait time at the airport.

The Challenge

Design

- Simple, creating a good experience with a cheerful design yet useful and easy to navigate. Easy for the customer to use and it will help them search for restaurants, View floor plan of the airport, Track their flight, get discounts on Restaurants, etc.

Floor Map

- To provide the floor plan of any airport that the user would like to view
- Allow user to search with IATA code
- Provide the location of all amenities in the airport
- Display the searched information using different colours

Live Tracking

- The app to allow the user to get the live status of the flight

Book Food

- The app to allow the users to search for the restaurants in the Airport
- Book food and get status of the order
- All users to pre-book their order

Multi-user Access

- Customer and Restaurant can log in with the same app with different screens for all

Admin Control

- To maintain overall control, the app can be managed through an Admin or Super Admin login that prevents unauthorized access

Sub-Admin Control

- Admin to create Sub-admin and assign their roles and responsibilities. This allows access to sub-admin based on role permission assigned by the Super-Admin. The purpose of Sub-admin is to make the process quick and fast in managing Restaurants and other activities of the app

Complete Security

- This app's API is developed using the Laravel framework with a maximum level of security

Accessibility

- The app is designed to enable the users to make use of most of the mobile native functionality, like native calls, etc

Proposed Solution

Phase 1

DCI understood that the mobile application proposed is a complicated and unique app that has to be a platform that will allow the users to search and view restaurant listing, events, provide reviews, redeem points, etc.

- DCI planned to proceed the development into 2 phases
- Requirement gathering/Elicitation
- Wireframing and Prototype
- ER diagram

As planned, DCI provided the Wireframe as per the functionality discussed of the mobile application which when approved by the client, we worked on functional Prototype. This made it very simple for the design team to provide a professional design as expected by the client.

Phase 2

- Development
- Testing
- UAT
- Deploying the mobile app to Google playstore and Apple store
- On approval of the Functional Prototype by the client, DCI started building the Database
- Integrating the Prototype into a functional mobile application
- DCI run, unit test on all stages to ensure that the bugs are minimal on the testing phase

Flight live tracking

AVI links with a third party API named OAG to provide the users with the live tracking result of the flight the user search. This allows the user to search for the flight status with the Flight number.

Food Ordering

DCI has developed a powerful admin panel and a mobile application for the Restaurants to manage their menu and orders. Since we manage the Restaurant list at the backend, we instantly display the Restaurant list to the users based on their search. Send instant push notifications on food ordering and the status of the order to the user app.

Results

AVI is happy and proud of joining hands with DCI in developing a mobile application that has provided a satisfactory app which helps the users to utilize their wait time by providing all the required information about the Flight status, live tracking info, food orders, etc. The main achievement of the app is,

- Provide Floor plan of any airport to let the user know about the amenities available in the airport and their location
- Quick search result of flight status
- Help the users to avoid running in search of information and get all the information in one app

The effort and dedication by the DCI team of developers is truly amazing. The true dedication and highly talented resources of DCI made AVI app to achieve its great heights.