

Title: Online Flight Reservation System

Course ID and Name: BIC3254d Web Programming

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# **Airlines Reservation System Development Plan**

## **1. Project Overview**

We have developed a web-based Airlines Reservation System using **XAMPP (Apache, MySQL, PHP)** for the backend and **HTML, CSS, JavaScript** for the frontend.

### **Key Features:**

* User registration & authentication (Admin & Customer)
* Flight search & booking
* Seat selection & payment processing
* Booking management (view/cancel)
* Admin dashboard (flight & user management)

## **2. Development Stack**

| **Component** | **Technology** |
| --- | --- |
| **Frontend** | HTML, CSS, JavaScript |
| **Backend** | PHP |
| **Database** | MySQL (via XAMPP) |
| **Server** | Apache (XAMPP) |
| **IDE** | VS Code |

## **3. Development Phases**

### **Phase 1: Setup & Database Design**

1. **Install & Configure XAMPp**
   * Install XAMPP (Apache, MySQL, PHP).
   * Start Apache & MySQL services.
   * Create a project folder in htdocs.
2. **Database Schema (MySQL)**
   * Design tables:
     + users (id, name, email, password, role)
     + flights (id, flight\_no, departure, arrival, date, seats, price)
     + bookings (id, user\_id, flight\_id, seat\_no, status, payment)
   * Use PHPMyAdmin to create the database.

### **Phase 2: Backend Development (PHP)**

1. **User Authentication**
   * Registration & login system (PHP sessions).
   * Password hashing (password\_hash()).
2. **Flight Management**
   * CRUD operations for flights (Admin only).
   * Search flights (filter by date, route).
3. **Booking System**
   * Seat selection logic.
   * Payment simulation (dummy payment gateway).

### **Phase 3: Frontend Development (HTML, CSS, JS)**

1. **User Interface**
   * Homepage (flight search form).
   * Login/Registration forms.
   * Booking dashboard (user & admin views).
2. **Dynamic Features (JavaScript)**
   * Real-time flight search (AJAX).
   * Seat selection interactive UI.
   * Form validation.

### **Phase 4: Testing & Deployment**

1. **Testing**
   * Test all functionalities (user flow, booking, admin controls).
   * Fix bugs & optimize performance.
2. **Deployment**
   * Host locally via XAMPP.
   * (Optional) Deploy to a web server.

## **4. Timeline**

| **Phase** | **Duration** |
| --- | --- |
| Setup & DB | 2 days |
| Backend | 5 days |
| Frontend | 4 days |
| Testing | 2 days |
| **Total** | **13 days** |

## **5. Expected Output**

* A fully functional **Airlines Reservation System** where:
  + Users can **search, book, and manage flights**.
  + Admins can **add/edit flights & view bookings**.
  + Secure authentication & smooth UI/UX.