

## **Project Structure - Flight Booking Website**

### **backend/**

Contains the Node.js/Express backend code.

### **backend/app.js**

Main entry point: sets up Express server, middleware, and routes.

### **backend/routes/**

Defines API endpoints for flights, users, and authentication.

### **backend/controllers/**

Handles business logic for each route.

### **backend/models/**

Database schemas and ORM models for PostgreSQL.

### **frontend/**

React application source code.

### **frontend/src/**

Main React source folder.

### **frontend/src/components/**

Reusable UI components (e.g., FlightCard, Header).

### **frontend/src/pages/**

Page-level views (e.g., HomePage, SearchResults, BookingPage).

### **frontend/src/services/**

API clients and service functions for backend calls.

### **frontend/public/**

Static assets (index.html, images, favicon).

### **db/**

Database initialization and seeding scripts.

### **db/init.sql**

SQL script to create tables and database schema.

### **db/seed.js**

Node.js script to populate database with sample data.

### **setup.sh**

Shell script to build and run Docker containers and seed the database.

### **.env**

Environment variables file (not committed) with database and service settings.

### **README.md**

Project overview, installation steps, usage, and environment variables.

### **Dockerfile**

Docker configuration to build the backend and frontend images.

### **docker-compose.yml**

Defines Docker services for backend, frontend, and PostgreSQL database.