StayFinder - Full Stack Web App (Airbnb Clone)

📌Project Summary

StayFinder is a full-stack web application inspired by Airbnb. It allows users to browse property listings, view listing details, register/login, and book stays. Users can also view their recently visited listings and booking history.

🕗Objectives

- Build a functional prototype with:
- **Frontend**: Property listing, search, listing details, login/register pages
- **Backend**: REST API for user auth, listings, bookings
- **Database**: MongoDB to store users, listings, bookings

📦Deliverables

🔗Frontend (React)

- **Homepage**: Grid of listing cards showing image, location, price
- **Listing Detail Page**: Title, description, image, location, calendar-style date pickers
- **Login/Register**: Form validation, error handling
- **Dashboard**:
- Recently viewed listings (from localStorage)
- Booking history per user

🔗Backend (Node.js + Express)

- **Auth Routes**:
- `POST /api/auth/register` — User registration
- `POST /api/auth/login` — User login
- **Listings Routes**:
- `GET /api/listings` — All listings
- `GET /api/listings/:id` — Single listing by ID
- **Bookings Routes**:
- `POST /api/bookings` — Book a property
- `GET /api/bookings/user/:userId` — User's bookings
- `DELETE /api/bookings/:bookingId` — Delete a booking

🔗Database (MongoDB)

- **Models**:
- `User`: name, email, password

- `Listing`: title, location, price, image, description
- `Booking`: userId, listingId, checkInDate, checkOutDate
- **Seed/Test Data**: Sample listings manually inserted into the database.

🧱Bonus Features (Implemented)

- **Search Filters**: Users can filter by location and price range
- **Recently Viewed Listings**: Stored using `localStorage`

🕔UI/UX Inspiration

- Clean, modern design similar to Airbnb
- Layout and styling inspired by UI patterns from Dribbble and NomadX

Submission Information

🔗Tech Stack Chosen & Why

- **Frontend**: React — for component-based architecture and fast rendering
- **Backend**: Node.js + Express — lightweight, fast, and easy to integrate with MongoDB
- **Database**: MongoDB Community Edition — schema-flexible and developer-friendly for prototyping

🔗Full-Stack Capability

Yes, the applicant has built both frontend and backend end-to-end and is capable of full-stack development.

🔗2 Unique Features to Improve Airbnb

1. **Listing View History** — Personalized dashboard showing recently viewed listings.
2. **Booking History with Cancel Option** — Users can view and delete past bookings.

🔗App Security & Scaling Strategy

- Use JWT tokens for secure authentication
- Store passwords securely using hashing (bcrypt)
- CORS configuration to prevent cross-origin issues
- Scale using MongoDB Atlas or Docker containers for production deployment
- Future option: Load balancing + CDN for static assets

🔗Final Project Status

All **required objectives and deliverables have been implemented** successfully. The app is fully functional with user login, listing browsing, bookings, and user dashboard features.

🗜️ Next Steps (Optional)

- Add Stripe or Razorpay for real-time payments
- Implement a host dashboard to manage properties
- Add reviews/ratings system for listings

📁 Project Structure

```
project/
├── stayfinder-client/    # React Frontend
├── stayfinder-server/    # Node.js Backend
│   ├── models/
│   ├── routes/
│   ├── app.js
│   └── .env
└── README.md
```

📝 How to Run (Local Setup)

1. **Clone the repo**
2. Run backend:

```
cd stayfinder-server
npm install
npm run dev
```

3. Run frontend:

```
cd stayfinder-client
npm install
npm start
```

4. Visit: `http://localhost:3000`
