**Entities (Spring Boot)**

**1. User**

* id (Long, PK)
* email (String, unique, used as username)
* phone (String , unique)
* password (String, hashed, nullable until OTP verified & password set)
* Fname (String, optional for signup)
* Lname (String, optional for signup)
* City ( String)
* Country( String )
* additionalInfo ( String )
* profileImageUrl (String, optional) / profileImage (Blob, optional)
* type ( Enum (USER,ADMIN))
* languagePreference (String)
* verified (boolean)
* createdAt (timestamp)
* updatedAt (timestamp)

**Endpoints:**

* POST /auth/send-otp → send OTP to email
* POST /auth/verify-otp → verify OTP
* POST /auth/set-password → set password after OTP verification
* POST /auth/login → authenticate user
* GET /users/me → get logged-in user profile
* PUT /users/me → update profile
* DELETE /users/me → delete account

**2. OtpVerification**

* id (Long, PK)
* email (String)
* otp (String)
* expiryTime (LocalDateTime)
* verified (boolean)

**Endpoints:**  
*(Used internally in AuthController — not directly exposed except in OTP flow)*

**3. Trip**

* id (Long, PK)
* userId (FK → User)
* name (String)
* description (String)
* coverImageUrl (String, optional)
* startDate (Date)
* endDate (Date)
* createdAt (timestamp)
* updatedAt (timestamp)

**Endpoints:**

* POST /trips → create new trip
* GET /trips → get all trips for user
* GET /trips/{id} → get single trip
* PUT /trips/{id} → update trip
* DELETE /trips/{id} → delete trip

**4. TripStop**

* id (Long, PK)
* tripId (FK → Trip)
* city (String)
* country (String)
* startDate (Date)
* endDate (Date)
* orderIndex (int)

**Endpoints:**

* POST /trips/{tripId}/stops → add stop
* PUT /trips/stops/{id} → update stop
* DELETE /trips/stops/{id} → remove stop

**5. Activity**

* id (Long, PK)
* tripStopId (FK → TripStop)
* name (String)
* description (String)
* type (String)
* cost (BigDecimal)
* duration (int, minutes)
* imageUrl (String)

**Endpoints:**

* POST /stops/{stopId}/activities → add activity
* PUT /activities/{id} → update activity
* DELETE /activities/{id} → remove activity

**6. Budget**

* id (Long, PK)
* tripId (FK → Trip)
* transportCost (BigDecimal)
* stayCost (BigDecimal)
* activitiesCost (BigDecimal)
* mealsCost (BigDecimal)
* totalCost (BigDecimal)

**Endpoints:**

* GET /trips/{tripId}/budget → view budget
* PUT /trips/{tripId}/budget → update budget

**Angular Components**

**Auth Flow (OTP + Password)**

1. signup.component.ts
   * Email field, send OTP button.
   * Calls POST /auth/send-otp.
2. otp-verification.component.ts
   * Email + OTP input.
   * Calls POST /auth/verify-otp.
3. set-password.component.ts
   * Password + confirm password fields.
   * Calls POST /auth/set-password.
4. login.component.ts
   * Email + password.
   * Calls POST /auth/login.

**User & Trips**

1. dashboard.component.ts
2. create-trip.component.ts
3. my-trips.component.ts
4. itinerary-builder.component.ts
5. itinerary-view.component.ts
6. city-search.component.ts
7. activity-search.component.ts
8. budget-breakdown.component.ts
9. calendar-timeline.component.ts
10. shared-itinerary.component.ts
11. profile-settings.component.ts
12. admin-dashboard.component.ts *(optional)*