**User Login, Booking and Test Cases Documentation**

**1. User Authentication Flow**

**1.1. User Registration (Signup)**

* **Purpose:** Registers a new user in the system.
* **Validation Rules:**
  + All fields are mandatory.
  + Password length must be greater than 6 characters.
  + Password confirmation must match the original password.
  + Email should be unique.
* **Possible Responses:**
  + 201: User registered successfully.
  + 422: Validation errors (e.g., missing fields, password mismatch).
  + 400: User already exists.
  + 500: Internal Server Error.

**1.2. User Login**

* **Purpose:** Authenticates the user and provides a session token.
* **Validation Rules:**
  + Both email and password are required.
* **Authentication Process:**
  + Verifies user existence and password validity.
  + Generates a session token upon successful authentication.
* **Possible Responses:**
  + 200: Login successful.
  + 422: Validation errors (e.g., missing fields).
  + 400: Invalid credentials.
  + 500: Internal Server Error.

**1.3. Password Recovery**

* **Purpose:** Allows users to reset their password.
* **Validation Rules:**
  + All fields are mandatory.
  + Password confirmation must match the original password.
* **Password Reset Process:**
  + Verifies user existence by email and updates the password.
* **Possible Responses:**
  + 200: Password changed successfully.
  + 422: Validation errors (e.g., missing fields, password mismatch).
  + 400: Email not found.
  + 500: Internal Server Error.

**1.4. Logout**

* **Purpose:** Logs the user out by clearing the session token.
* **Possible Responses:**
  + 200: Logout successful.
  + 500: Internal Server Error.

**2. Booking System**

**2.1. Book Ticket**

* **Purpose:** Allows users to book tickets for selected adventures.
* **Validation Rules:**
  + All user details must be provided.
  + At least one visitor (either adult or child) must be specified.
* **Booking Process:**
  + Generates a unique booking number and saves the booking details.
* **Possible Responses:**
  + 201: Booking successful.
  + 422: Validation errors (e.g., missing fields, zero visitors).
  + 500: Internal Server Error.

**2.2. View My Bookings**

* **Purpose:** Retrieves all bookings for a given email.
* **Validation Rules:**
  + The email field is mandatory.
* **Booking Retrieval Process:**
  + Checks for any bookings associated with the provided email.
* **Possible Responses:**
  + 200: Bookings found.
  + 422: Missing email.
  + 400: No bookings found.
  + 500: Internal Server Error.

**3. Test Cases**

**3.1. Signup Test Cases**

1. **Incomplete Details:** Returns status 422 for missing or invalid fields.
2. **Password Too Short:** Returns status 422 if the password is less than 6 characters.
3. **Password Mismatch:** Returns status 422 for mismatched passwords.
4. **User Already Exists:** Returns status 400 if the email is already registered.

**3.2. Login Test Cases**

1. **Incomplete Details:** Returns status 422 for missing email or password.
2. **User Not Found:** Returns status 400 if the email is not registered.
3. **Incorrect Password:** Returns status 400 for an incorrect password.

**3.3. Forgot Password Test Cases**

1. **Incomplete Details:** Returns status 422 for missing or invalid fields.
2. **User Not Found:** Returns status 400 for an unregistered email.
3. **Password Mismatch:** Returns status 422 for mismatched passwords.

**3.4. Logout Test Cases**

1. **Logout Failure:** Returns status 500 if the user is not logged in or the session cannot be cleared.

**3.5. Book Ticket Test Cases**

1. **Incomplete Details:** Returns status 422 if any field in the booking form is missing.
2. **Zero Visitors:** Returns status 422 if no adult or child visitor is specified.

**3.6. View Bookings Test Cases**

1. **Missing Email:** Returns status 422 if the email is not provided.
2. **No Bookings Found:** Returns status 400 if there are no bookings associated with the email.