IT314 - Software Engineering

Lab Session V - Modeling Requirements into Activity Diagram

Group - 23

WanderWiz - Automatic Itinerary Planner

1 Login Sprint

1.1 Activities :

- Design: Create the page's visual interface.
- Development: Write code for the login page.
- Database Setup: Set up a database for user data.
- Validation: Check user inputs for correctness.
- Authentication: Verify user credentials.
- Error Handling: Manage errors and notifications.
- Security: Protect user data and implement encryption.

1.2 Actions :

- User Input: Enter credentials.
- Submit: Click "Login" or "Sign In."
- Validation: Check input validity.
- Authentication: Verify user identity.
- Session Management: Maintain user login state.
- Redirect: Forward to relevant pages.

1.3 Conditions :

- Correct Credentials: Only allow login with valid credentials.
- Account Status: Consider user account status.
- Password Reset: Enable password recovery.
- Privacy: Ensure data security and privacy.
- Remember Me: Allow persistent login.
- Two-Factor Authentication (2FA): Provide enhanced security options.
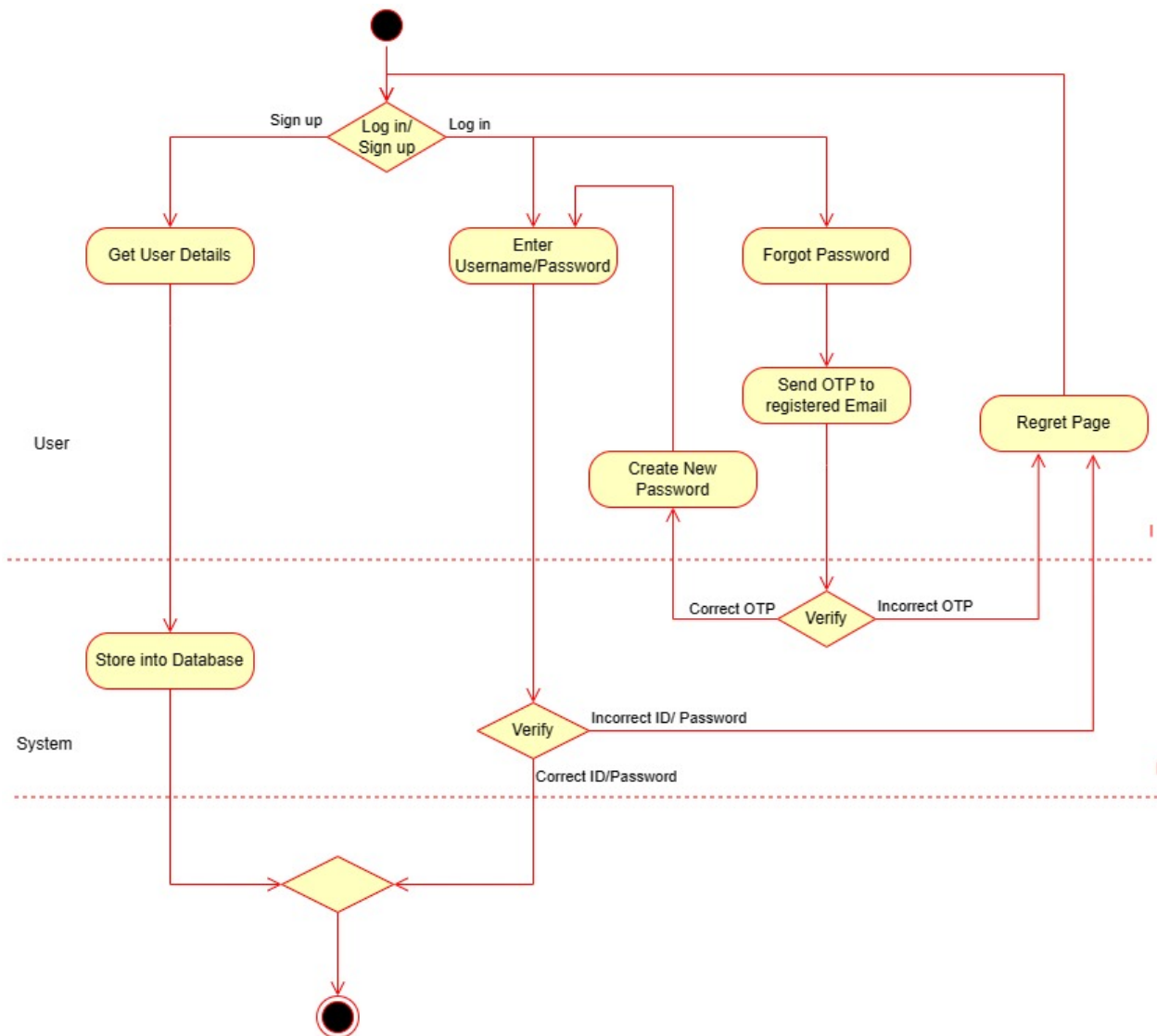
1.4 Activity Diagram (Login):

Figure 1: Activity Diagram for Login/Register

2 Itinerary Generation Sprint

2.1 Activities :

- Destination Selection: Choose the location(s) or destination(s) for the trip and consider factors like interests, budget, and travel duration.

- Accommodation Booking: Search for suitable accommodations (hotels, vacation rentals, etc.).

- Transportation Booking: Arrange transportation to and from the destination(s)

- Activity Selection: Consider interests, preferences, and any special requirements.

- Itinerary Creation: Organize all the information into a coherent itinerary format and also include dates, times, locations, and contact details.

2.2 Actions :

- Duration Planning: Determine how many days you'll spend at the destination.

- Priority Setting: Rank activities and attractions based on your interests.

- Budgeting: Estimate costs for transportation, accommodation, food, and activities.

2.3 Conditions :

- Weather Conditions: Make adjustments to the itinerary if adverse weather is expected.

- Health and Safety: Ensure travelers have necessary vaccinations and medications and stay informed about any health advisories or safety concerns in the destination.

- Emergency Contacts: Share emergency contact information with fellow travelers. Keep a copy of important phone numbers and addresses.

- Flexibility: Be open to itinerary adjustments based on unexpected circumstances. Have contingency plans in case of cancellations or delays.

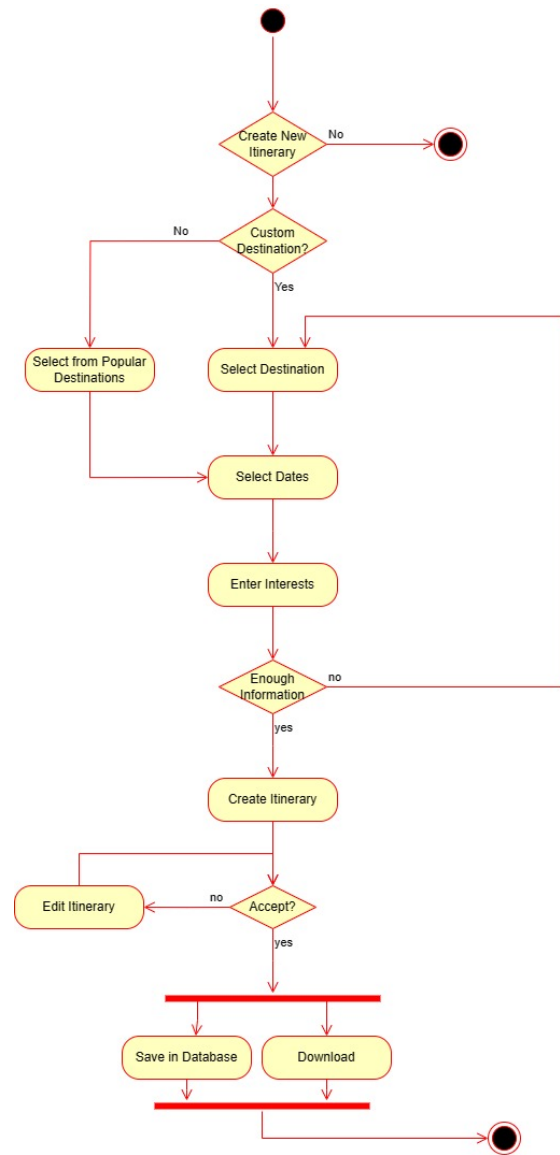## 2.4 Activity Diagram (Itinerary Generation) :

Figure 2: Activity Diagram for Itinerary Generation

3 Profile Management :

3.1 Activities :

- Profile Editing: Users can edit their profiles to update personal information, contact details, and preferences.

- View Itineraries: Allow users to view their existing itineraries created within the application.

- Edit Itineraries: Enable users to modify and customize their existing itineraries to better suit their preferences.

3.2 Actions :

- Develop 'edit profile details' functionality.

- Implement 'view itinerary' logic.

- Develop 'edit itinerary' functionality.

- Develop 'edit profile details' functionality(User name, password, email, Mobile number, etc)

3.3 Conditions :

- Privacy and Data Protection: Comply with data protection regulations and clearly communicate how user data, including itinerary details, is used and protected.

- User Consent: Users should provide consent for any changes made to their profiles or itineraries.

- Backup and Recovery: Implement backup and recovery procedures to safeguard user-profiles and itineraries in case of data loss or system failures.

- Security Measures: Enhance profile and itinerary security, such as using authentication tokens and encryption, to protect user data.

- User Communication: Keep users informed about any changes or updates to their profiles or itineraries through notifications or alerts.

- Testing and Quality Assurance: Thoroughly test profile editing and itinerary management functionalities to ensure they work as intended, are user-friendly, and are free from bugs or vulnerabilities.
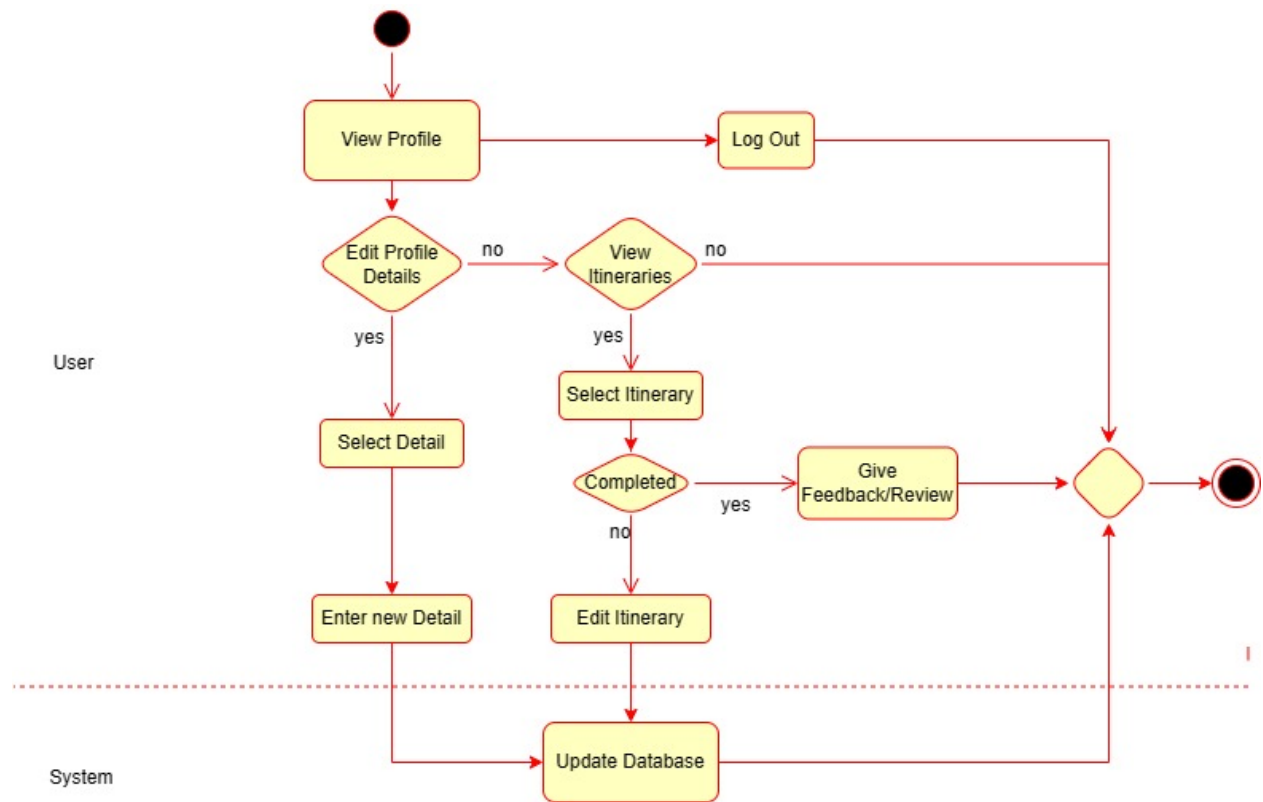
3.4 Activity Diagram (Profile Management) :

Figure 3: Activity Diagram for Profile Management