# GOVERNMENT COLLEGE OF TECHNOLOGY COIMBATORE-13

# **WANDERLUST**

# A PERSONALISED TRAVEL PLANNING APP

An Android Application Using Kotlin

## Submitted by:

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#### 1. INTRODUCTION

#### **Objectives:**

The "Wanderlust: A Personal Travel Management App" is a mobile application developed to help users plan, organize, and enhance their travel experiences. The app provides a convenient platform for itinerary creation, budget tracking, and destination exploration. With its user-friendly interface and advanced features, the app aims to empower travelers to enjoy stress-free trips while staying organized and within budget.

#### **Functionalities:**

The purpose of the "Wanderlust" app is to address the challenges faced by modern travelers, such as disorganized itineraries, overspending, and difficulty finding relevant information about destinations. This app simplifies travel planning and enhances the overall experience by providing users with a centralized platform to manage their trips effectively.

By offering features such as itinerary creation, real-time expense tracking, and destination guides, the app ensures travelers stay on top of their plans and make the most of their journeys. Users can visualize their travel schedules, track their spending in real-time, and access curated information about destinations.

The app is designed for a diverse range of users, including solo travelers, families, business professionals, and students. It also ensures data privacy and security, safeguarding users' personal and travel-related information.

In summary, the "Wanderlust" app simplifies trip management, empowers users with planning tools, and enhances travel experiences through organized and user-friendly features.

#### 2. LITERATURE SURVEY

#### 2.1. Existing Problems

Travel planning can often be overwhelming and disorganized. Many people struggle with:

- Coordinating itineraries, reservations, and activities.
- Staying within budget and keeping track of travel expenses.
- Discovering relevant, trustworthy information about destinations.
- Managing trip documents like tickets and confirmations. Traditional methods, such as pen-and-paper planning or scattered digital tools, are often inefficient and error-prone. Many existing travel apps lack personalized features or have steep learning curves, causing users to abandon them.

#### 2.2. Proposed Solution

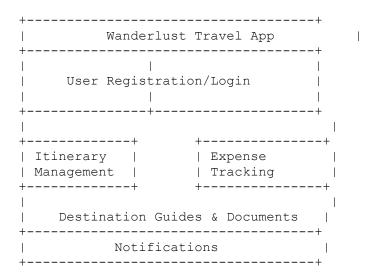
The "Wanderlust" app addresses these issues by providing a centralized, easy-to-use platform for trip planning and management. Key features include:

- **Itinerary Management**: Allows users to create and organize travel schedules, add activities, and set reminders.
- **Expense Tracking**: Enables real-time tracking of travel expenses and budget allocation across categories.
- **Destination Guides**: Offers curated information, recommendations, and insights about destinations.
- **Document Organizer**: Allows users to store tickets, reservations, and other travel documents securely.
- **Collaboration Features**: Enables group travel coordination with shared itineraries and expenses.

Through these features, the app helps users plan efficiently, stay organized, and enjoy stress-free travels.

#### 3. THEORETICAL ANALYSIS

#### 3.1. Block Diagram



#### 3.2. Hardware/Software Designing

- Hardware Requirements:
  - o Mobile Devices: Android smartphones or tablets for testing and running the app.
  - Internet Connectivity: Necessary for real-time data synchronization and accessing destination guides.
- Software Requirements:
  - o Development Environment: Android Studio with Kotlin for app development.

- Database: SQLite or an alternative for storing user data, itineraries, and documents locally.
- APIs and Libraries: For features like map integration, currency conversion, and weather updates.
- o Version Control: Git for managing code changes.
- o Deployment: Google Play Store for app distribution.

#### 4. EXPERIMENTAL INVESTIGATIONS

During development, key aspects of the app were analyzed and tested, including:

#### **User Experience Analysis:**

- Evaluated navigation flow and design for simplicity and intuitiveness.
- Gathered feedback through usability testing sessions to refine the interface.

#### **Functionality Testing:**

- Verified core features like itinerary management, expense tracking, and destination guides.
- Ensured accurate expense calculations and smooth integration of APIs.

#### **Performance Analysis:**

- Tested responsiveness and loading times across devices.
- Used profiling tools to optimize performance and resolve bottlenecks.

#### **Security and Privacy Assessment:**

- Implemented secure data storage and encryption for sensitive user information.
- Ensured protection against unauthorized access.

#### **Compatibility Testing:**

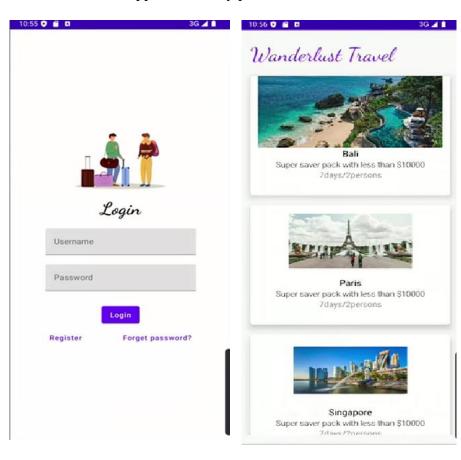
 Verified consistent performance on devices with varying specifications and Android versions.

#### 5. FLOWCHART

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#### 6. RESULT

The "Wanderlust" app successfully provides:



### Singapore



Day 1: Arrival and Relaxation
Arrive in Ball and check into your hotel or
accommodation.
Spend the day relaxing and getting acclimated to
the island.
If you have time, explore the nearby area or head to

Day 2: Ubud Tour Start your day early and head to Ubud, a cultural and artistic hub in Ball. Visit the Monkey Forest and the Ubud Palace. Take a tour of the Tegalalang Rice Terrace, a

arrisance from a four Visit the Monkey Forest and the Ubud Palace. Take a tour of the Tegalalang Rice Terrace, a beautiful UNESCO World Heritage Site. End your day with a traditional Balinese dance performance.

Day 3: Temple Hopping Visit some of Ball's most famous temples, such as Tanah Lot and Uluwatu. Take in the stunning views of the ocean and cliffs. Enjoy a sunset dinner at one of the many restaurants near the temples.

Day 4: Waterfalls and Beaches Take a day trip to Bali's beautiful waterfalls, such as Tegenungan or Gitgit. Spend the afternoon at one of Bali's world-renowned beaches, like Seminyak or Nusa Dua.

Day 5: Island Hopping
Take a day trip to one of Bali's neighboring islands,



Day 1: Morning: Visit Gardens by the Bay and marvel at the Supertree Grove and the Flower Dome and Cloud Forest conservatories. Afternoon: Explore the Marina Bay Sands complex,

Afternoon: Explore the Marina Bay Sands complex, which includes a casino, luxury shopping mall, and observation deck with a stunning view of the city.

Day 2: Moning: Explore the historic district of Chinatown, including the Buddha Tooth Relic Temple and Museum and the Sri Mariamman Temple. Atternoon: Visit the nearby Clarke Quay for lunch and to explore its waterfront restaurants, bars, and shops.

Day 3: Morning: Take a four of the UNESCO-listed Botanic Gardens, one of the world's most famous and significant tropical gardens. Afternoon: Head over to the National Museum of Singapore, which houses a vast collection of historical and cultural artifacts.

Day 4: Morning: Visit the Singapore Zoo and admire the wildlife, including orangutans, tigers, and elephants. Afternoon: Head over to Sentosa Island and relax at one of its many beaches or try some of the many attractions such as Universal Studios Singapore or

#### 7. ADVANTAGES & DISADVANTAGES

#### Advantages:

- Simplifies trip planning and tracking with a centralized platform.
- Offers real-time expense tracking to help users stay within budget.
- Provides valuable destination insights and activity recommendations.
- Ensures data security and privacy with encrypted storage.
- Enhances group travel experiences with collaboration features.

#### **Disadvantages:**

- Dependency on technology and internet connectivity.
- Limited to Android users in its initial version.
- Requires regular updates and consistent user engagement.

#### 8. APPLICATIONS

- **Personal Trip Planning**: Ideal for solo travelers and families.
- Group Travel Coordination: Simplifies planning and expense sharing for groups.
- **Business Travel Management**: Organizes schedules and tracks expenses for business trips.
- Travel Education: Helps new travelers understand budgeting and itinerary planning.

#### 9. CONCLUSION

The "Wanderlust" app enhances the travel experience by streamlining trip planning, offering budget management tools, and providing destination insights. With its intuitive design and robust features, it is a valuable companion for modern travelers.

#### 10. FUTURE SCOPE

- Integration with Travel Services: Add ticket booking and hotel reservations.
- Advanced Insights: Leverage AI for personalized travel recommendations.
- Offline Mode: Enable access to saved itineraries and guides without internet.
- Expense Collaboration: Enhance group travel with shared expense tracking.