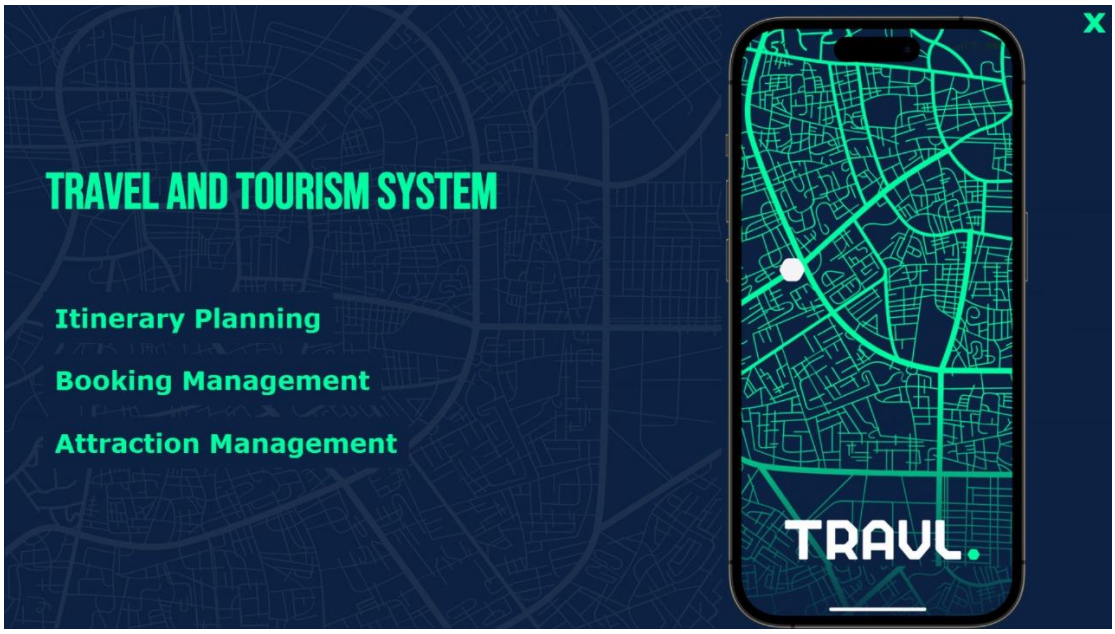
Travel and Tourism System



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Travel and Tourism System documentation

This document provides documentation for an integrated Travel and Attraction Management System implemented in Python. The system comprises two major components: the Travel Management System and the Attraction Management System. The integration allows users to plan and manage both travel and attractions seamlessly.

Travel Management System

Overview

The Travel Management System facilitates travel planning, hotel selection, and booking. It uses Dijkstra's Shortest Path Algorithm to find the shortest paths between locations, enabling users to optimize their travel routes. The Attraction Management System handles attractions, including adding new attractions, obtaining details, sorting attractions, adding feedback, and retrieving attraction names. It employs an SQLite database for efficient data storage and retrieval. The system seamlessly manages user booking requests through booking management, ensuring a smooth and organized process for securing accommodations.

Features

- Interactive Graphical user interface for selecting starting locations and booking hotels.
- Utilizes Dijkstra's algorithm for efficient route planning.
- Supports concurrent processing of hotel booking requests.
- Generates booking reports and allows saving data to both CSV and SQLite database.
- Efficiently manages attractions with database integration.
- Supports sorting attractions based on criteria such as ticket price and capacity.
- Enables users to add feedback for specific attractions.
- Provides a list of attraction names for user reference.
- The integration of queues in booking management.

Integration

The integration of the system allows users to plan their entire travel experience, including selecting optimal routes and booking hotels, as well as exploring and managing attractions at their chosen destinations.

Usage

The main program demonstrates the usage of both systems, showcasing how users can plan their travel routes, book hotels, and explore attractions seamlessly.

Prerequisites

Before running the travel management system, ensure that you have the following installed:

Python (version 3.6 or higher)

tkinter library (usually included with Python)

pillow library (can be installed via pip)

SQLite library (usually included with Python)

Installation

1. Navigate to the project directory:
   cd travel-management-system
2. Install the required dependencies:
   pip install -r requirements.txt
3. Run the program from the terminal:
   python main.py

Conclusion

The Travel and Attraction Management System provides a comprehensive solution for users to plan and manage their travel experiences. The system leverages algorithms for efficient route planning and attraction sorting, offers an interactive user interface, and ensures data integrity through database integration. The modular design and extensibility make it suitable for further enhancements and integration into larger travel management applications.