**Software Requirements Specification**

**For**

**Café keeper: Digital address book for the cafes near you.**

**Prepared by**

|  |  |  |
| --- | --- | --- |
| **Name** | **SAP ID** | **Specialization** |
| Anishka Sinha | 500094103 | CCVT |
| Vishakha Joshi | 500094135 | CCVT |
| Vivaswan Shukla | 500094065 | CCVT |
| Priyvrat Upadhyay | 500094125 | CCVT |

School Of Computer Science

UNIVERSITY OF PETROLEUM & ENERGY STUDIES,

DEHRADUN- 248007. Uttarakhand

Table of Contents

|  |  |
| --- | --- |
| **Topic** | |
| Table of Content | |
| Revision History | |
| 1 | Introduction |
|  | 1.1 Purpose of the Project |
|  | 1.2 Target Beneficiary |
|  | 1.3 Project Scope |
|  | 1.4 References |
| 2 | Project Description |
|  | 2.1 Reference Algorithm |
|  | 2.2 Data/ Data structure |
|  | 2.3 SWOT Analysis |
|  | 2.4 Project Features |
|  | 2.5 User Classes and Characteristics |
|  | 2.6 Design and Implementation Constraints |
|  | 2.7 Design diagrams |
|  | 2.8 Assumption and Dependencies |
| 3 | System Requirements |
|  | 3.1 User Interface |
|  | 3.2 Software Interface |
|  | 3.3 Database Interface |
| 4 | Non-functional Requirements |
|  | 4.1 Performance requirements |
|  | 4.2 Security requirements |
|  | 4.3 Software Quality Attributes |
| 5 | Methodology |

**Software Requirements Specification (SRS) for Café Keeper : Digital Address Book for Cafes Near You**

1. **Introduction**

* **1.1 Purpose of the Project**: The purpose of the Cafe Keeper project is to revolutionize cafe discovery and evaluation by providing users with a sophisticated and reliable platform to explore nearby cafes, their menus, and user-generated reviews. It employs advanced data structures and algorithms to ensure high-quality cafe information.
* **1.2 Target Beneficiary**: Cafe Keeper is designed for cafe enthusiasts and anyone who appreciates a great cafe experience, making it accessible to a broad audience.
* **1.3 Project Scope**: The project scope includes creating a digital command-line-based cafe address book system that allows users to easily find cafes, rate their experiences, and contribute to the platform's growth.
* **1.4 References**: The project draws inspiration from existing platforms like Yelp, TripAdvisor, and Zomato while aiming to address their limitations.

**2. Project Description**

* **2.1 Reference Algorithm**: Cafe Keeper utilizes advanced algorithms to monitor cafe ratings and remove poorly performing establishments, ensuring a high-quality database.
* **2.2 Data/ Data Structure**: The project focuses on efficient data management using C++ programming, advanced data structures, and algorithms to store and manage cafe information.
* **2.3 SWOT Analysis**: A SWOT analysis is not mentioned in the provided synopsis. It can be conducted to assess the project's strengths, weaknesses, opportunities, and threats.
* **2.4 Project Features**: The key features of the project include cafe sorting, user participation, efficient exploration, user profiles, and filtering options.
* **2.5 User Classes and Characteristics**: Users can be divided into cafe enthusiasts, casual diners, and cafe owners or managers. Their characteristics vary in terms of usage and engagement with the platform.
* **2.6 Design and Implementation Constraints**: Constraints may include programming language limitations, data storage and retrieval challenges, and user interface design complexities.
* **2.7 Design Diagrams**: The synopsis does not mention specific design diagrams, but these could include system architecture diagrams, database schemas, and user interface mockups.
* **2.8 Assumptions and Dependencies**: Assumptions could include user participation and data accuracy, while dependencies may involve external libraries or APIs.

**3. System Requirements**

* **3.1 User Interface**: The user interface should be user-friendly, allowing users to search for cafes, rate them, and contribute reviews.
* **3.2 Software Interface**: The software should interact with the underlying data structures and algorithms efficiently.
* **3.3 Database Interface**: The system needs to connect with a database to store and retrieve cafe information.

**4. Non-functional Requirements**

* **4.1 Performance Requirements**: The system should respond quickly to user queries, and the algorithm for cafe rating should run efficiently.
* **4.2 Security Requirements**: User data and reviews should be securely stored, and the platform should protect against unauthorized access.
* **4.3 Software Quality Attributes**: The platform should focus on providing high-quality and up-to-date cafe information, ensuring user trust in the system.

**5. Methodology**

The project follows the Agile methodology, which allows for flexibility in development. It involves implementing sorting and searching algorithms, handling errors, and providing clear code documentation for maintenance and clarity.

In summary, the Café Keeper project aims to address the challenges of cafe discovery and rating systems by providing a dependable and innovative solution. It focuses on user engagement, data management, and dynamic quality control to create a valuable resource for cafe enthusiasts and casual diners alike.