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Software Design Document on “Restaurant Selection Platform”

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1. Introduction

1.1 Purpose

People visiting the restaurants is very common in recent times and it is very important for them to find an appropriate restaurant according to their taste, ambience and the location that are dearer to them. The restaurant selection platform helps customers to choose their desired one by filtering out by their choices and also to redirect to a particular restaurant portal to get the complete information about that restaurant, which can further be used to make reservations, order takeout, and also get update on their dining preferences. On the other hand, in restaurant selection platform, an owner of a restaurant can register to the application and update the information about the restaurant such as cuisines, ambience, reservations.

1.2 Scope

The restaurant selection platform provides the complete information of the restaurants based on the range of customer location. Then that data will be further sorted and proceeded according to the choice made by the customer and finally that data will be stored in a database. Database will be kept always in Sync with restaurant selection platform. In addition, the owner of the restaurant can effectively manage the reservations, update the details regarding the restaurant and can generate daily and monthly custom reports.

1.3 Overview

This Software Design Document shall provide the concept and realization of the restaurant selection platform where the features integrated within the system are presented. A pictorial representation of the system’s architecture will be implemented followed by a detailed explanation of data flow which will give us a clear understanding of the topics functionality . The Use Case diagram will give a clear picture about the various users involved and also their roles in the execution of the software. The Data Flow Diagram is used to explain how the sequence of actions get triggered. Finally, a data dictionary is used, which provides information about the various attributes stored in the database.

2. System Overview

Restaurant selection platform is a Java application built to provide a common platform for both restaurant owners and its customer. We will be using Eclipse Integrated development environment platform along with Oracle Java development kit to create presentation and control layers of the application, for backend database we will be using MySQL. Abstraction part i.e. data access, managing data will be handled using Java Persistence application programming interface i.e. JPA by Hibernate. We will be using Spring framework one of the most broadly used framework for developing stand alone and web applications due to it’s various features like lightweight, exception handling, inversion of control i.e. instead of creating or looking for dependent objects, spring container will wire the dependent objects.

4.0 Data Design

4.1 Data Description

The restaurant selection platform deals with various data. The major sets of data include owner of the restaurant, customer and the restaurant. While we develop data model we consider most of the scenarios. So, understanding the major entities such as owner entity where the owner of the restaurant who registers to the application to provide the information for his existing restaurant or a new restaurant, services provided, hospitality, ambience and bookings. The next entity is the customer entity. Here the entity depicts the customer visiting the restaurant who registers to the application and provides his basic information, later searches for the location for which he would be getting a filter of restaurants. Another entity is the restaurant where list of it will be displayed as given by the owner. In addition, a new restaurant will be added if the user wishes to add.

4.2 Data Dictionary



