

LOW LEVEL DESIGN

RESTAURANT RATING PREDICTION

BY

NITHISH BABU

SUDHIKSHA PATIL

AKHIL VYDYULA

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1. Introduction

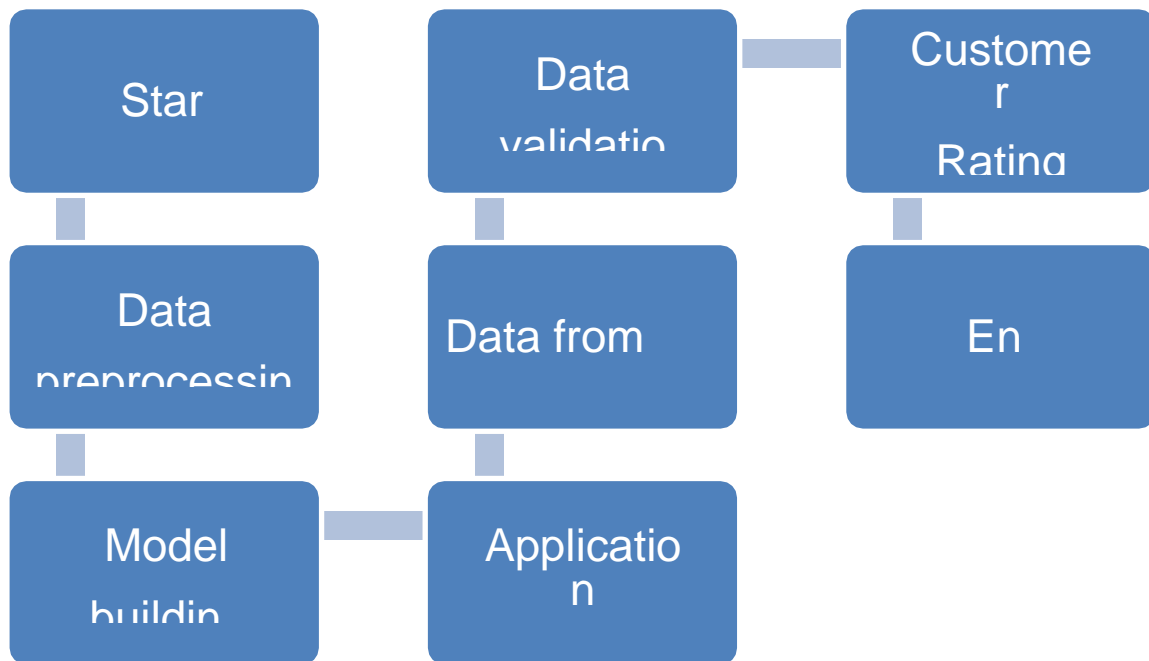
1.1. What is Low-Level design document?

The goal of LLD or a low-level design document (LLDD) is to give the internal logical design of the actual program code for predicting the customer rating on product. LLD describes the class diagrams with the methods and relations between classes and program specs. It describes the modules so that the programmer can directly code the program from the document. The LLD phase is the stage where the actual software components are designed.

1.2. Scope

Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. This process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during

2. Architecture



3 Architecture Description

3.1 Data Description

PROBLEM DESCRIPTION

Restaurants from all over the world can be found here in Bengaluru. From United States to Japan, Russia to Antarctica, you get all type of cuisines here. Delivery, Dine-out, Pubs, Bars, Drinks, Buffet, Desserts you name it and Bengaluru has it. Bengaluru is best place for foodies. The number of restaurant is increasing day by day. Currently which stands at approximately 12,000 restaurants. With such a high number of restaurants. And new restaurants are opening every day. However, it has become difficult for them to compete with already established restaurants. This Zomato data aims at analyzing the demography of the location. It also aims at finding similarities between neighborhoods of Bengaluru on the basis of food.

- Does demography of area matters?
- Does location of particular type of restaurant depends on people living in that area?
- Are any neighborhood on similar based on the type of food?
- Is particular neighbors is famous for its own kind of food?
- What kind of food is famous in locality?

3.2 Data Pre-processing

Data Pre-processing steps we could use are Null value handling, Handling categorical values, One- hot encoding, Multicollinearity, etc.

3.3 Data Modeling

We trained our dataset on different Classifier Learning algorithm (Logistic, K-NN, Decision Tree Regression). After training the dataset on different algorithms I got highest accuracy of 84% on Random Forest Classifier.

3.4 Data from User

Here we will collect product data from user such as product name, product dimensions, payment mode, customer and seller's city, state, zip-code.

3.5 Data Validation

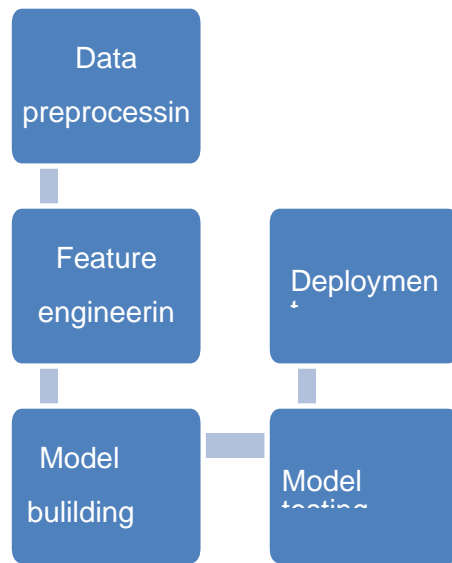
Here Data Validation will be done which is given by the user.

3.6 Restaurant Rating Prediction

After calling model, Output will be recommended, this output will be displayed in webpage.

3.7 Deployment

We will be deploying the model from flask.
This is a workflow diagram for the review rating.



4. UNIT TEST CASES

TEST CASE DESCRIPTION	PRE-REQUISITE	EXPECTED RESULT
Verify whether the Application URL is accessible to the user	1. Application URL should be defined	Application URL should be accessible to the user
Verify whether the Application loads completely for the user when the URL is accessed	1. Application URL is accessible Application is deployed	The Application should load completely for the user when the URL is accessed
Verify whether the User is able to give review in review box and click on predict button	1. Application is accessible	The User should be able to see the rating after giving the review.

