Low Level Design

Analyzing Google App Store

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DOCUMENT CONTROL

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Contents

1. Introduction

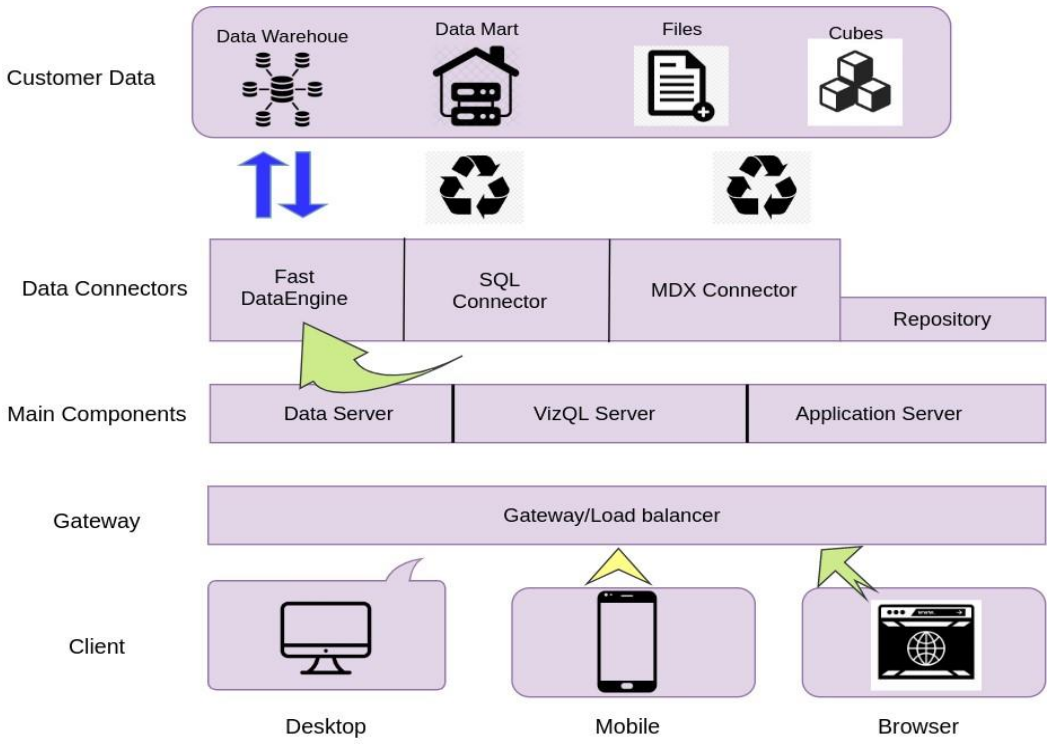
1.1 What is Low-Level design document?

The goal of the LDD or Low-level design document (LLDD) is to give the internal logic design of the actual program code for the House Price Prediction dashboard. LDD describes the class diagrams with the methods and relations between classes and programs specs. It describes the modules so that the programmer can directly code the program from the document.

1.2 Scope

Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. The 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 data design work.

2. Architecture



3. Architecture Description

3.1. Data Description

The Dataset contains various details about different google app store application. These details consist of Category, rating, reviews, size, installs, type, content, rating, etc.

1. Category: Category of app such as design, beauty, shopping, education, etc.
2. Rating: Rating of apps between 1 to 5 according to user experience.
3. Reviews: Reviews are the opinion of the apps given by the user.
4. Size: Size of the apps are in KB or MB.
5. Installs: Determines how many users installs a particular app.
6. Type: Type of app like free or paid.
7. Genre: Type of app such as shopping, game, tools, lifestyle, etc.

3.2. Web Scrapping

Web scraping is a technique to automatically extract content and data from websites using bots. It is also known as web data extraction or web harvesting. Web scrapping is made simple now days, many tools are used for web scrapping. Some of python libraries used for web scrapping are Beautiful Soup, Scrapy, Selenium, etc.

3.3. Data Transformation

In the Transformation Process, we will convert our original datasets with other necessary attributes format. And will merge it with the Scrapped dataset. For this we use libraries such as Pandas and NumPy to visualize the data.

3.4. Data Insertion into Database

a. Database Creation and connection - Create a database with name passed. If the database is already created, open the connection to the database.

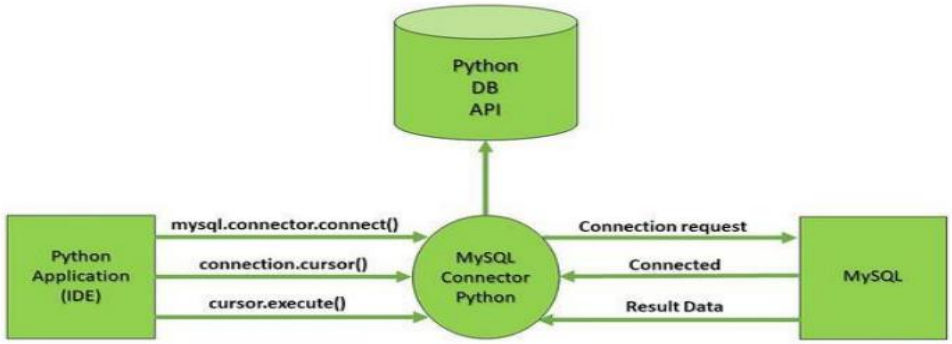
b. Table creation in the database.

c. Insertion of files in the table

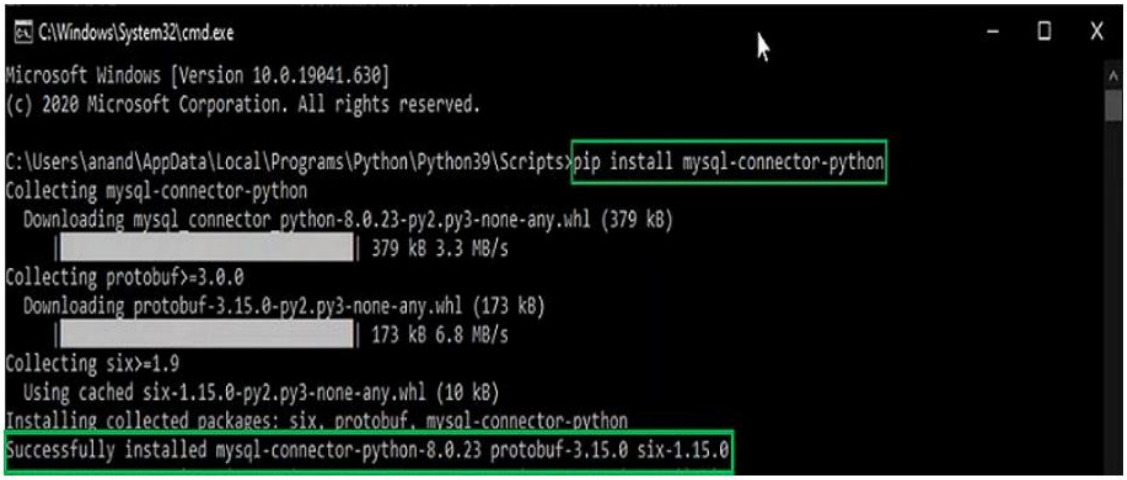
3.5 Make the SQL connection and set up the data source

Step 1: Configuring Python

Python is a high-level, general-purpose, and very popular programming language. Basically, it was designed with an emphasis on code readability, and programmers can express their concepts in fewer lines of code.



To create a connection between the MySQL database and python, the connect () method of MySQL. Connector module is used. We pass the database details like Hostname, username, and the password in the method call, and then method returns the connection object.



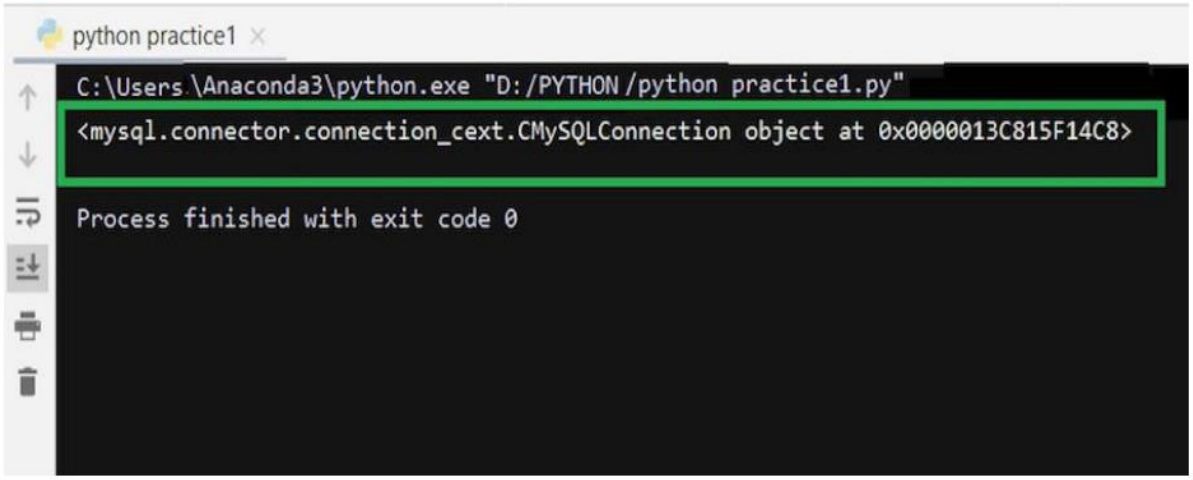
Following code to connect Python with MySQL.

```
# Importing module
import mysql.connector

# Creating connection object
mydb = mysql.connector.connect(
    host = "localhost",
    user = "yourusername",
    password = "your_password"
)

# Printing the connection object
print(mydb)
```

Output:



3.5. Export Data from Database

Data Export from Database - The data in a stored database is exported as a CSV file to be used for Data Pre-processing.