Joke Application

Joke app on JVM using GET API

Presented by:

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Aim: To provide easy to handle entertainment application which requires least resource to run on Client System.

Technology used in Project:

- Java SE
- API
- SQLite Database

<u>Libraries required for this project</u>

Internal libraries:

- Java.util.*;
- Java.net.*;
- Java.sql.*;
- Java.io.*;
- Javax.swing.*;

External libraries:

SQLite.jdbc.driver.jar

API(Application Programming Interface) used in this project :

• https://v2.jokeapi.dev/joke/Any?blacklistFlags=political,racist,sexist&type=singl

Components of the Project file

Packages:

(default package)

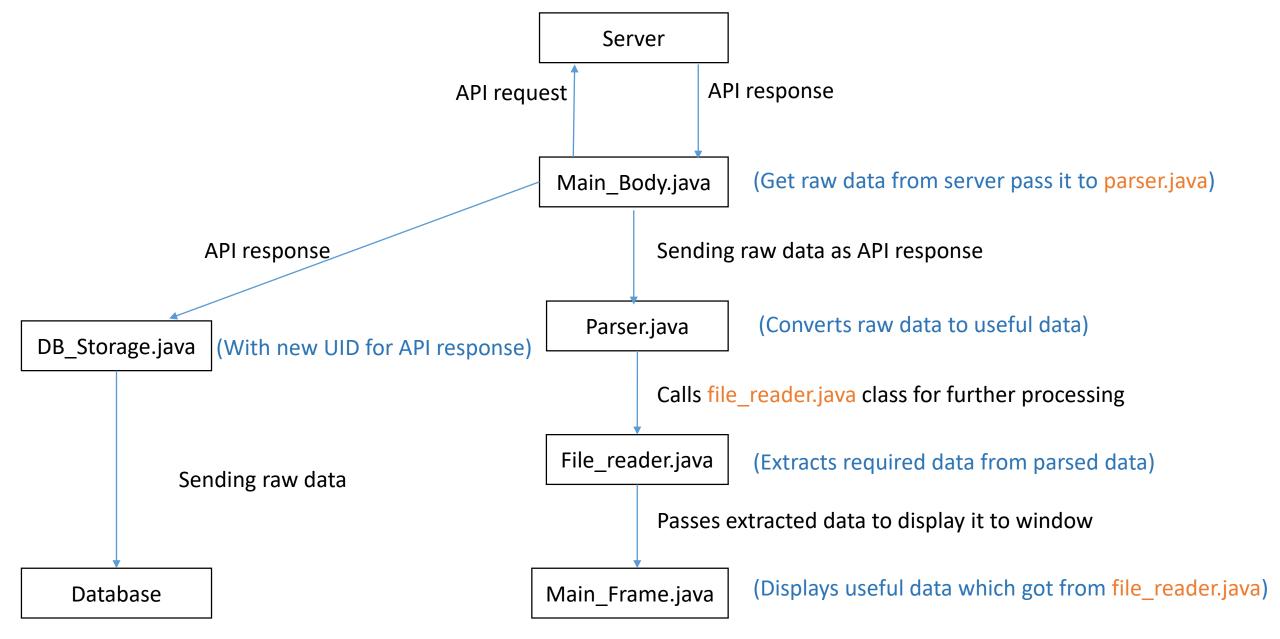
Classes:

- Main_Body.java
- DB_Storage.java
- fromDB.java
- Main_Frame.java
- Parser.java
- File_reader.java

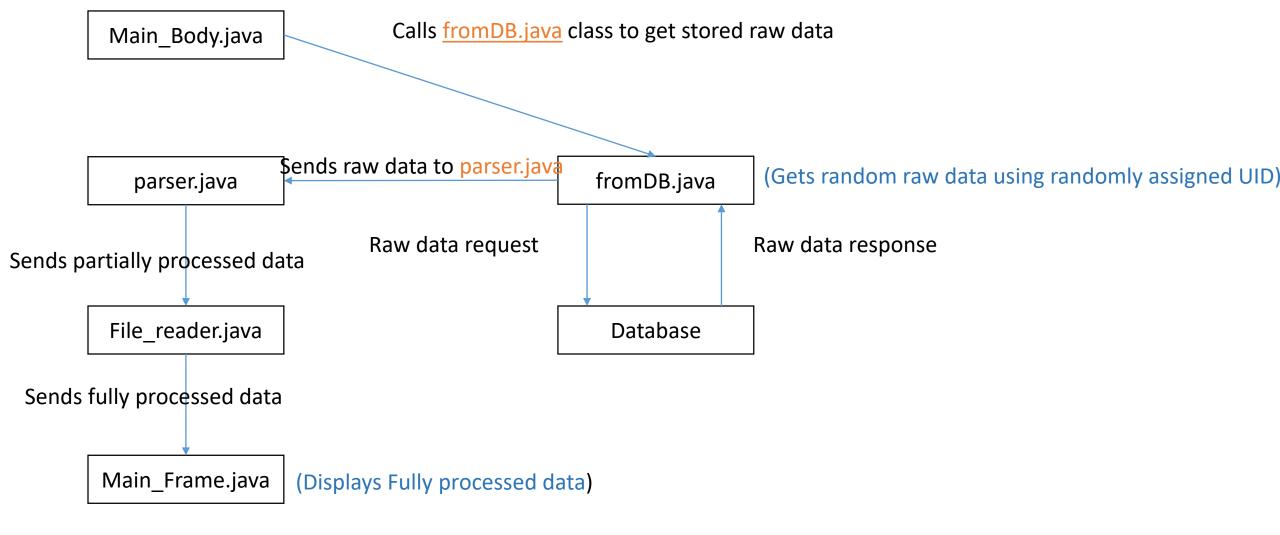
Methods:

- main(String[]args) from Main_Body.java
- intoDB(String response) from DB_Storage.java
- fromdb() from fromDB.java
- main(String[] args) from Main_Frame.java
- parser(String API_response) from parser.java
- File_reader() from File_reader.java

Architecture(Connected to Internet)



Architecture(Not connected to Internet)



Working

1) Main_Body.java

• Main Body.java is a starting point of our project. It either calls parser.java or fromDB.java in case if there is any internet connectivity then it will call parser.java after getting raw data from API server and in case of no internet connectivity then it will call fromDB.java class for operating in offline mood.

2) DB_Storage.java

- It is accountable for storing raw data getting from Main Body.java
- It also assign UID(Unique identification) to every raw data that is coming in the class.
- This UIDs are unique and cannot be assigned to two different raw data.

3) Parser.java

- Parser.java class is responsible for partial extraction of raw data from which is given by <u>Main Body.java</u>. Further extraction is done by <u>File reader.java</u>
- This class creates a temporary text file to store partially extracted data in system.
 Then this text file is accessed by File_reader.java for further extraction of data.
- It calls file_reader() method from File-reader.java class for further extraction.

4) File_reader.java

- It is responsible for fully extraction of data which we got from server which also stored in temporary text file.
- It accesses that text file. Gets valuable data from it and sends them to <u>Main Frame.java</u>

5) Main_Frame.java

 This implements <u>javax.swing</u> library for working. It takes data from <u>File_reader.java</u> in the form of String[] array.

6) from DB. java

- Method of this class is only called by <u>Main body.java</u> if there is no internet connectivity
- It chooses a random UID which are assigned to raw data in Database and according to that UID system chooses a raw data and sends that raw data to <u>parser.java</u> and further extraction takes place in system
- Using this technique, this project can display jokes even if there is no internet.

Bugs:

- Sometime displays repetitive content
- Gives runtime error if moved without configuring Database and text file
- Takes 2 seconds to show result(Independent of resources)

Minimum Requirement:

Same as to run JVM

Size:

• 10MB in Storage

Source Code:

<u>shahabrar7746/Joke-APP: For more information visit this link (github.com)</u>
Result:

