

Project Proposal

Application Development

Team Members

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Project Description

Our project for the Application Development course is based on “Building of Web-based Dashboard using Python Flask Library” where a dataset of “**Google Play Store Applications**” will be analyzed and results will be provided in the form of visualizations. This analysis of data tends to help application developers in distinguishing themselves from a wide variety of applications by observing user interests, and understanding which key factors need to be kept into consideration for developing a potential application. The dashboard will also contain essential GUIs for the users such as Application Search, drop-down menus to observe different visualizations, along with many other user-friendly features.

Significant operations need to be performed on the subjected dataset such as data cleaning, analysis, manipulation, and most importantly data visualization, using different libraries in Python.

Dataset/Web APIs

The dataset which will be used in the development of the application is “Google Play Store Apps”, which is readily available at Kaggle. The dataset consists of records of more than 2.3 million applications that contain information related to some of the major parameters that an application holds such as its Category, Rating, Installs Count, Size, Release Date, Minimum Android version, along with many other attributes. A sample image of the dataset is attached below:

App Name	App Id	Category	...	...	Scraped Time
Gakondo	com.ishakwe.gakondo	Adventure	...	...	15/06/2021 20:19
Ampere Battery Info	com.webserveis.batteryinfo	Tools	...	...	15/06/2021 20:19
Vibook	com.doantiepvien.crm	Productivity	...	...	15/06/2021 20:19
...
Radio VOA Hausa	com.jlstudio.RadioVOAHausaC	Music	...	...	16/06/2021 13:05

The link to the dataset is:

<https://www.kaggle.com/gauthamp10/google-playstore-apps>

Python Libraries

Python libraries that will be required to develop the web-based application include:

- Flask
- Pandas
- NumPy
- Matplotlib
- Plotly

This is only a tentative list of libraries that will be used in the project. The list can be extended during the development phase, as per the requirement of the project.

Features

The application will include the following valuable features for the users:

- Dropdown menus to filter the data according to the desired 'Years' and 'Category'.
- A search bar for users to enter their desired application name and get the following details:
 - Size
 - Rating
 - Category
 - Installs Count
 - OS compatibility

and more.

More features could be added further during the development phase of the project, as per requirement.
