

GSOC 2021

Project Proposal

Personal Information

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- ❑ IRC nickname on #sugar : dhruvkabariya
- ❑ Your first language : Hindi (Also comfortable in English)
- ❑ Location: Surat,India
- ❑ Timezone: Indian Standard time (UTC+05:30)

About me

I am a 2nd year computer science and engineering student studying at Ahmedabad University. I will be available to work full from May as my semester is going to complete at the end of April. If I am selected, I shall be able to work 40 hrs per week, but I will do more if it requires.

Skills/Programming Languages

I am a 2nd year Computer science and engineering student. I have completed many courses which are mentioned below.

- Database management system
- Computer Organization and architect
- Introduction to programming
- Data Science
- Probability and stochastic processes
- Data structure and Algorithms
- Design and Analysis of Algorithms

I am not limited to college curriculum, I have done many online courses in Machine learning, Deep learning, Django and Flutter from coursera and Udemy.

Projects I have done :

1. Developed Application which register students for University Event. This was a full stack project which included a backend developed with Django and API with DjangoRestframework and integrated this API with a Mobile Application created with Flutter. The backend was deployed on AWS elasticbeanstalk
2. Created Data Science project for visualization of corona case rise in Canada Country. From Government data which include rise in cases with date and territory. I make visualization for the Data which showcase rise in cases with date in different territory.

More projects are on [github](#).

Project

Project Name : PackageInfo WebApp

Project Description

The project aims to develop a website which provides information on packages in popular linux distribution. This information includes name, supported linux distribution, version, size, developer, and some non essential data like downloads, github repo link, licence and documentation link. The package information will be stored in a database, and it will be available to search via REST API, and Website itself. The frontend will help users to search packages from name, linux distribution they support, developer and help them to sort the package by size, publish date and version status (beta, alpha, pre-beta etc.).

Technical Details:

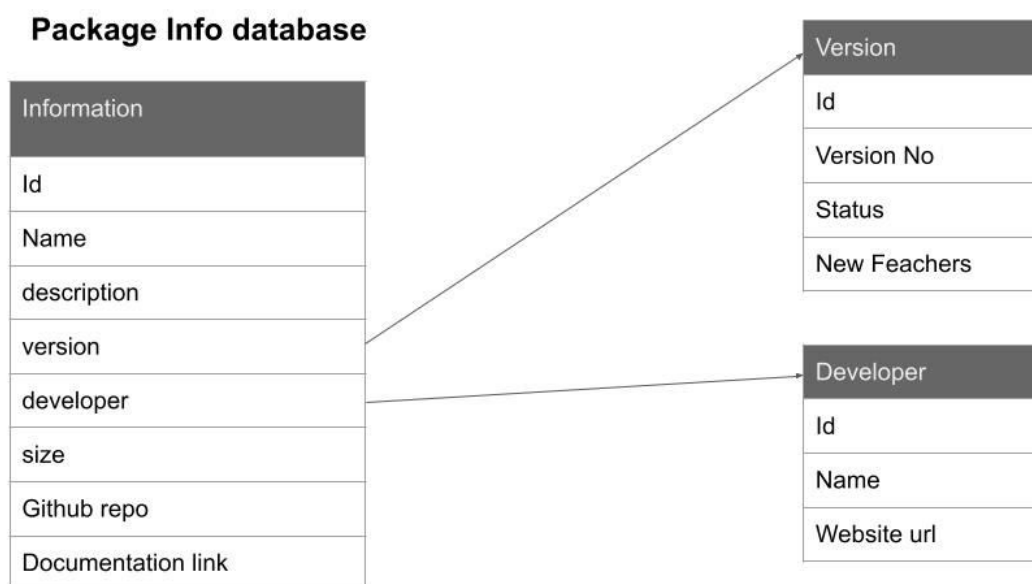
The project can be divided into two parts, one is backend which includes database and API, second is frontend.

Backend :

The backend is the heart of every web based project as it has all the data and business logic. Features like scalability we shouldn't forget and that's why I choose Django. Django also has other advantages like middleware authentication by default, ease of connection with Database, and Model-Template-View architecture. Now **DJANGO REST FRAMEWORK** is more helpful here to us for creating REST API of our project. REST API is going to power our frontend and help us to make it open for other developers. I have developed several applications and websites with Django and I never found anything complex in it. It is easy to understand and I am experienced in it.

Database Design :

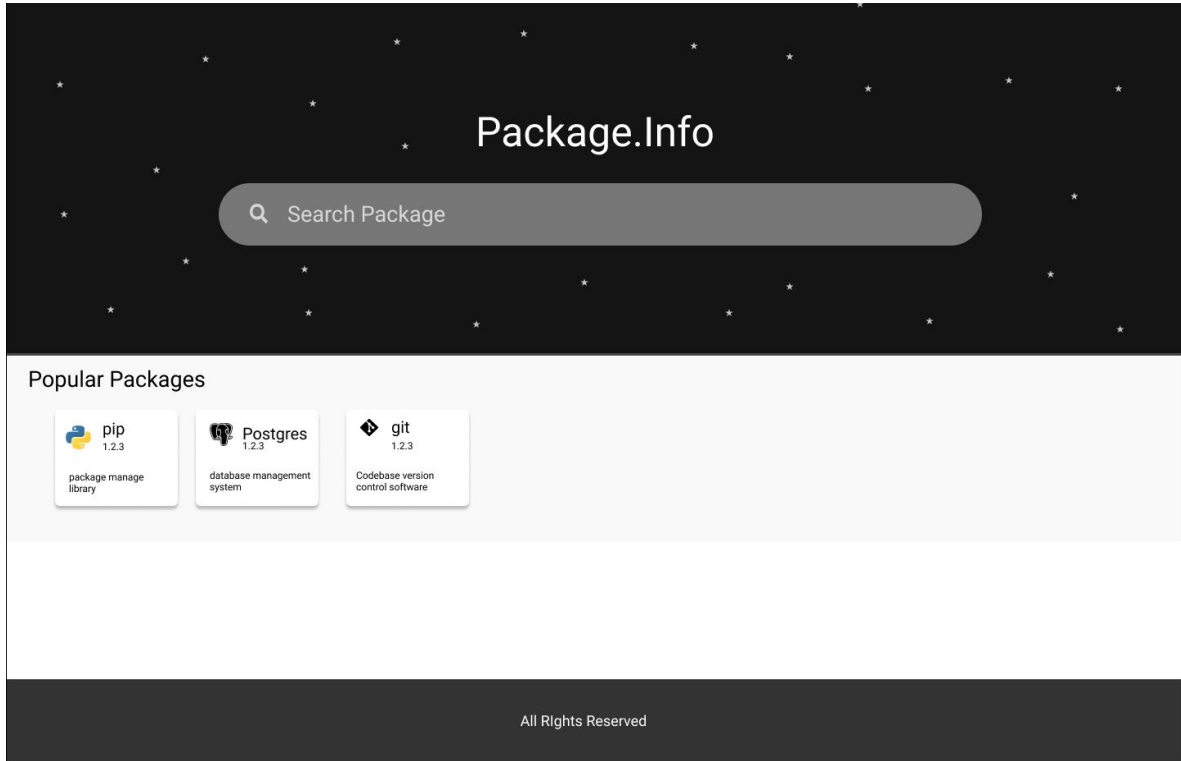
The database will contain three tables to store every bit of information about the package. Here the Information table will have two foreign keys for the version field which relate to the Version table and the other one is the developer field which is related to the Developer table. Now why I add the Version table because when some package gets updated with new features we can search from this feacher and also check version status (beta, alpha etc). I find developer table helpful to search packages by developer as one developer may developed more than one package.



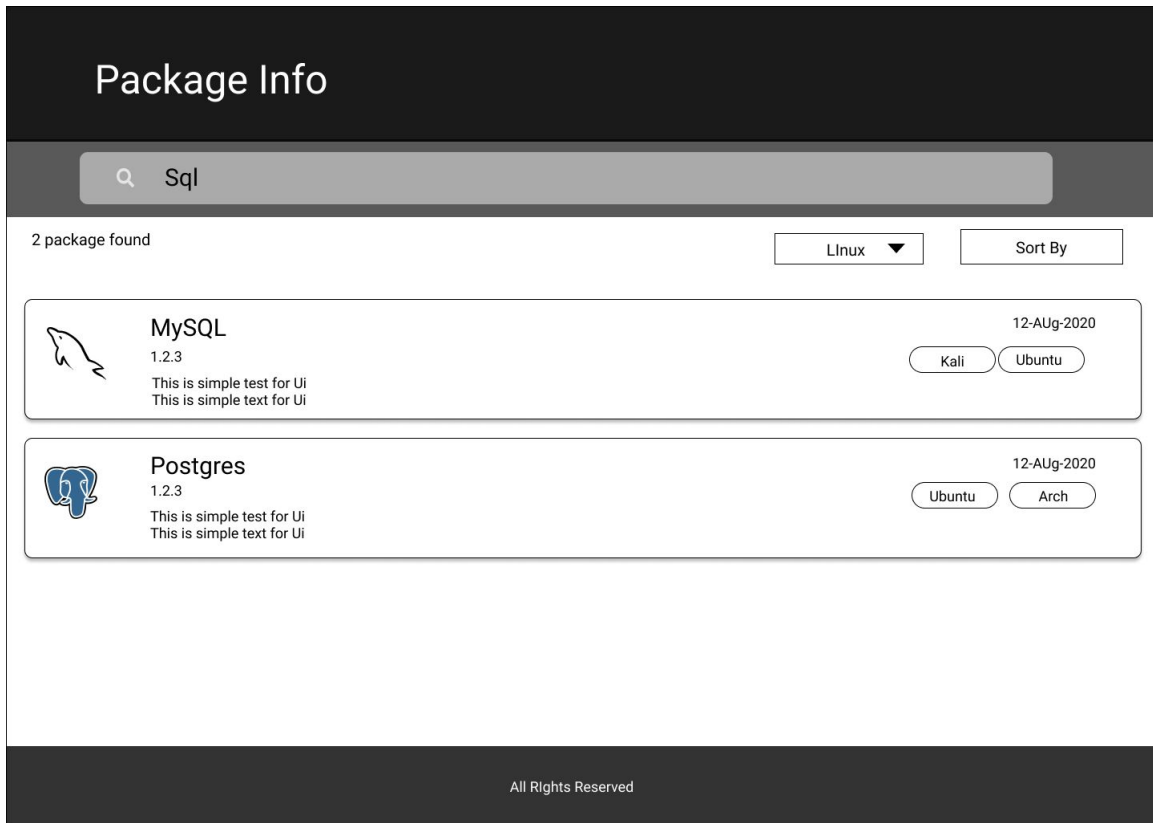
Frontend :

The frontend is a convenient way and easy to get information. It needs to include as many features as needed otherwise it will create confusion for users. So we are gonna make a three page website. 1.Homepage, 2.Search result page, 3. Information Page.

Here are some pre-design.




Home page



Search Result Page

Package Info



PostgresSQL 1.2.3

Ubuntu Kali

Version 1.2.3 12-03-2021 Stable

LICENSE [PostgreSQL License](#)

[github.com/postgres](#)

Documentation [github.com/postgres/doc](#)

Developer [PostgreSQL Global Development Group](#)

It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of using Lorem Ipsum is that it has a more-or-less normal distribution of letters, as opposed to using 'Content here, content here', making it look like readable English. Many desktop publishing packages and web page editors now use Lorem Ipsum as their default model text, and a search for 'lorem ipsum' will uncover many web sites still in their infancy. Various versions have evolved over the years, sometimes by accident, sometimes on purpose (injected humour and the like).

All Rights Reserved

Information Page

Timeline/Deliverables :

Community Bonding Period:

Week-1

Week-2

Week-3

Week-4

Week-5

Week-6

Week-7

Week-8

Week-9

Week-10

Your Motivation

Also discuss your plans after the GSOC period ends. Do you plan to continue working on the project after GSOC ends?

- ❖ What is your motivation to take part in Google Summer of Code ?
 - It is a great opportunity to start open source contribution and make connections in the tech community also it will help me to boost my career and most important I will use my skills to help the community out there without any expectation. This is the motivation which is drawing me to GSoC.

- ❖ Why do you want to work on this particular project ?

Motivation:

Convince us that you will be a good fit for the GFOSS project you have selected, by sharing links from [GFOSS Projects](#).

If your project is on an idea you proposed, convince us that the idea is useful to [GFOSS](#).

- A paragraph explaining why you are interested in participating in GSoC
- A paragraph explaining why you believe we should choose you

