Platform and Framework Analysis

Introduction

For our project, we will use Python as our scripting language, Django for our web framework, mySQL for our database, and Apache for our web server. All of these platforms are open source, and we stand for open source.

Python

We have chosen to use Python as our scripting language. Its primary advantages include its readable syntax and the ease with which it can be learned. Additionally, it is cross-platform and supports rapid development. These are advantages are key since we have a very limited amount of time to develop a passable prototype. Finally, Python is the language used by our other chosen platforms, so we would be forced to use it even if was not our ideal choice. Thanks to its advantages, this is not a concern.

Django

We have chosen Django for our web framework. Django has been time-tested and designed for intensive design requirements and stringent programmer demands. One of the greatest strengths of Django is its admin interface. This interface allows the programmer to manage his site without writing any extra code and is one of Django’s highest-praised attributes. Django is hailed as robust, efficient, fast, stable, and scalable. Its primary focus is on dynamic and database-driven websites, and it supports multiple databases including mySQL. We have chosen to use it because we have a database-driven application in mind and because of its critical acclaim and real-world industry use.

mySQL

We have chosen mySQL for our database. Its first advantage is that it is hailed as the easiest database to learn and use. It is praised for its scalability, flexibility, speed, strength, and power. It can be configured for particular applications, and it supports specialized web functions like text searching. In addition to this specialization, it offers comprehensive support for every application development need, cross-platform management, and automatic space expansion. It is one of the most popular and widely used databases. The ease with which it can be learned and the wide variety of support it offers makes it our obvious database choice.

Apache

We have chosen Apache for our web server. Apache is one of the earliest and most popular web servers: 63.7% of all active websites use it. It is praised for its high speed and throughput, its large public library of add-ons, and its huge resource pool. It is very flexible and has a variety of multi-processing modules to run in process-based, hybrid, or event-hybrid modes to better match the demands of a particular infrastructure. Once again, its ease, popularity, and fully-stocked library make it our clear choice.

Below is a picture that models our proposed setup for the implementation of our application.

