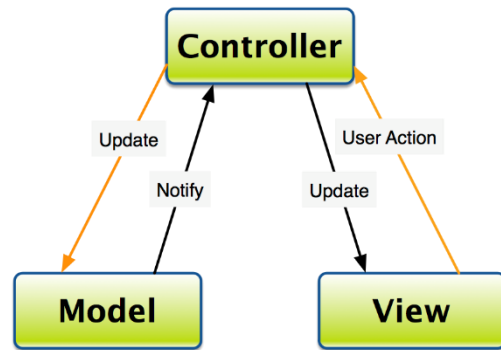


UML diagrams (domain model, DCDs, SDs, etc.)

MVC (or MVT): This is an overall pattern used in many applications that separates the data, business logic, and display layers of the application. Some of the advantages of structuring a project this way includes having more fine control over what users see and are able to edit, completing some logic in between what users see and what is written to the database, and easier to develop when code is split into these logical areas. (better than MVVM (model view view-model) counterpart)



Python: Python is a scripting language that is used by many web-developers. Because it is a scripted language, it's performance isn't as good as Java or C#, but developing in Python is much quicker. We chose this option because the Colonial Heritage Foundation shouldn't be hammered by thousands of requests per minute. Python is also fairly easy to pick up, its syntax is clean and understand, and importing modules is a snap with the package manager, pip (comes with Python 3.4).



Django: A lot of free things built in to quickly build a website with python. It offers routing of requests. Used by many python web developers as the go-to web framework.

- Manages sessions
- Request object for passing things in memory across pages
- Password encryption
- Very convenient ORM (object relational map)
- Authentication

PostgreSQL



PostgreSQL: DBMS that works best with Django's ORM.



DMP or Django-Mako-Plus: is an extension of Django and Mako together. It makes creating pages quicker and more organized. It automatically pairs js, css and html files together if they have the same name. This takes the work out of making sure that linking pages are working correctly. With DMP, that is managed for you. It also gives a quick routing scheme that is easy to understand and develop for.



Bootstrap: a css and js framework that is used for displaying webpages nicely. It is also quick and easy to use. One of the biggest advantages is the fact that it allows a developer to create mobile and desktop friendly web pages using its grid system.



jQuery: a modern javascript library that can add a lot of quick functions to webpages and leaves them more readable had they been done in vanilla js. jQuery also provides a very nice way of performing AJAX requests. Bootstrap depends on this for a lot of its functionality.

Ajaxforms: a small jquery plugin that allows forms to be submitted and rendered with AJAX.

Loadmodal: a small bootstrap plugin that makes creating popover modals easier

Requests: a python library that makes http requests easy to execute.

Ldap: Library for connecting with a server's ldap authentication system.