

Technologies

We have chosen to use the Linux Nginx MariaDB Php (LEMP) stack.

Php will be our primary language because php works great with html and they are easily interchangeable. It also give us interactive features which allow us to interact with users on an elaborate scale like when using forms.

MariaDB is a dropin replacement for MySQL in the LEMP stack. They are both very similar in their flexibility and scalability which is needed due to the continuous modification of data and information on the web application. MariaDB is fast and robust with a rich ecosystem of storage engines, plugins and many other tools that will make integration on the application versatile.

We chose the Nginx server because it is lightweight and still very powerful when compared to Apache. Nginx is an open source reverse proxy server for HTTP, HTTPS, SMTP, POP3, and Imap protocols. It will function as a load balancer and an origin server for the web application. Usage of the Nginx server will gives us high performance and low memory usage.

The LEMP stack has a wide range of support and documentation online because majority of the web runs on php.

Frameworks: We will be using LARAVEL as our php framework primarily because it has a good Object Relational Manager (ORM). It uses a system called Eloquent ORM which will be suitable for the data access operations needed in the web application.

Laravel also provides certain libraries that help with

- form validation
- input/output filtering
- calendar scheduling