

Liquid Galaxy Project

Backend Technology

CMS (Content Management System):

There are a lot of CMS platform providers, either free or with subscription, for example:

- **Wordpress** - is a free popular platform that can act as part of an internet hosting service, or on a local computer as its own web server.
 - In the backend, Wordpress is based on **PHP** to allow support for more human-readable permalinks (URL that is intended to remain unchanged for a long period and time, being very easy for users to type and remember)
- **Pulse CMS** - is a software designed for helping the developer to add content to an existing site and manage it easily.
 - For backend, this Content Management System uses **Apache** and **PHP 5**:
 - **Apache** is a free and open-source cross-platform web server software (more than 60% of all websites are using it);

- **PHP 5** is a server side scripting software created in 2004 with improved support for object-oriented programming;
- **Backdrop CMS** - is part of the Drupal project for providing affordable CMS for small and medium-sized organizations.
 - Backdrop can be extended with its various modules;
 - In backend, Backdrop is also using **PHP**;

Students Chat:

For Students Chat the website could use a Facebook Messenger look alike interface, because it is a nice looking environment but also easy to use and understand;

- In the backend, for building the platform were used:
 - **JavaScript** - a software that can be used also in front-end as in back-end. It can be used for a nice looking interface and also for animations inside the chat box;
 - **Erlang** - is used for developing systems that can be distributed among different computers in a network;
 - **C++ or Python** - can be used for coding instant messaging. C++ is a powerful programming

language but requires a lot of lines of code. On the other side, Python, which is also a powerful programming language, can handle the task easier and with less lines of code;

- **PHP** - is embedded within a web page along with its HTML. Before the page is sent to a user that has requested it, the Web server calls PHP to interpret and perform the operations called for in the PHP script.

Students Community:

- For students community in the backend, the website could use **FireBase** and **JavaScript**.
 - **FireBase** provides a realtime database and backend as a service;
 - This way each student can have an account for easier identification.

Publishing photos on the web:

- Publishing photos on the web can be done by using **PHP** on the backend ;