

World News - Group 7
CS411
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Based on your analysis, choose an architecture / platform to use for developing your solution (Node, PHP, JSP, etc). Explain why you believe that this particular architecture is the right choice. In addition, write a paragraph that examines an alternate platform and why you believe that it is not the correct choice.

For our web app, we are using the MEAN architecture (MongoDB, Express, Angular.js, and Node.js). We decided to use this architecture for a number of reasons. One reason is that each element of this stack shares the JavaScript language, keeping communication between the different layers simple. In terms of the individual components, let's start with MongoDB.

MongoDB is a NoSQL database featuring a schema less nature, meaning that the developer can easily change the structure of the data.

Express provides the Web API that powers the MEAN stack. It is a minimalist framework built for Node.js and comes with a ton of HTTP facilities.

As for Angular.js, this front-end library is small (~45KB). Small means fast, and when it comes to waiting for a website to load, any amount of ms helps.

Node.js is a great server-side platform. It makes it easy to change how the site routes requests, change logic to answer queries, etc. Also node.js is built for speed and has a fast event-driven architecture, as well as better scalability thanks to its non-blocking architecture.

An opposing platform would be the more classic LAMP stack. We decided that we would prefer to not use this architecture. First off, Apache is not a notably high performing web server. We were looking for something a bit snappier. In terms of the database, MySQL has its own unique database language whereas MongoDB can carry its data as simple JSON-like values. This means that using MongoDB would be easier in terms of communication with our other layers. In terms of PHP/Python/Perl, there is no huge downside to using these for server-side programming, but why not use JS for everything to ease communication between server and client? As for linux, linux is fine but it alone is not compelling enough for me to adopt the rest of the LAMP stack.