

This document will contain the rationale for decisions that will affect the development and outcome of the overall project.

Issue: What database should we use?

Alternatives: MongoDB, CouchDB, SQL

Criteria:

The requirements given to us by our client is that the database must be based in the cloud, and the database we choose must support Spanish and English languages.

Argumentation:

SQL is a good choice because it is what is currently used for the other three databases and would require no new learning for the AMGG devs.

MongoDB and CouchDB are good options because nosql databases are better able to handle traffic on a clustered system. They also are very compatible with Node.js and offer a lot of support for Node.js which we would like to use on this project.

The benefits of MongoDB over CouchDB is that MongoDB queries look very similar to SQL queries which will make the conversion from SQL to Mongo easier for the AMGG devs. Furthermore, Mongo offers great partition tolerance, and high consistency which will be more important for our application than CouchDB's high availability because we will be handling financial information and we do not want there to be and sponsorship conflicts.

Decision:

Our team has decided that MongoDB is the best choice for our project. The similarities between SQL queries and Mongo queries will make understanding Mongo much easier for AMGG devs. Mongos partition tolerance and consistency is also more beneficial than Couch's partition tolerance and availability. The benefits of a nosql database as well as the Node.js support make it a clear choice over a sql database. We will run this by our client to get their approval.

Issue: Should we use Node.js

Alternatives:

Criteria:

Argumentation: .

Decision:

Issue: Which cloud service should we use?

Alternatives: GoDaddy, Heroku, Bluemix, Amazon Web Service, Google Cloud Platform

Criteria:

Argumentation:

GoDaddy is currently being used by AMGG to host their websites. Using GoDaddy to host our DB would make it a little easier to interact with the website.

Decision: