Assignment 3

1. Authentication use case

Authorize from Spotify API

User hits login button

landing page

2. Develop a flow diagram for one of your high-level use cases. You can use a swimlane, state, or logical flow diagram…whichever makes the most sense for the use case. It isn’t required, but you might find it useful to create a state or navigation diagram for your entire site as a way to determine the various pages that you’ll need in the solution.

Enter login info

success

Load saved tracks to database for analysis

Display twitter feed and analytics for 3 artists

Option 1 (default): Display top 3 artists from DB

Option 2: Search specific artists

Display twitter feed and analytics for specific artist

Throw error

failure

3. Complete the use case template for your remaining use cases. Don’t forget to add numbering to the table in the template that lists the use cases and the primary actor.

4. 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.

The platform we have decided to use is Node.js. We believe this is the correct choice for a variety of reasons. Firstly, Node is a huge up and coming platform used by companies all over the world. Since the purpose of this class is to become better software engineers, we believe that learning Node is extremely beneficial to us. Furthermore, Javascript is such a powerful tool that is only becoming more important in computer science today. Having a firm grasp on both Node and JS will make us into well-rounded computer scientists. Secondly, Node has so much to offer it is hard to ignore it. Using NPM we believe Node will deliver all of the necessary and useful tools we will need to make a fully complete and thorough project for this class. With so many modules to choose from, Node makes it easy for new developers to still be able to harness the full power of the platform. Web applications can be quite daunting at first, but with NPM we are not afraid of what we have to do, but rather we are excited for what we will be able to accomplish.

After much research, it was Node that triumphed over PHP for this project. As stated above, NPM was what really drew us close to Node. It is not that PHP is the wrong choice, but we found that Node is a better choice for us. With NPM, so many features are brought to our fingertips that it was an easy choice in the end. Another key thing we liked about Node over PHP is the performance. While for our purposes PHP and Node will probably run our application at the same speed, after lectures and further research online it does seem like Node is on top when it comes to performance. With fewer dependencies and simpler interpreter in Node, we believe that PHP would be less useful to our project and our future as computer scientists. Therefore, PHP as an alternate platform is not the correct choice.