

CS411 A3

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Prototype Technology Stack

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Technology Stack:

Front-End Languages: JavaScript, HTML

Back-End Language: JavaScript

External API Database: TicketMaster Discovery API, Spotify API

Explanation:

For the prototype, since we only need to call TicketMaster Discovery API and display the results, we decide to keep things simple. Since the data type of TicketMaster API is JSON, we decide to use HTML to display the search form and results, and use JavaScript to call the API and parse out the result.

For the front-end web development, we decided to use HTML to define the content of our web pages and use JavaScript to program behaviors of our web pages. Before deciding which languages we should use, we checked both the TicketMaster API and the Spotify API. The data type of both databases is JSON. Since searching is the key feature of our web application, calling from databases should be the most frequent events occurring in our app. In this case, we believe that it will be easy for us to get access to JSON by using JavaScript.

For the back-end development, we decided to use Python as our primary language and Django as our web framework. Since the back-end development is more related to the database, before deciding which language we should choose, we did some research on which languages are supported by MongoDB and JSON. We deliberated between Python and Java, but since most of us are better at Python than Java, we decided to work with Python. For the framework, we decided to use Django, since it has lots of built-in features, which will make our tasks easier. More importantly, it has a built-in Bootstrapping tool, which makes our front-end development easier.