CS411 A3
Han Gao, Ayla Choudhery, Nathan Levy, Dean Weeden
Architecture / Platform
Due: Nov, 9 2019

Technology Stack:

Front-End Languages: JavaScript, HTML, CSS, Bootstrap
Back-End Language: Python & Django
Database: SQLite
External API Database: TicketMaster Discovery API**,** Spotify API

Explanation:

For the front-end web development, we decided to use HTML to define the content of our web pages, JavaScript to program behaviors of our web pages, and CSS and Bootstrap to decorate our frontend. They are the most frequently used languages for frontend development.

We chose to use Python and Django for a couple of reasons, but primarily because of our familiarity with Python. While we are familiar with Python, none of us have significant experience with Django but felt that due to our familiarity with Python this would help us to quickly learn this new framework. Since Django is described as a high-level Python web framework, it made sense to use Python with Django. What's more, Django has lots of built-in features and packages, which will save us lots of time on programming basic functions and give us more time working on complicated algorithms. Django also has a built-in Bootstrapping tool, which makes our front-end development easier.

We chose to use SQLite for our database because most of us have had previous experience using the SQLite for other projects. It is very compatible and works well with the software choices we made. Our project generally requires a table for user's profile information, one for user's music preferences, and one for their purchasing history. We deliberated between MongoDB, SQLite, and PostgreSQL, but since SQLite is a relational database, every table in our database will hold for a specific purpose in SQLite. When we are searching for information, it will be easy and clear for us to call a specific table if each table only holds a specific information.