Product Backlog (10/24 – End of Semester)

Sprint 1 Back Log ({Proto-type} 10/17 – 11/1)

* Learn how to setup and access the API functions through the Spotipy Module
* Write tutorials/sample programs to hone knowledge over specific aspects of the Module.
* Write a setup program that generates a User Profile with a listing of average song qualities
* Write a user class that we can add mutation functions to, to manipulate the User’s preferences based on comparative songs
* Write a procedure to generate a new listing of songs that can be compared to the user’s profile to generate a ranking of new songs that the user will like.
* Write a program that will generate a new text file that will display the User’s new suggested songs
* Documentation.
* UML stuff.

Sprint 2 Back Log (11/1 – 11/15)

* Extract user profile data to a database
  + Adapt all setup methods to interact with SQLite
  + Adapt User class methods to interact with SQLite
* Further develop the user profile as its own object
  + Write methods to calculate and preserved standard deviation of numerical features
  + Write methods and structures to hold weighting of features
* Begin Writing testing suite
  + Research sane ways to test recommendation
  + Write testers for all methods
  + Write testers for all classes
  + Write testers for mutators
  + Write testers for standard deviation methods
* Documentation
* UML & chart stuff

Final Sprint Back Log (11/15- Semester End)

* Further develop intelligent recommendations
  + Write methods to adjust weighting as new songs are added to the profile database
  + Write methods to automatically reject new songs beyond so many standard deviations
  + Write methods to gauge how new songs mutate the profile, adjust weights accordingly
* Refine where songs to be recommended come from on Spotify
* Finish testing suite
  + Figure out how to "reset" an account for continual testing from scratch
  + Write in ways to test recommendation
* Write code to automate the whole process, adding songs at regular intervals of time
* Write code to automate the process of updating the user profile
* Documentation
* UML & chart stuff