**Project Title: Music Recommendation via Twitter Sentiment Analysis**

**Team Members:**

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| --- |
| **Name:** |
| Sharon Shiny |
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**Logo:**

**Trello Board Screen Shot**:

*Screenshot of your workflow, data design, or Project Management Board that shows breakdown of tasks*

**Project Description(High Level):**

**Motivation (WHY you feel it’s valuable): Tweeting has been part of our daily lives and can be a predictor of our current mood. This prediction can be used to create curated music playlists.**

**User Stories:**

**Tweeting has been part of our daily lives and can be a predictor of our current mood. This prediction can be used to create curated music playlists and possibly uplifting the person’s mood.**

**APIs to be Used: Twitter API**

**Libraries to be Used: Keras, sklearn**

**Packages Required:**

**Authentication of Users** (How?)**:**

**Goals:**

MVP Goals: Extracting 100 **English** Twitter feed via **sampled Twitter CSV**, preprocessed using Tokenizer, and predicting sentiment driven curated music playlist.

Stretch Goals: Extracting 100 **Multi-Lingual** Twitter feed **via Twitter API**, preprocessed using Tokenizer, and predicting sentiment driven curated music playlist.

**Breakdown of Tasks**(Ownership by Group Member)**:**

FrontEnd (Javascript, HTML, CSS):

BackEnd (Python, Flask, ML):

**Schedule for Completion of Tasks:**

|  |  |  |
| --- | --- | --- |
| **Date** | **Task** | **Notes** |
| **07/20** |  |  |
| **07/21** |  |  |
| **07/22** | * xFinding the dataset | **Twitter Sentiment Analysis** <https://www.kaggle.com/abhishekyadav5/tweets-preprocessing> |
| **07/23** | * Create a trained model based on sample extracted from Twitter Sentiment CSV generator. * Try to pull from Twitter API instead of CSV generator? | <https://twitter-sentiment-csv.herokuapp.com/>  <https://www.geeksforgeeks.org/twitter-sentiment-analysis-using-python/> |
| **07/24** |  |  |
| **07/25** |  |  |
| **07/26** |  |  |
| **07/27** |  |  |
| **07/28** |  |  |
| **07/29** |  |  |
| **07/30** | Project Work & Mock Presentations |  |
| **07/31** | PROJECT PRESENTATION |  |

**Models & Columns:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Model Name** | **Model Attributes** | **Model validations** | **Model Associations** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Associations(Has Many/Belongs To):**

**Validations:**

**GET and POST API Routes(Restful Routes):**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Resource** | **URL** | **HTTP Verb** | **Action** | **Used For** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Migration Strategy (Seed File):**

**Flask Components**

**Git Workflow:**

**“Stuck Time” Agreement:**

**Retrospective Notes (Due DATE):**

**ALL Deployed & Repos Links (Due DATE):**

**Working Agreements:**

**Project Requirements:**

You must use at least two of the below:

* Amazon AWS
* Google Cloud SQL
* HTML/CSS/Bootstrap
* JavaScript D3.js
* JavaScript Leaflet
* JavaScript Plotly
* MongoDB Database
* Python Matplotlib
* Python Pandas
* SQL Database
* Tableau

**Expectations:**

* Prepare a 15-minute data deep-dive or infrastructure walkthrough that shows machine learning in the context of what we’ve already learned.
* We expect you to put serious time and thought into this.
* We expect you to report problems you are facing along the way.
* We expect you to utilize some form of project management system.
* We expect you to dig deep into documentation and external resources to learn what you need.

**Example projects:**

* Create a front-end interface that maps to an API to “smarten” the algorithm.
* Perform a deep dive of existing data using machine learning.
* Create a visualization that continues to learn where clusters lie based on ML.   
  (Use D3 or Plotly to change the visualization.)
* Create an idea with mock data that simulates how machine learning might be used.
* Create an analysis of existing data to make a prediction, classification, or regression

**Notes:**