**Product Backlog**

| Story | Priority | Effort (1-10) | Validation |
|---|---|---|---|
| As a user, I want to be able to find a song by giving our application lyrics **verbally**. | 1 | 5 | Assistant returns the correct song |
| As a user, I want to be able to find a song by giving our application lyrics through **text**. | 1 | 5 | Assistant returns the correct song |
| As a user, I want to be able to respond to the application and have it play a sample of the song. | 2 | 6 | Assistant plays the song that it finds |
| As a user, I want the application to return a way of finding the song (apple music, google music, spotify). | 3 | 6 | Assistant provides working links to different media |
| As a user, I want the application to be precise in that it can predict the song with the correct lyrics that I am looking for each time it is run. | 2 | 7 | Assistant provides the same song for the same search as long as the user confirms it is correct. |
| As a user, I want the application to respond smoothly throughout the duration of the user conversation. | 2 | 6 | Assistant interprets user requests correctly, can adjust conversation effectively based on user responses |
| As a user, I want the application to ask if the correct song was played and if not, I want the application to smoothly attempt to try again. | 3 | 6 | Assistant takes in additional information to narrow down false results, responds back to user |
| As a user, I want to be able to give input to the application and have it learn from mistakes and get rewarded for successful finds (ML). | 3 | 9 | Assistant is able to use ML to predict the best and most likely song from a list of songs. |
| As a user, I want to be able to use the application in multiple languages. | 4 | 9 | Assistant is able to understand and |

| | | | communicate in multiple languages. |
|---|---|---|---|
| As a user, I want to use the application (user interface). | 1 | 3 | User is able to interact with the assistant by talking and typing. |
| As a user, I want to be able to find a song using just the lyrics from a song (genius API). | 1 | 3 | Application is able to find the requested song using genius API. |
| As a user, share the song with social media. | 4 | 7 | Working links to post on social media appear. |
| Set up the firebase and google actions environment and get them to work with external API calls | 1 | 7 | Our code in the cloud can do external API calls [outside google] |

**Sprint Backlog**

| **Story** | **Priority** | **Effort** | **Validation** |
|---|---|---|---|
| As a user, I want to be able to find a song by giving our application lyrics **verbally**. | 1 | 5 | Assistant returns the correct song |
| As a user, I want to be able to find a song by giving our application lyrics through **text**. | 1 | 5 | Assistant returns the correct song |
| As a user, I want to use the application (user interface). | 1 | 3 | User is able to interact with the assistant by talking and typing. |
| As a user, I want the firebase and google actions environment to work with external API calls | 1 | 7 | Our code in the cloud can do external API calls [outside google] |
| As a user, I want to be able to find a song using just the lyrics from a song (genius API). | 1 | 3 | Application is able to find the requested song using genius API. |

# Burndown Chart

Sprint 1

Amount of work Remaining

Time

http://www.burndowngenerator.com
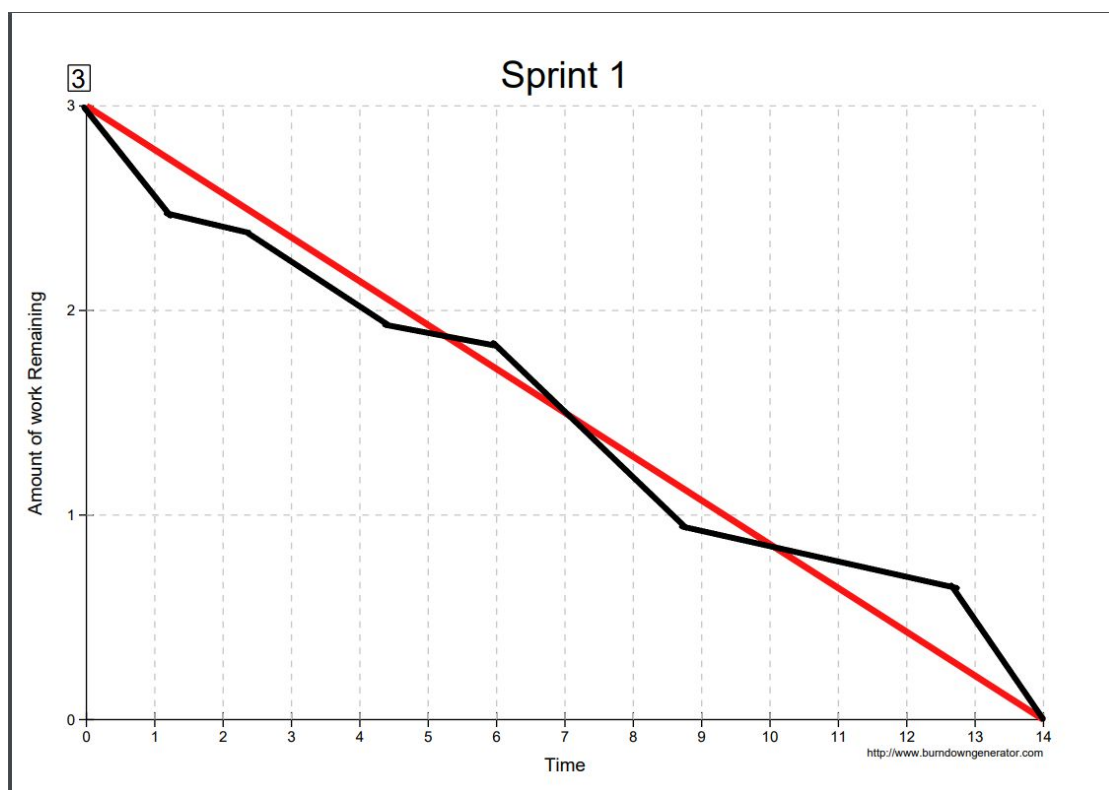
**Red line: Ideal**
**Black line: Actual**

# UML Diagram: Lyricflow

Big Dataset

Receive Search Request In Natural Language

Train ML Model [TensorFlow]

Extract Relevant Information From the Query [Dialogflow]

Classifier

Send Response to User

User confirms result - No

User confirms result - Yes