

CLASS 3300-003 or 4
Intro to Software Engineering

TEAM: Kigo
REQ Lead: Kelly
DATE: 3-Dec-24

Project Final Presentation - Requirements Spreadsheet				
ID	REQUIREMENT	CONFIGURATION MANAGEMENT		
		Team Member	INC/Ver	Date Delievered
FR-001	User Spotify Authentication	Noah	Version 1	10/20/24
FR-002	Pull user's listening history	Noah	Version 2	10/24/24
FR-002	Pull user's listening history, Fixed bug causing code to return an error	Noah	Iteration 2.1	10/30/24
FR-005	Implement algorithm to count syllables. End goal is >= 95% accurate.	Kelly	Version 1	10/26/24
FR-005	Implement algorithm to count syllables. End goal is >= 95% accurate.	Kelly	Increment	10/25/24

FR-005	Implement algorithm to count syllables.	Kelly	Increment	10/26/24
FR-009	Error Handling for incorrect argument passed to HaikuFinder.	Kelly	Version 1	11/17/24
FR-005	Additional diphthongs added to increase accuracy	Kelly	Version	10/27/24
FR-002	Pull song lyrics for one song	Noah	Version 3	11/4/24
FR-008	Pull song lyrics for multiple tracks	Noah	Version 3.1	11/16/24
FR-008	Pull song lyrics for user's most-listened songs	Noah	Iteration 3.1	11/12/24

FR-008	Pull song lyrics for user's most-listened songs	Noah	Iteration 3.2	11/19/24
FR-008	Pull song lyrics for user's most-listened songs	Noah	Iteration 3.3	11/24/24
FR-009	Compile lyrics	Noah	Version 4	11/26/24
FR-003	Implement algorithm to count syllables	Kelly	Iteration 2.1	11/17/24
FR-006	Save haikus to structured text files		Version	11/12/24
FR-007	Test syllable counting against reference	Kelly	Increment	10/25/24

NFR-001	Ensure reliable file operations	Kelly	Increment	10/20/24
NFR-002	Support extensibility in processing rules	Kelly	Increment	10/26/24
FR-008	Handle incorrect arguments in HaikuFinder	Kelly	Increment	11/16/24
Hai-00Y	Improve diphthong and triphthong handling	Kelly	Increment	10/27/24
NFR-003	Design visuals for GUI (app background, cursor design)	Sam	Version 1	11/3/24

FR-009	GUI display and navigation.	Sam	Increment 1	10/27/24
FR-010	Implement user interface layout and appropriate buttons.	Sam	Increment 1	10/24/24
NFR-004	Store user preferences locally.	Sam	Increment 1	11/3/24
NFR-005	Functionality to clear user data.	Sam	Increment 1	11/3/24
NFR-006	Functionality to toggle certain preferences.	Sam	Increment 1	11/3/24

NFR-007	Dynamic data display (for user-specific data such as Spotify username, profile image, etc).	Sam	Increment 1	11/26/24
FR-011	Spotify authentication and haiku generation flow.	Sam	Increment 1	11/26/24
FR-012	Implement routes for executing certain tasks such as authorizing Spotify, fetching lyrics, and generating haikus.	Sam	Increment 1	11/27/24
FR-013	Run JAR files built from the Java source code to perform the above tasks.	Sam	Increment 1	11/27/24
FR-014	Implement developer-facing error handling and logging.	Sam	Increment 1	11/27/24

TEST				
Test Method	Team Member	Date Tested	# Flags	Flags Resolved
			# of issues	# of issues resolved
Tested with my spotify account to verify I was able to login and retrieve data.	Noah	10/21/24	0	0
Signing in with spotify account and verifying the returned songs are my top tracks	Noah	10/24/2024 thru 10/25/2024	1 - Would return saying it could not locate songs, then it would still return all the songs	0
Signing in with Spotify account and verifying returned songs are correct and do not include error message	Noah	10/30/24	0	1 - Code no longer returns error when returning top songs
TestingSyllableCounter against list a few lyric files.	Kelly	21-Oct	1	1
Created testingSyllableCounter class which produces output.txt, correct_syllables.txt for comparing syllable	Kelly	10/24/24	1- Still missing some diphthong cases.	1

Song with Complex Words, acronyms, and slang words	Kelly	10/26/24	1	0
Allows command line to pass arguments (file names) to HaikuFinder	Kelly, Sam	Tested initially on 11/3/24 and ensured correct rendering for each every build.	0	0
Created testingSyllableCounter class which produces output.txt and correct_syllables.txt for comparing syllable count of thousands of words in seconds.	Kelly	10/27/24	link	1
Tested by manually entering names of songs. To verify lyric API data I Input popular track names aswell as niche songs.	Noah	11/4/24	1 - no error handeling for when song lyrics cannot be located	0
Tested code by having it read a list of song names and attempted to retrieve and print lyrics.	Noah	11/16/2024 thru 11/18/2024	0	1 - now has error handeling for songs without lyrics available.
Used my spotify account to pull my top tracks, then feed them into the lyrics.ovh api to return the lyrics of all the songs	Noah	11/14/24	0	0

Checked files after running program. Only created files for songs which had lyrics.	Noah	11/20/24	0	0
Validated files outputted in the new correct format	Noah	11/25/24	0	0
Ensure all components can work together to create song lyrics	Noah	11/26/24	0	0
SyllableCounter1 with a curated list of lyric files; compared results to manual counts	Kelly	11/17/24	0	0
Validated haiku output format and directory creation in haikus folder.		11/14/24	0	0
Created testingSyllableCounter class to generate output.txt and compare with reference data for 1000 common words.	Kelly	10/26/24	1	1

Simulated various input file issues (missing, empty, corrupt) to test error handling.	Kelly	10/22/24	1	1
Added regex patterns for vocable detection and tested for performance impacts during lyric processing.	Noah	10/26/24	0	0
Passed invalid arguments to verify error handling and fallback behavior.	Kelly	11/17/24	0	0
Tested additional rules for syllable counting in SyllableCounter1 Using diphthong- and triphthong-heavy samples.	Kelly	10/28/24	0	0
Visuals are stored in docs>src>visual and all relevant code points to this location. Ensured that visuals rendered correctly for every build of the webpage.	Sam	11/3/24	0	0

Tested page transitions (e.g., “Home”, “About”, and “Preferences”) and button interactions (e.g., “Generate Haiku”). Ensured smooth navigation and proper rendering of all pages.	Sam	10/27/24	2	2
Verified functionality of all buttons, including “Connect Spotify” and “Generate Haiku,” ensuring they triggered appropriate actions and page transitions.	Sam	10/24/24	0	0
Tested storing user preferences such as "Allow Explicit Content" via toggles in local storage and verified persistence across sessions.	Sam	10/24/24	0	0
Tested the “Clear Local Data” button to ensure it deleted all locally stored user preferences such as the "Allow Explicit Content" preference.	Sam	11/3/24	0	0
Tested toggling preferences such as explicit content filtering. Verified UI updates and preference persistence.	Sam	11/3/24	0	0

Tested rendering of user-specific data obtained from Spotify API, such as usernames and profile images.	Sam	11/26/24	0	0
Tested full authentication flow, including redirection to Spotify's login page and returning to Kigo for haiku generation and display.	Sam	11/26/24	3	3
Tested backend routes /login, /callback, /fetch-lyrics, and /generate-haiku independently and in combination with frontend interactions. Verified correct data flow and responses.	Sam	11/27/24	5	5
Tested execution of JAR files for Spotify data retrieval, lyrics fetching, and haiku generation. Verified inputs and outputs through backend processes and validated final outputs.	Sam	11/27/24	3	3
Verified presence of detailed logging for debugging purposes (e.g., API errors, authentication issues, and JAR execution).	Sam	11/27/24	0	0

Final DELIVERY Date	Comments
10/21/24	While there were no "flags" this step took me a long time to understand. I was attempting to retrieve the wrong token and use it for user authentication.
10/25/24	Went smoothly, the code returned all the songs by song name and artist.
10/30/24	To complete validation you need to get a code from the url after the user signs in. I do not know how to get the code at this point.
	Still not accurate enough. Roughly 84% accurate.
	Still not accurate enough. Roughly 90% accurate.

	Struggled slightly with unique word structures. Hyphenated words and acronyms pose a problem.
11/17/24	No significant issues.
	Everything working as expected
11/7/24	This API setup went much smoother than the spotify API did. Using Lyrics.ovh API to collect song lyrics
11/20/24	Added error handling for when song lyrics could not be located.
11/14/24	lyrics.ovh API does not have lyrics for all songs, niche, less popular songs are less likely to have lyrics available through the API.

11/21/24	Previous iteration of collecting song lyrics just output to terminal. Implemented file outputting system for song lyrics. A decent proportion 11/20 of my most listened to song lyrics are available.
11/26/24	Files now include song name and artist name instead of just being in the file's name.
11/27/24	Code that combines, user authentication, top song retrieval, lyric retrieval, and file outputting
11/17/24	Accuracy improved from 84% to 95% with refined rules for diphthongs, triphthongs, and silent 'e'.
11/14/24	Output files saved correctly and verified for format and readability.
10/28/24	Mismatches logged and resolved; introduced better edge case handling for rare word structures.

10/22/24	Error messages refined to be more user-friendly and clear.
10/28/24	Successfully extended regex rules without significant performance degradation.
11/17/24	HaikuFinder now handles invalid inputs gracefully and logs errors appropriately.
10/29/24	Accuracy improved by 5% with added cases for less common diphthongs and triphthongs.
11/3/24	Verified proper navigation through live testing; adjusted UI layout for responsiveness.

10/29/24	Verified proper navigation through live testing; adjusted UI layout for responsiveness.
10/25/24	Resolved UI alignment issues during testing; adjusted CSS for better layout and responsiveness.
10/24/24	Our team ended up not needing this preference because Spotify already has an age verification check when users sign up. It will need to be removed in future versions.
11/4/24	Same as above- Our team ended up not needing this preference because Spotify already has an age verification check when users sign up. It will need to be removed in future versions.
11/4/24	All toggles worked as intended.

11/26/24	User-specific data displayed accurately. No issues.
11/26/24	Spotify authentication and haiku generation worked as intended.
11/29/24	All routes worked as intended, handling requests and responses accurately.
11/29/24	JAR files were executed successfully via Node.js backend. Ensured proper input handling and output formatting.
11/29/24	Developer-facing error messages and logs provided sufficient detail for debugging.