

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
NFR-016	Ensure reliable file operations	Kelly	Increment 1	10/20/24
FR-007	Test syllable counting against reference	Kelly	Increment 1	10/25/24
FR-005	Implement algorithm to count syllables. End goal is >= 95% accurate.	Kelly	Increment 2	10/25/24
NFR-017	Support extensibility in processing rules	Kelly	Increment 1	10/26/24

FR-005	Implement algorithm to count syllables. End goal is $\geq 95\%$ accurate.	Kelly	Increment 1	10/26/24
FR-005	Implement algorithm to count syllables.	Kelly	Increment 3	10/26/24
FR-005	Additional diphthongs added to increase accuracy of Syllable Counter	Kelly	Increment 4	10/27/24
FR-005	Improve diphthong and triphthong handling for syllableCounter	Kelly	Increment 1	10/27/24
FR-006	Save haikus to structured text files	Kelly	Increment 1	11/12/24
FR-015	Handle incorrect arguments in HaikuFinder	Kelly	Increment	11/16/24
FR-009	Error Handling for incorrect argument passed to HaikuFinder.	Kelly	Increment 1	11/17/24

FR-005	Implement algorithm to count syllables	Kelly	Increment 2.1	11/17/24
FR-001	User Spotify Authentication	Noah	Increment 1	10/20/24
FR-002	Pull user's listening history	Noah	Increment 2	10/24/24
FR-002	Pull user's listening history, Fixed bug causing code to return an error	Noah	Increment 2.1	10/30/24
FR-002	Pull song lyrics for one song	Noah	Increment 3	11/4/24
FR-008	Pull song lyrics for user's most-listened songs	Noah	Increment 3.1	11/12/24

FR-008	Pull song lyrics for multiple tracks	Noah	Increment 3.1	11/16/24
FR-008	Pull song lyrics for user's most-listened songs	Noah	Increment 3.2	11/19/24
FR-008	Pull song lyrics for user's most-listened songs	Noah	Increment 3.3	11/24/24
FR-018	Compile lyrics	Noah	Increment 4	11/26/24
FR-010	Implement user interface layout and appropriate buttons.	Sam	Increment 1	10/24/24

FR-009	GUI display and navigation.	Sam	Increment 1	10/27/24
NFR-003	Design visuals for GUI (app background, cursor design)	Sam	Increment 1	11/3/24
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
Simulated various input file issues (missing, empty, corrupt) to test error handling.	Kelly	10/22/24	1	1
Created testingSyllableCounter class to generate output.txt and compare with reference data for 1000 common words.	Kelly	10/26/24	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
Added regex patterns for vocable detection and tested for performance impacts during lyric processing.	Noah	10/26/24	0	0

TestingSyllableCounter against list a few lyric files.	Kelly	10/21/24	1	1
Song with Complex Words, acronyms, and slang words	Kelly	10/26/24	1	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 additional rules for syllable counting in SyllableCounter1 Using diphthong- and triphthong-heavy samples.	Kelly	10/28/24	0	0
Validated haiku output format and directory creation in haikus folder.	Kelly	11/14/24	0	0
Passed invalid arguments to verify error handling and fallback behavior.	Kelly	11/17/24	0	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

SyllableCounter1 with a curated list of lyric files; compared results to manual counts	Kelly	11/17/24	0	0
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	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
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 handling for when song lyrics cannot be located	0
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

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 handling for songs without lyrics available.
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
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 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
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 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
10/22/24	Error messages refined to be more user-friendly and clear.
10/28/24	Mismatches logged and resolved; introduced better edge case handling for rare word structures.
	Still not accurate enough. Roughly 90% accurate.
10/28/24	Successfully extended regex rules without significant performance degradation.

	Still not accurate enough. Roughly 84% accurate.
	Struggled slightly with unique word structures. Hyphenated words and acronyms pose a problem.
	Everything working as expected
10/29/24	Accuracy improved by 5% with added cases for less common diphthongs and triphthongs.
11/14/24	Output files saved correctly and verified for format and readability.
11/17/24	HaikuFinder now handles invalid inputs gracefully and logs errors appropriately.
11/17/24	No significant issues.

11/17/24	Accuracy improved from 84% to 95% with refined rules for diphthongs, triphthongs, and silent 'e'.
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.
11/7/24	This API setup went much smoother than the spotify API did. Using Lyrics.ovh API to collect song lyrics
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.

11/20/24	Added error handling for when song lyrics could not be located.
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 did not have available lyrics.
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
10/25/24	Resolved UI alignment issues during testing; adjusted CSS for better layout and responsiveness.

10/29/24	Verified proper navigation through live testing; adjusted UI layout for responsiveness.
11/3/24	Verified proper navigation through live testing; adjusted UI layout for 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.