Team Building

Joshua Lester

4/11/25 — April 11, 2025

1   About Me

My name is Joshua Lester and I'm a one person team as I started this class
late. My degree is a BSCS and I plan to graduate in Winter 2026. My general
areas of experience are mostly in C# and .NET. I like making web apps with
Vue and Nuxt. I'm good with SQL as I TA the class. I've been learning about
C++ recently and I'm trying to make a barebones game engine right now! I'm
also taking the deep learning class right now. It's pretty fun and I enjoy seeing
the result of my work, such as a model being great at what I trained it for.

My team name is Doomsday, as I'm going to make a console application to
visualize rhyme schemes, and my favorite rhymer is MF DOOM.

Here's a picture of me taken at the latest FUSE career fair:

User Stories, Cases, and Requirements

Project: rhymeo

Version: 0.1

Team #4: Doomsday

Joshua Lester

CSCD350: Software Development Principles

Instructor: Dr. Sanmeet Kaur

Date: April 14, 2025

1 Assignment

1.1 User Stories

1. As an app user, I want to provide the app lyrics to parse so I can see my rhyme scheme.

2. As an app user, I want to be able to input my lyrics as a text file, so I don't have to type them in manually.

3. As an app user, I want to also be able to provide my app lyrics either through a file, or typing them in myself, to allow for flexibility.

4. As an app user, I want to receive error messages when I've inputted the wrong format, so I can fix the error with ease.

5. As an app user, I want to be able receive help from the app if I don't understand exactly how to use it.

6. As an app user, I want to be able to specify what exactly I want the app to do.

7. As an app user, I want the app to separate the lyrics into words, syllables, and pronunciation so that I can understand the pronunciation structure.

8. As an app user, I want the app to remember what words I've inputted before so it can deliver my rhyme scheme faster.

9. As an app user, I want to be able to see my rhyme scheme visualized with colors to benefit my writing process.

10. As an app user, I want to be able to go through an installation process that makes everything easy to use so I don't have to keep track of the internals of the app.

11. As an app user, I want to be able to look up potential rhymes so I can be assisted in my writing process.

12. As an app user, I don't want to worry about formatting the lyrics perfectly (without punctuation), in order to make the process easier.
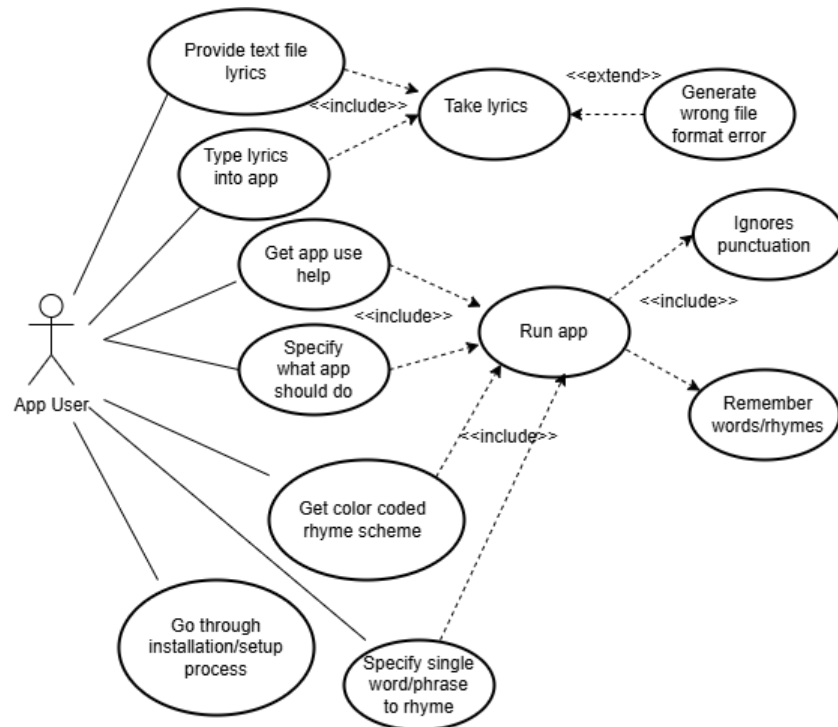
1.2 Use Case Diagram

Figure 1.1: Use Case Diagram

1.3 Requirements and Specifications

1. There will be a feature to intake lyrics through the command line.

2. There will be a feature to intake lyrics through the command line as a file. This feature will use another software tool for reading files.

3. There will also be a feature to intake lyrics as the user types them out. This feature will use another software tool for keeping track of the lyrics.

4. There will be a feature let the user know about errors such as wrong file format.

5. There will be a feature to ask the app for help.

6. There will be a feature to find out what the user wants the app to do (as there might be multiple modes).

7. There will be a feature to divide the lyrics into lines, words, syllables, and then into pronunciation for better analyzation. This feature will rely on a pronunciation dictionary.

8. There will be a feature to store words from pronouncing dictionary and past words inputted and rhymes found into storage in the app.

9. There will be a feature to color the lyrics in the console text. This feature will use a tool for coloring text.

10. There will be a feature to run through an installation process, to keep the maintenance of the app clean and easy.

11. There will be a feature to query the application on words that rhyme with a user-given word.

12. There will be a feature to parse the lyrics and ignore values that aren't essential to the analyzation of the lyrical content (such as punctuation). The app will also put the nonessential characters back to maintain integrity of lyrics/input.

1.4   Glossary

1. Syllable: unit of pronunciation having one vowel sound.

2. Rhyme scheme: a poem or song's rhythm in each line or word in relation to other lines or words.

3. Pronouncing dictionary: dictionary used for lookups for pronunciation. Sometimes used by new language learners to help with correct pronunciation.