Project: *Extraordinary Rhymes*

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Software Requirements Specification

(To be included in the SDF as section 5.)

5.1 Introduction

*Extraordinary Rhymes* is a simple client-side web app that marks up song lyrics entered by the user. The app is intended to help the use find rhymes within their lyrics, and will give the option of helping the user structure their song in blocks. The app will also include features such as rhyme-scheme enforcement and suggestion of lyrics.

UML:



The remainder of this document is structured as follows: section 5.2 contains functional requirements, section 5.3 will describe performance requirements for the app, and section 5.4 will contain environment requirements.

5.2 Functional Requirements

5.2.1 *index.html* (the landing page)

5.2.1.1 The landing page shall provide a set of a replicatable blocks that the user can drag and drop to structure a song. At the very least these blocks shall contain: an Intro block, a Verse block, an Outro block, a Chorus block, and a Bridge block. These blocks shall be text fields constrained to only accept what is applicable to each of the block’s nuances.

5.2.1.2 The landing page shall display a marked up, un-editable, text field featuring the user’s lyrics, annotated, with rhymes indicated. Additional information about the lyrics shall be displayed adjacent to the body of lyrics itself. Rhymes will be indicated by colored highlighting of texts, blocks of lyrics will be annotated by a small note above each block (for example: “Verse 1”, or “Chorus”). The marked up text field will be displayed adjacent to the block sandbox.

5.2.1.3 The landing page shall provide two options for exporting the song lyrics:

1. As an image file sent to one’s e-mail.
2. As a marked up HTML file.

5.2.2 *\*.js*

5.2.2.1 The app shall provide the following features:

1. Users can enforce rhyme schemes on phrases.
   1. Rhyme schemes can follow any format:
      1. AABB
      2. ABAB
   2. Internal rhyme and end rhyme are supported.
   3. Multisyllabic rhymes (feminine rhymes) are supported.
2. Users can query the app for rhyme suggestions.
   1. Suggestions can follow certain dimensions:
      1. Do you want a noun?
      2. A verb?
3. Users can apply pre-templated song structures.
   1. 32-bar form.
   2. Verse-chorus form.
4. Users can force highlight rhyme recognition.
   1. The app will consider two words to rhyme in order to fit a schema, even if the app (or API) fails to detect this rhyme.
5. The app shall annotate Bar lines.
6. The app shall count syllables (for each Bar).

5.3 Performance Requirements

1. This app shall be hosted on a web server with a domain name indicating its address.
2. The app, if queried by a mobile device, such as a phone or tablet, shall display a responsive and mobile-friendly web page that will allow the user to perform all functions satisfactorily.
3. The app, if queried by a desktop PC, shall function satisfactorily.

5.4 Environment Requirements

Development of this app shall require a syntax-highlighting IDE, a working Git installation, and a modern web browser. Execution of this app shall require a modern web browser with an up-to-date JavaScript engine. Deployment of this app shall require a dedicated or virtual private server with an installation of nginx, Apache, or some equivalent web server. Deployment of this app shall require a domain exclusive to the app, such as *extraordinaryrhymes.com*.