

# Software requirement specification (SRS) document template

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## Definitions and acronyms

# 1 Introduction

## Describe the purpose of the document.

This document will outline the purpose and functionality of Cadence, a dating platform focused on matching users based on their musical preferences.

### 1.1 Product scope

#### List the benefits, objectives, and goals of the product.

Cadence will provide a more nuanced dating service than those currently on the market allowing users to have a more personalized dating experience.

### 1.2 Product value

#### Describe how the audience will find value in the product.

Users will be able to enjoy a matchmaking service tailored to their music tastes ensuring that potential partners have common interests from the get-go resulting in making a connection being much easier.

### 1.3 Intended audience

#### Write who the product is intended to serve.

The intended audience is single adults who desire to meet other single adults that share similar music preferences.

### 1.4 Intended use

#### Describe how will the intended audience use this product.

Cadence will be used for the purpose of courting partners with similar musical preferences.

### 1.5 General description

#### Give a summary of the functions the software would perform and the features to be included.

Cadence will offer a matchmaking service based on location and musical preference. Other features offered will be account creation,

## Functional requirements

List the design requirements, graphics requirements, operating system requirements, and constraints of the product.

The design requirements for our product are a simple experience where users can quickly and easily navigate the site's features. Most features will exist as pop-outs on a central web-page so they will have to be non-intrusive and allow space for other sidebars to exist without crowding the screen.

Our graphics will be soothing encouraging a relaxed environment for users to interact in. Cadence's operating system requirements will be minimal as it will be running on a web server. Since Cadence is run as a website, it will need consistent internet access as well as access to the databases holding the user data.

## External interface requirements

### 3.1 User interface requirements

Describe the logic behind the interactions between the users and the software (screen layouts, style guides, etc).

Users will be able to access the website the platform is hosted on and log in or sign up. Once logged in to their account, users can navigate a streamlined match-making system that displays other users profiles highlighting their musical preferences and hobbies.

### 3.2 Hardware interface requirements

List the supported devices the software is intended to run on, the network requirements, and the communication protocols to be used.

As the program will be running on a website, any device that can run a web browser and has an internet connection will be able to access the platform.

### 3.3 Software interface requirements

Include the connections between your product and other software components, including frontend/backend framework, libraries, etc.

Cadence will need to be able to access the Spotify and Apple Music APIs so that we can obtain the user's data from their accounts should they choose to link them. It will also need to be linked to MondoDB so we can build and maintain a database of users. Node.JS and React will be used to link our frontend and backend.

### 3.4 Communication interface requirements

List any requirements for the communication programs your product will use, like emails or embedded forms.

Cadence will allow users to chat with other users through an embedded chat window on the website. Additionally, emails will be sent to users for account creation and management such as changing their password when they've forgotten it or upgrading their account.

## 4 Non-functional requirements

### 4.1 Security

Include any privacy and data protection regulations that should be adhered to.

As we will be pulling user information from the APIs of other websites that users have linked their accounts to, we will adhere to regulations that ensure that users data will not be used outside of its intended use.

### 4.2 Capacity

Describe the current and future storage needs of your software.

Cadence will need enough storage to host the website on the internet and to store a database for hosting user information such as their age, gender, and partner preference

### 4.3 Compatibility

List the minimum hardware requirements for your software.

Cadence will be able to run any device that can run a modern internet browser capable of running multiple threads in the same window.

### 4.4 Reliability

Calculate what the critical failure time of your product would be under normal usage.

Under normal usage, our platform will have minimal critical failure time which would be caused by a heavy workload on the server that maintains the website and the database of user data.

### 4.5 Scalability

Calculate the highest workloads under which your software will still perform as expected.

Our software will perform as expected until it reaches maximum capacity for the user database or until the server hosting the website exceeds maximum workload. Both issues can be resolved by allocating more resources to accommodate the heavier workload.

### 4.6 Maintainability

Describe how continuous integration should be used to deploy features and bug fixes quickly.

Continuous integration will be used to quickly address any issues caused by mismanagement of the server storing user data as well as any issues regarding navigating the website. Additionally, it can be used to implement user-requested features without diminishing current user satisfaction.

### 4.7 Usability

Describe how easy it should be for end-users to use your software.

Users should be able to easily navigate through the website with minimal page loading by providing most of the main site functions as pop-ups.

### 4.8 Other

List any additional non-functional requirements.

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