System Requirements

Template

Version 2.1 - May 17, 2013

**Using This Template**

This and other PDM tools are available. All Sections are required to be addressed, however if a section or subsection is not needed, that section/subsection of the document can be marked as Not Applicable but as explanation must be provided as to why it does not apply. Please also reference the **Lessons Learned** section in the Appendix for additional information that may assist.

To create a deliverable from this template:

1. Delete the template title page (previous page) and this page.
2. Replace [bracketed text] on the cover page (next page) with your project and agency information.
3. Replace [bracketed text] in the tool header area at the top of Page i (Contents page) with the same project and agency information as on the cover page.

Note: Please do not remove or modify content in the footer area.

1. Complete the entire template. Each section contains abbreviated instructions, shown in italics, and a content area. The content area is marked with a placeholder symbol () or with a table. Relevant text from other project deliverable may be pasted into content areas.

Note: Please do not remove the italicized instructions.

1. Update the table of contents by right-clicking and selecting “Update Field,” then “Update entire table.”

**Template Revision History**

| **Version** | **Date** | **Name** | **Description** |
| --- | --- | --- | --- |
| 1.0 | 2/5/2012 | PDM Project team | Initial Creation |
| 2.0 | 6/28/2012 | Elizabeth Bradley/David Davis | Reformatted document template; Renamed template to System Requirements. Added Initial Technical Architecture Specifications |
| 2.1 | 1/14/2013 | David Davis | Revised system requirements instructions section |
| 2.1 | 5/17/2013 | David Davis | Correct typos |

Project Delivery Methodology (PDM)

**System Requirements**

**Lorenzo Ramirez**

**Spotify Playlist Tool**

VERSION: 1.0 REVISION DATE: 20 August 2023

Approval of the System Requirements indicates an understanding of the purpose and content described in this deliverable. By signing this deliverable, each individual agrees with the content contained in this deliverable.

|  |  |  |  |
| --- | --- | --- | --- |
| **Approver Name** | **Title** | **Signature** | **Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Contents

[Section 1 Purpose 3](#_Toc143437573)

[Section 2 General System Requirements 3](#_Toc143437574)

[2.1 Major System Capabilities 3](#_Toc143437575)

[2.2 Features 3](#_Toc143437576)

[2.3 Major System Conditions 3](#_Toc143437577)

[2.4 System Interfaces 3](#_Toc143437578)

[2.5 System User Characteristics 3](#_Toc143437579)

[Section 3 Policy and Regulation Requirements 4](#_Toc143437580)

[3.1 Policy Requirements 4](#_Toc143437581)

[3.2 Regulation Requirements 4](#_Toc143437582)

[Section 4 Security Requirements 4](#_Toc143437583)

[Section 5 Training Requirements 4](#_Toc143437584)

[Section 6 Initial Capacity Requirements 4](#_Toc143437585)

[Section 7 Initial System Architecture 5](#_Toc143437586)

[Section 8 System Acceptance Criteria 5](#_Toc143437587)

[Section 9 Current System Analysis 5](#_Toc143437588)

[Section 10 References 6](#_Toc143437589)

[Section 11 Glossary 6](#_Toc143437590)

[Section 12 Document Revision History 6](#_Toc143437591)

[Section 13 Appendices 6](#_Toc143437592)

# Section 1 Purpose

This application is going to be created as a companion to managing playlists within the user’s Spotify account. Creating and managing Spotify playlists can be a tedious task, depending on the goal, but this app can streamline those tasks in automatic, sometimes A.I. driven, programs that can make playlists based on specific criteria or manage already existing playlists. The user cannot create any kind of playlist (not exactly), because the application will have specific kinds of playlist it can make. For example, it can create playlists based on the user’s top songs, A.I. prompts, and more. It can also manage playlists by randomizing the track order, be able to swipe songs in or out of a playlist (in the same sense as Tinder), and more. To be clear, the user base for this application is me. It is not going to be made for commercial purposes, since I just need it for my own goals. Possibly, one day I will revise the app to be made with other users in mind, but not for this version.

# Section 2 General System Requirements

## 2.1 Major System Capabilities

* *Must be available on the Internet.*
* *Must be available 24 hours per day.*
* *Must be accessible by mobile devices, specifically iPhone 14 Pro Max.*
* *Must allow Spotify account log in*
* *Must connect to Spotify’s API*

## 2.2 Features

* *Create custom playlists:*
  + *Based on vibes*
    - *Track features to keep vibe consistent*
    - *Use user’s liked songs*
    - *Manually choose the playlist track amount*
  + *Top songs (manual) & top songs (automatic)*
    - *month, 6-month, 12-month*
  + *AI Generated from Prompt*
    - *Use track features*
    - *From ten given songs*
  + *Throwback*
    - *Top songs from past playlists*
  + *Seasonal playlists*
    - *Playlist spans 3 months*
      * *Winter: December to February*
      * *Spring: March – May*
      * *Summer: June – August*
      * *Autumn: September – November*
    - *Look at playlist creation dates to determine which seasonal playlist they go into*
    - *Automatic on the first day of the season for the previous season*
  + *Organic Playlists (maybe not bc too similar to daily mix)*
    - *New songs every week or so*
    - *Don’t include some songs more than once for different version*
    - *Keep a database for all songs used for each playlist*
    - *Use audio features to keep playlists consistent*
    - *All songs are taken from user’s liked songs*
  + *User’s Top Artists*
* *Statistics*
  + *Top songs*
  + *Top artists*
  + *Give options such as putting them in playlist, adding them into playlist, etc.*
* *Organize user’s liked songs by track release date*
* *Track Swiper*
  + *30 second sound clip*
  + *Swipe left = move to ‘previously liked songs” and remove from liked songs*
  + *Swipe right = move to “get to know these” and remove from liked songs*
  + *Swipe up = remove from playlist*
  + *Undo feature (delete/move track ten seconds after swipe | function puts in queue)*

## 2.3 Major System Conditions

*Specify major system assumptions and/or constraints (aka conditions). The conditions may limit the options available to the designer/developer. For example:*

*- System must use the FDOT Enterprise GIS Framework*

*- System must use FDOT Enterprise Document Management System*

*- System must interface with Bank of America credit card payment system*

## 2.4 System Interfaces

*Describe the dependency and relationship requirements of the system to other enterprise/external systems. Include any interface to a future system or one under development. For clarity, a graphical representation of the interfaces should be used when appropriate.*

## 2.5 System User Characteristics

*Identify each type of user of the system by function, location, and type of device. Specify the number of users in each group and the nature of their use of the system.*

# Section 3 Policy and Regulation Requirements

*Specify relevant applicable laws, regulations, policies, and standards that will affect the operation and performance of the system, as well as any relevant external regulatory requirements, or constraints imposed by normal business practices.*

## 3.1 Policy Requirements

## 3.2 Regulation Requirements

# Section 4 Security Requirements

*Specify security requirement for users of the system.*

# Section 5 Training Requirements

*Specify Training requirements for the system.*

# Section 6 Initial Capacity Requirements

*Specify the initial capacity requirements for the system. An initial estimation can be established using current data amounts, planned number of users, and estimated number of transactions.*

1. *Identifies the highest and lowest estimated number of transactions and processing frequency expected usage (including any seasonal peaks) for capacity planning for storage and memory requirements for the application or project. Identifies the highest and lowest estimated number of transactions and processing frequency expected usage (including any seasonal peaks) for capacity planning for storage and memory requirements for the application or project.*

# Section 7 Initial System Architecture

*Specify the data platform, hardware, software, programming languages, tools and operating system requirements for the application or project.*

1. *Identify any specialized hardware requirements that must be purchased or upgraded prior to development, or in support of the implementation, of the application or project.*
2. *Identify any specialized software requirements that must be purchased or upgraded prior to development, or in support of the implementation, of the application or project.*
3. *Identify any programming languages and tools selected for the development of the application or project.*
4. *Identify any network/operating system or combination of network/operating systems that will be used for the development of the application of project.*

# Section 8 System Acceptance Criteria

*Specify the general system acceptance criteria specified and agreed upon by the project sponsor and key stakeholders that will be used to accept the final end product. For example:*

* *New system must run in parallel with current production system for x months*
* *3 years of data must be in system (conversion implied) on day one*

⇒

# Section 9 Current System Analysis

*If a current system exists, perform analysis on the system and describe how the current system is used by the business. Specify data conversion requirements, relevant data flows, system interfaces to existing systems, reporting capability, etc.*

*⇒*

# Section 10 References

*Provide a list of all documents and other sources of information referenced in this document and utilized in its development. Include for each the document number, title, date, and responsible office/author.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Document No.** | **Document Title** | **Date** | **Author** |
|  |  |  |  |
|  |  |  |  |

# Section 11 Glossary

*Define of all terms and acronyms required to properly interpret the requirements contained within this document.*

# Section 12 Document Revision History

*Identify revisions to the document starting with initial creation. This section should be updated when an approval is required (i.e. initial creation, change request, new mandated change, etc)*

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Name** | **Description** |
|  |  |  |  |
|  |  |  |  |

# Section 13 Appendices

*Include any relevant appendices.*