

SOFTWARE REQUIREMENTS SPECIFICATION

PA Historical Finder

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1. Introduction

1.1. Purpose of this Specification Document

This document specifies the requirements for the software, being developed. The system, referred to as PA Historical Finder, is one that enables users to explore significantly historical information within Pennsylvania.

1.2. Glossary

- **PA Historical Finder** - Name of the system being built
- **Historical Landmarks** - Any historical person, event, or place. Referred to as landmarks for short.
- **Tag List** - A list created by a user that contains a collection of landmarks.
- **Map** – A visual representation of geographical data for a given demographic.

1.3. Scope of the Product

The purpose of the software is to allow users to search for historical information and to view search results in an interactive interface.

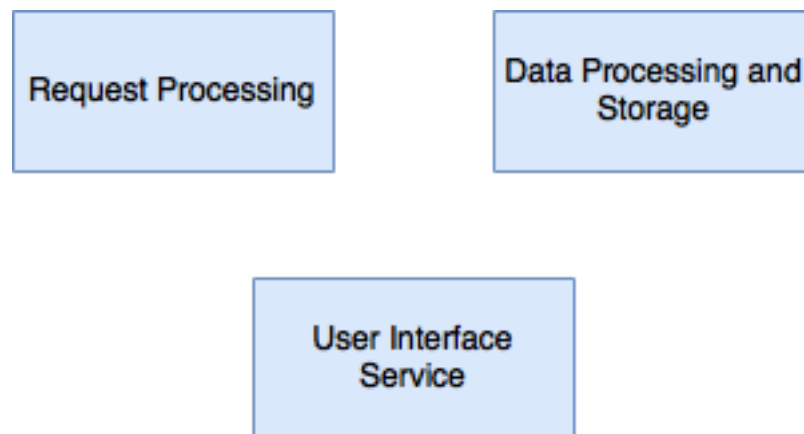


Figure 1.0

1.4. References

This document references the User Software Specification for PA Historical Finder. References are in the format Use Case (UC) followed by its numerical label. For example, US 1 refers to Use Case 1.

This document also references the Software Design document for deploying and managing system being built, and licenses/terms of usage with tools used to develop the proposed system.

1.5. Overview of the Remainder of the Document

The latter part describes the system's functional and non-functional requirements.

2. General Description

2.1. Product Perspective

The product will provide the capabilities to explore various landmarks within PA.

Development is done via Agile Development methodologies. Project management will utilize industry standard source control system(s) and open source tools and libraries.

2.2. Product Functions

The software will provide the following functions:

1. User authentication and authorization
2. Search and view historical landmarks
3. Create tag lists of historical landmarks

2.3. User Characteristics

General users of this software are expected to be any individual with average electronic consumer savvy skills and an interest in Pennsylvania's history.

2.4. Operating Environment

The application will be written in web technologies, supplemented with a database provider, which will be hosted on a Windows or Linux based machine on separate or same machines respectively. The user simply needs access to a web browser to use the application.

2.4.1. Technology/Tools Usage Licenses

Please see the supplement Software Design Documentation for more details.

2.5. Design and Implementation Constraints

All design and implementation will be completed within an agile methodology within the given time frame.

2.6. Assumptions and Dependencies

1. The map rendering is dependent on Google's API service. Limits, constraints and adhering to license terms apply.

2.7. User Documentation

No written document will be produced. User documentation will be in the form of in-application usage tutorials where deemed necessary.

3. Deployment

3.1. Hardware

At minimum, a server is needed to host the web application and Database Provider. Hosting the website and database on separate machines is also a choice and the set-up is quite similar in regard to software installation and configuration.

3.2. Software Prerequisites

Before beginning installation of software, the host machine needs to have:

- Python 3.6+ installed
- NodeJS and NPM installed (*latest versions are recommended*)

3.3. Installing and Configuring the Web Application

To see step by step instructions, please see the Software Design documentation.

4. Risks Analysis

Please view the attached "PA Historical Finder Risks Analysis.xlsx" file for the full list of risks identified during the analysis stages of preliminary, life-cycle (development), and operations.