*Wayfarer*

Requirements Document

Last Revised: September 23, 2020

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# Introduction

There is a community of people who enjoy the challenge of visiting every town in a particular state or region. The intent is primarily for recreation. Specifically: individuals, couples, friends, or families might seek new experiences by visiting towns to see sights, shop, eat at restaurants, attend events, or just to say they have been there. For the sake of simplicity, we will call the people (individuals or groups) who do this “visitors.”

Wayfarer is a system that allows visitors to manage their exploration of the towns of Vermont. It gives visitors a way to record information about each visit, in a journal-like manner, and share that information with others. Ultimately, Wayfarer is intended to support members of the 251 Club of Vermont by connecting to the 251 Club’s backend database of users and recorded comments and photos. However, as a simplification, Wayfarer will initially be designed for use by anyone and have no explicit connection with the 251 Club. Although the concept of “town bagging” is not unique to Vermont, Wayfarer as currently imagined focuses on that one state, also as a simplification.

The rest of this document describes the detailed functional and non-function requirements for Wayfarer.

# Functional Requirements

The Wayfarer system shall only support visitors who are visiting towns in the state of Vermont. Wayfarer shall not attempt to interact with the existing 251 Club web site. However, see the Expected Extensions non-functional requirement. These limitations are likely to be lifted in the future.

## Actors

The following actors (roles) shall be supported:

1. **Visitor**. An individual (or a group, but treated as an individual by the system) who visits a town and wishes to record information about that visit (called the visit’s *artifacts* by this specification). This specification uses “visitor” instead of the more common term “user” to reflect the primary motivation of that actor.
2. …?

## Use Cases

|  |  |
| --- | --- |
| **ID:** | **Write-Comment** |
| **Title:** | Create Comment Artifact |
| **Description:** | A visitor creates a comment related to one town that the visitor has visited. |
| **Primary Actor:** | Visitor |
| **Preconditions:** | The Visitor must be authenticated to the system |
| **Postconditions:** | The comment provided by the visitor has been recorded in the artifact database |
| **Main  Success Scenario:** | * Visitor selects the town (default determined by GPS?) * Visitor selects the date/time (default determined by clock?) * Visitor writes/edits the comment (optionally dictate?) * Visitor explicitly saves comment |
| **Extensions:** | [TODO: What happens if there is no network connectivity?] |
| **Frequency of Use:** | Frequently. |
| **Status:** | Not Implemented |
| **Owner:** | [Who owns this use case, in your project team] |
| **Priority:** | Very high. This is essential functionality. |

# Non-Functional Requirements

*Describe requirements that are not related to the actual operation of your project. Use the headers below to guide you but don't feel slavishly bound to them.*

## Platform

* **Platform-Architecture**. Wayfarer shall be implemented as a client/server system with a client program used by visitors and a server backend that stores all recorded artifacts. This architecture anticipates a future extension whereby Wayfarer (optionally) interacts with the backend systems of the 251 Club of Vermont or possibly other, similar organizations in other states.
* **Platform-Multiuser**. Wayfarer shall support multiple users of the same backend system. This also anticipates a future extension supporting the 251 Club of Vermont (or similar).
* **Platform-Client**. The client application which visitors use shall be…?
* **Platform-Backend**. The backend system shall execute on…?

## Performance

*What is the minimum amount of resources that your project will require? Give specific numbers if possible.*

## Security

*What kinds of attacks must your product be able to resist? What kinds of attacks will your product not necessarily protect against?*

## User Characteristics

*Are the users technically knowledgeable? What skills do you assume the users have?*

## Scale

*How large a system must your project support? (number of users, number of files, number of simultaneous network connections, as appropriate)*

## Documentation

*What sort of documentation will be provided and who is the intended audience of that documentation? Certainly, documentation for various user classes (ordinary users, administrators) is appropriate, but also consider documentation for future developers or maintainers of the system.*

## Data Formats

*What kind of input/output formats must your project be able to handle? This is particularly relevant if there are appropriate standard formats to consider.*

## Internationalization

*Does your project need to support multiple languages or cultures? If it does not, it is best to say so explicitly.*

## Expected Enhancements

* **Enhancement-251-Backend**. Wayfarer will likely need to be enhanced to (optionally) interact with the back-end databases of the 251 Club of Vermont. Specifically, it should eventually be possible for a visitor who is a member of the club to use his/her club credentials to log in and then upload artifacts to the club’s server (for presentation on the club web page), and also to share artifacts with, and view artifacts shared by other club members.
* **Enhancement-Multistate**. Wayfarer may need to be extended to support states other than Vermont.

## Date

* **Date-Presentation**. A presentation of the system shall be given at the end of the Fall 2020 semester.