

# Requirements

## User stories (with commentary)

1. I want to be able to be able to access and use the site on both my computer and Android smartphone.
  - a. So this means using both React for the web app. For the mobile app, we'll need to decide between a native solution, a mobile website or even allowing for both.
2. As a user with a lot of artifacts, I want to be able to store a large amount of artifacts so that all of my objects can be shared with my family
  - a. This translates into the non-functional requirement of scalability and practicality. The former should be self-obvious (how the system handles larger and larger data loads) and the latter may entail some way of batch-handling multiple artifacts. So, like on some file hosting sites where you can upload multiple files at once, the same idea applies to our artifacts.
3. As a user with privacy sensitive objects, I want my data to be secure so that people without authorisation cannot access them.
  - a. Another non-functional requirement—security. Thankfully React already does some input sanitising for us so we don't have to worry about, say, SQL injections. And delegating server and database set-up to 3rd-parties means devops is already secured.
4. As a family-oriented user, I want my family members to be able to see my artifacts
5. As a viewing user, I want to be able to see the artifacts of my family
6. As a user with obscure artifacts, I want to be able to customise the data relating to the different artifacts such that it gives a specific and relevant description.
  - a. So I'm guessing the client is saying this because given his large collection of artifacts he wants a way to organise them in a manner that is meaningful to him. So perhaps the ability to give colour tags, text tags and descriptions to artifacts. This means our database schema needs to accommodate for this.
7. As a new user, I want to be able to register an account and quickly start uploading artifacts.
  - a. This entails an easy-to-use system and perhaps a guided, interactive tutorial. You know how there are websites which shadow out the background, place emphasis on the foreground and have interactive pop-ups that introduce you to their web app? Perhaps something like that, no?
8. As already registered user, I want to be able to log back into my account quickly so that I can easily access my artifacts.
  - a. The client wants his user input details; a "remember me" option or checkbox found on many other websites. However since this is a web app, most modern web browsers already have integrated, automatic username and password management. So, IMO, this is a low priority feature. However if the client insists on having that checkbox on that login page or doesn't know how to use such integrated solutions due to his unfamiliarity with tech, we'll need, say, cookie management or investigate if Redux's state management capabilities has anything to offer.
9. As a user, I want to be able to remove artifacts from the site and the database.
  - a. TL;DR: CRUD.

10. As a user, I want the website to be clean, aesthetic and not overbearing. Hence I want a white background, so that my focus is on the artifacts.
  - a. As human beings, our desires are always in flux. We want one thing in the moment, and another thing next the next moment. We should still maintain a level of internal customizability incase their desires change. So this essentially means to not hard code our colour values in the scenario that we happen to do so.
11. As a time-focused user, I want the website to be responsive, with upload and page load times minimized so I my time enjoying artifacts is maximised.
  - a. Non-functional requirement—performance.
12. As a technology-novice user, I want the website to follow a logical flow so that I and other like minded.
  - a. More or less easy-to-use as inferred from (2).
13. As someone with a large extended family where I am close with some and not with others I wish to be able to control how my artefacts are shared across my social network.
14. As a user who uses computers often, I wish to be able to toggle to dark mode so that I do not strain my eyes.
15. As a user who has not used the website before, I would like a description of the functionality of the website.

## Summary

So as part of our requirements analysis, the following has been inferred (in order of relative importance to the MVP):

### Functional requirements:

1. Create, read, update and delete (CRUD) functionality for artifact entries.
2. User state management.
3. Tagging functionality
4. Batch CRUD functionality for artifacts.
5. Mobile functionality

### Non-functional requirements:

1. Easy-to-use, KISS, practical design
2. Security
3. Scalability
4. Performance

# Product requirements

## Overview

The client has amassed an extensive collection of artifacts that they have procured over the years. As they are getting older, they wish to share the joy these artifacts brought them with other family members and some mutual friends but cannot find a suitable service online to do so. As such, the client has requested for a suitable service to be created to allow them to showcase and pass on their treasured artifacts and belongings. Privacy was a key concern of the client, hence the decision to opt for a closed website over social media.

## Purpose

The service will provide a simple, convenient and efficient way for people to give away artifacts and belongings to family, relatives and mutual friends. The service aims to solve the issue of connecting people who want to give away a specific artifact or belonging with those who want to acquire it.

## Functional Requirements

1. Register a new user account
2. Login to an existing user account
3. Upload a new artifact including relevant details and imagery
4. Remove an uploaded artifact
5. Browse artifacts included in other people's account
6. Communicate in relation to specific artifacts
7. Share specific artifacts with specific groups of people
8. View and tag specific details relating to the artifact such as history, value, uses, etc.
  - a. Needs to be flexible since different artifacts can have different relevant information.
9. Batch create, read, update and delete (CURD) functionality for artifact entries.

## Non-Functional Requirements

1. Available on mobile and desktop.
2. Fast, clean, easy-to-use and responsive user interface.
3. Highly secure by adhering to best practices.
4. Performant e.g. entails fast page loading speeds and minimal reloading.
5. Maintainable so that new features could be added in the future.
6. Reliable to ensure artifact data, user accounts and networks are not subject to data loss or failure.
7. Administration panel, where the client can track access and permissions in a graphical experience
8. Scalable—the app can handle a database with many artifacts.

## Acceptance criteria

### Sprint 1

1. Be able to access the site on both desktop and mobile
2. Be able to browse all artifacts in a gridview
3. Be able to click on an artifact and see its <relevant information>
4. Be able to upload a new artifact with <relevant information>
5. Be able to remove an existing artifact
6. Be able to login to an existing user account
7. Be able to register a new user account