

Requirements

Stakeholders

End user

- Visitors of the museum using the website.

Admin

- Museum curators and other people managing the software.

Important User Stories

End User:

1. As a user I want to view objects by their popularity so that I can find the most interesting objects.
2. As a user I want to view information about each object so that I can learn about it.
3. As a user I want to view trails between objects within a region so that I can visit the places.

Admin:

1. As an admin I want to modify items in collection so that I can add, delete or update information about each object.
2. As an admin I want to view stats about objects in the collection so that I can understand which objects are of most interest to the users.
3. As an admin I want to add trails for each object which shows the navigation of where it was from.

User Story Flows

(End user 1) As a user I want to view objects by their popularity so that I can find the most interesting objects.

1. Consider list of regions
2. Select a region
3. Objects from that region displayed descending order by most viewed

(End user 2) As a user I want to view information about each object so that I can learn about it.

1. Consider list of regions
2. Select a region
3. Consider list of objects from the selected region
4. Select an object
5. Select the type of information to view (Images, Stories, General Information)
6. Display the selected information

Atomic Requirements and Functional Requirements

1. User must see a map of Bristol with pins (where objects are from) on it
2. User must be able to choose and filter the pins by region
3. User must be presented a list of objects from the selected region
4. User must be able to select an object and read information about it
5. Admins need a login system to prevent unauthorised access
6. There needs to be an "About Us" page

Non-functional Requirements

7. Since the web application is mainly for visitors with a mobile device, the information displayed must be large and clear
8. Have a colour blind mode available for colour blind users
9. The web server has to take on a large number of requests sent by the visitors and admin in a short period of time
10. Login system has to be secure (e.g. login details stored in somewhere safe)
11. Map start-up time should be no greater than 5 seconds.

(End user 3) As a user I want to view trails between objects within a region so that I can visit the places.

1. Consider list of regions
2. Select a region
3. View trails within region
4. Select a trail
5. Navigate route

Alternative flow:

1. Consider list of regions
2. Select a region
3. Consider list of objects from the selected region
4. Select an object
5. View trails associated with said object
6. Select a trail
7. Navigate route

(Admin 1) As an admin I want to modify items in collection so that I can add, delete or update information about each object.

1. Login as admin
2. Choose add, delete or update
3. For add:
 - a. Input the details of the new object
 - b. Add the object into the database
4. For delete:
 - . Select the object that you want to delete by key
 - a. Remove the object from database

5. For update:
 - . Select the object you want to update by key
 - a. A form with all the object's detail should popup
 - b. Edit details
 - c. Submit and update the database

Exceptional flow:

1. Update:
 - a. Choose update
 - b. Select the object you want to update
 - c. A form with all the object's detail should popup
 - d. Edit the form with information that is the wrong type for that specific field
 - e. An error message should popup saying "invalid type"
2. Add:
 - . Choose add
 - a. Leave empty a required field
 - b. Submit form
 - c. An error message should tell you that field must be filled in
3. Delete:
 - . Choose delete
 - a. Type in a key that doesn't exist
 - b. An error message should tell you that object couldn't be found and try again

(Admin 2) As an admin I want to view stats about objects in the collection so that I can understand which objects are of most interest to the users.

1. Login as admin
2. Select a region
3. Sort objects from that region descending by number of views
4. Select an object
5. Display stats about the object (Number of views, Number of trails it's a part of)

(Admin 3) As an admin I want to add trails for each object which shows the navigation of where it was from.

1. Login as admin
2. Open the new trial form
3. Select a region
4. Select the objects that are going to be included in the trail
5. Enter a name for the trail
6. Submit form
7. Add new trail to database