

Number	44
Name	Tag Project
Summary	General User adds/removes one or more tags to a project.
Priority	3
Preconditions	General User has permissions to edit tags.
Postconditions	Project tags are different.
Primary Actor	General User
Secondary Actors	System
Trigger	General User prompts System to change project tags.
Main Scenario	Step Action
	1 General User prompts System to change project tags.
	2 System displays current tags to General User.
	3 General User selects tags to add/remove.
	4 System updates project tags accordingly.
Extensions	Step Branching Action
Open Issues	Where are tags created: in this action or in a separate action?

Number	45
Name	Manage Project Versions
Summary	< a brief summary of the use case >
Priority	3
Preconditions	General User has permissions to view/manage project versions. System displays project versions.
Postconditions	Versions set for a project are modified.
Primary Actor	General User
Secondary Actors	System
Trigger	General User decides to modify project versions.
Main Scenario	Step Action
	1 General User decides to modify project versions.
	2 System prompts General User on how to modify versions.
	3 General User enters information and confirms.
	4 System modifies project versions.
Extensions	Step Branching Action
	1a General User instead cancels action : The action is cancelled.
Open Issues	

Number	46										
Name	Save Project "as"										
Summary	Creates a copy of a project.										
Priority	3										
Preconditions	General User has permissions to create a project.										
Postconditions	A new project is created as a copy of another.										
Primary Actor	General User										
Secondary Actors	System										
Trigger	General User clicks "copy project" button.										
Main Scenario	<table border="1"> <thead> <tr> <th>Step</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>General User clicks "copy project" button.</td> </tr> <tr> <td>2</td> <td>System prompts General User for a name.</td> </tr> <tr> <td>3</td> <td>General User enters a name and confirms.</td> </tr> <tr> <td>4</td> <td>System creates a new project with the given name by copying the selected project.</td> </tr> </tbody> </table>	Step	Action	1	General User clicks "copy project" button.	2	System prompts General User for a name.	3	General User enters a name and confirms.	4	System creates a new project with the given name by copying the selected project.
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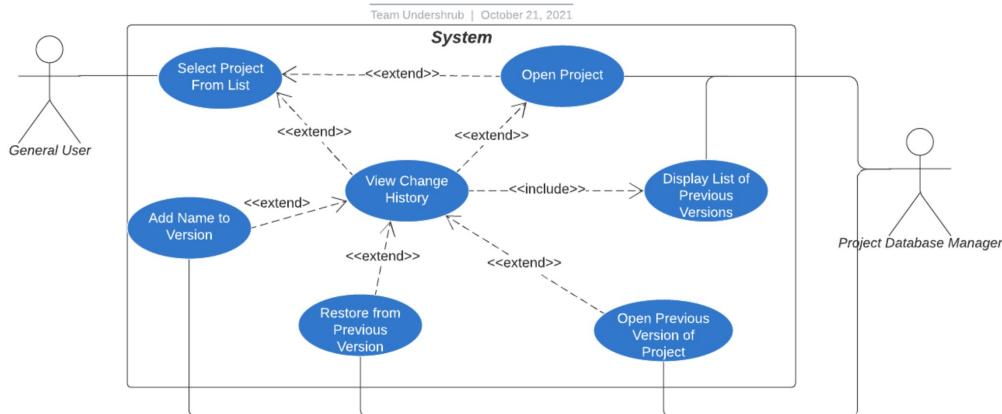
Number	47								
Name	Have Multiple Projects								
Summary	Users can have multiple projects in their account.								
Priority	5								
Preconditions	General user has the appropriate amount of storage space on their account.								
Postconditions	General user may have multiple projects.								
Primary Actor	General user								
Secondary Actors	System								
Trigger	General user creates an account and tries to upload projects or data.								
Main Scenario	<table border="1"> <thead> <tr> <th>Step</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>General user attempts to upload multiple projects.</td> </tr> <tr> <td>2</td> <td>System checks for user's available space.</td> </tr> <tr> <td>3</td> <td>If System confirms positive space availability the user can create more projects.</td> </tr> </tbody> </table>	Step	Action	1	General user attempts to upload multiple projects.	2	System checks for user's available space.	3	If System confirms positive space availability the user can create more projects.
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Open Issues									

Number	48										
Name	Update/Name Version										
Summary	The name and version number of a project is editable.										
Priority	3										
Preconditions	General User has permissions to edit project versions.										
Postconditions	Project version name/number changes.										
Primary Actor	General User										
Secondary Actors	System										
Trigger	General User clicks "edit name/number" button.										
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Open Issues											

Number	49										
Name	Create										
Summary	Create a project version.										
Priority	3										
Preconditions	General User has permissions to create project versions.										
Postconditions	A new project version is created.										
Primary Actor	General User										
Secondary Actors	System										
Trigger	General User clicks a "create version" button.										
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1b	General User instead cancels action : The action is cancelled.										
Open Issues											

Number	50										
Name	Delete										
Summary	Delete a project version.										
Priority	3										
Preconditions	General User has permissions to delete projects.										
Postconditions	Project version is removed.										
Primary Actor	General User										
Secondary Actors	System										
Trigger	General User clicks a "delete version" button.										
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3b	General User instead cancels action : The action is cancelled.										
Open Issues	Use buttons or menu options										

Project Version Management Use Case Diagram



Number	51	
Name	Select Project From List	
Summary	A general user will select one project from a list.	
Priority	2	
Preconditions	Some type of project has been added to a list in the users folders.	
Postconditions	The general user has selected a project from the list to view its contents.	
Primary Actor	General User	
Secondary Actors	Project Database Manager	
Trigger	The general user clicks the select project from the list button.	
Main Scenario	Step	Action
	1	The user clicks the “project select” button.
	2	The system alerts the database manager that a user is attempting access.
	3	The system checks if the user is allowed to access the project.
	4	The system performs the action requested by the user if they have valid permission.
Extensions	Step	Branching Action
	3a1.	The system checks if the user is allowed to access the project.
	3a2.	3a1. The system notices the user is not allowed to access. 3a2. The system notices the user is allowed to access.
	4a1.	The system performs the action requested by the user.
	4a2.	4a1. The system blocks the user's attempt to access the project. 4a2. The system allows the users to attempt to access the project
Open Issues		

Number	52	
Name	Add Name to Version	
Summary	The user attempts to add a name to a particular version of the project.	
Priority	2	
Preconditions	The version of data doesn't already have a name and the data exists.	
Postconditions	There will be a name added to a version of data within the project.	
Primary Actor	Project Database Manager	
Secondary Actors		
Trigger	Database manager attempts to name a file in the uploads.	
Main Scenario	Step	Action
	1	The manager triggers the system to add a name to a version of the data within the project.
	2	The system checks if the version already has a designated name.
	3	The system opens a text box allowing the manager to type in a name.
	4	The manager types in a name, pressing enter to close the textbox.
	5	The system sets the name of the version to the aforementioned user input.
Extensions	Step	Branching Action
	2a1.	The system checks if the version already has a designated name.
	2a2.	2b1. The system finds the version already has a name. 2b2. The system finds the version doesn't have a name.
	3a1.	The system opens a text box allowing the manager to type in a name.
	3a2.	3a1. If step 2a1 occurs, then the system does not open the textbox. 3a2. If step 2a2 occurs, then the system opens the textbox.
Open Issues		

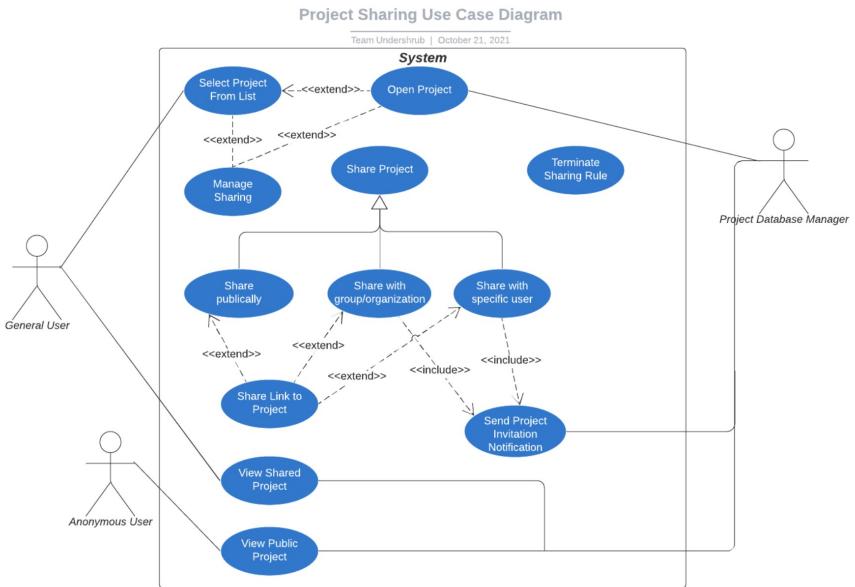
Number	53	
Name	View Change History	
Summary	The database manager attempts to view the change history through the list of previous versions.	
Priority	3	
Preconditions	The manager has successfully opened the list of previous versions of the project.	
Postconditions	The manager will be able to view the numerous changes to the version history.	
Primary Actor	Database Manager	
Secondary Actors		
Trigger	The manager clicks the “view change history” button.	
Main Scenario	Step	Action
	1	The manager navigates the homepage of the web portal.
	2	The manager clicks the “display list of previous versions” button.
	3	The system opens the “list of previous versions” menu.
	4	The manager navigates to the view change history button.
	5	The system displays the “view change history” menu.
Extensions	Step	Branching Action
	2a1.	The system fails to display the “list of previous versions” menu.
	5a1.	The system fails to display the “view change history” menu.
Open Issues		

Number	54	
Name	Open Project	
Summary	This case summarises the ability for a general user being able to open the project.	
Priority	4	
Preconditions	The general user has been added to the system by the database manager.	
Postconditions	The user can open the project to later edit or view it.	
Primary Actor	General User.	
Secondary Actor	Project Database Manager	
Trigger	The user has maneuvered to the “select project from list” menu with the plans to open a project.	
Main Scenario	Step	Action
	1	The user clicks the “select project from list” button.
	2	The system presents the select project menu.
	3	The user maneuvers to one of the projects within the menu, selecting it.
	4	The system checks to see if the user has access to this project.
	5	The system opens the project for the user to work with.
Extensions	Step	Branching Action
	4a	The system checks to see if the user has access to this project.
	1	4a1. The system finds the user doesn't have access.
	4a	4a2. The system finds the user does have access.
	2	
	5a	The system opens the project for the user to work with.
	1	5a1. The system blocks the user from opening the project because they don't have proper access noted down in step 4.
	5a	5a2. The system allows the user to open the project.
	2	
Open Issues		

Number	55	
Name	Display List of Previous Versions	
Summary	The database manager attempts to view the previous version of the project.	
Priority	3	
Preconditions	The project database exists.	
Postconditions	The database manager can use this menu to commit to other actions.	
Primary Actor	Project Database Manager	
Secondary Actors		
Trigger	The database manager navigates the menu to the “display previous versions” button.	
Main Scenario	Step	Action
	1	The database manager clicks the “display previous versions” button.
	2	The system will present the database manager with a list of previous versions.
Extensions	Step	Branching Action
Open Issues		

Number	56	
Name	Open Previous Version of Project	
Summary	The database manager attempts to open an older version of the project.	
Priority	3	
Preconditions	The project database exists.	
Postconditions	The database manager can use this menu to commit to other actions.	
Primary Actor	Project Database Manager	
Secondary Actors		
Trigger	The database manager navigates the menu to the “open previous versions” button.	
Main Scenario	Step	Action
	1	The database manager clicks the “open previous versions” button.
	2	The system will present the database manager with a list of previous versions.
	3	The database manager will choose a previous version to open.
	4	The system will present the chosen project version to show to the manager.
Extensions	Step	Branching Action
Open Issues		

Number	57	
Name	Restore from Previous Version	
Summary	The database manager attempts to reset changes from the project to a previous saved state.	
Priority	3	
Preconditions	A previous version of the project exists alongside a current version which has notable changes.	
Postconditions	The previous version of the project will override the current version of the project.	
Primary Actor	Project Database Manager	
Secondary Actors		
Trigger	The database manager attempts to change the current version from the repository.	
Main Scenario	Step	Action
	1	The database manager will open view the “previous versions” menu as they click the “restore previous version” button.
	2	The system will present a list of previous versions of the project alongside the current version being shown at the top.
	3	The database manager will click onto the project version he wishes to restore to the current version.
	4	The system will present a text box which says “are you sure you want to do this?” alongside two buttons for yes and no.
	5	The database manager will click their option.
	6	The system will close the textbox and not down the particular option.
	7	The system will either restore the version or ignore the previous command.
Extensions	Step	Branching Action
	5a1	The database manager will click their option.
	5a2	5a1 - The user clicks the “yes” button. 5a2 - The user clicks the “no” button.
	6a1 6a2	The system will either restore the version or ignore the previous command. 6a1 - If the user had previously clicked the “no” button then the system will not restore a previous version. 6a2 - If the user has clicked the “yes” button, then the system will restore the previous version.
Open Issues		



Number	58								
Name	Select Project From List								
Summary	General user selects project from a project list.								
Priority	3								
Preconditions	General user has searched the project list.								
Postconditions	General user selects a project.								
Primary Actor	General user								
Secondary Actors	Project Database Manager								
Trigger	General user uses the interface to investigate a project.								
Main Scenario	<table border="1"> <thead> <tr> <th>Step</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>General user selects a project in the project list.</td> </tr> <tr> <td>2</td> <td>System retrieves selected project.</td> </tr> <tr> <td>3</td> <td>System displays the project in a view window.</td> </tr> </tbody> </table>	Step	Action	1	General user selects a project in the project list.	2	System retrieves selected project.	3	System displays the project in a view window.
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Open Issues	Use buttons or menu options								

Number	59	
Name	Manage Sharing	
Summary	General user manages the individuals and permissions of those they have shared their project with.	
Priority	3	
Preconditions	General user has created a project and has the valid permissions to edit the permissions of others.	
Postconditions	General user successfully manages their project's sharing features.	
Primary Actor	General user	
Secondary Actors	Project Manager Database	
Trigger	General user selects one of their projects.	
Main Scenario	Step	Action
	1	General user selects the share menu option for one of their projects.
	2	General user, instead of adding a new share, attempts to edit an existing share setting.
	3	System displays two clickable editing options, one for general edit and one for share deletion.
	4	General user selects to edit the share.
	5	System displays different permission changes the general user can select.
	6	General user chooses a new permission level to change the chosen share to.
Extensions	Step	Branching Action
	4a	< Share Privilege Deletion > : General user deletes the sharing permission set for a particular user or group of users.
Open Issues		

Number	60	
Name	Open Project	
Summary	This requirement will allow a general user to be able to open an existing project on the database	
Priority	2	
Preconditions	A project must exist	
Postconditions	The project will be opened	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	The user selects the open project option	
Main Scenario	Step	Action
	1	The user selects the open project button
	2	The system retrieves the list of projects the user has permissions to access
	3	The system lists on screen the list of projects
	4	The user selects a project
	5	The system loads the project and closes the open project window
Extensions	Step	Branching Action
Open Issues	Use buttons or menu options	

Number	61	
Name	Terminate Sharing Rule	
Summary	General user terminates a sharing rule on a project they have appropriate permissions for.	
Priority	3	
Preconditions	General user has shared their project with another user.	
Postconditions	General user will have removed at least one other user's set of permissions for the project.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user attempts to manage the sharing features on one of their projects.	
Main Scenario	Step	Action
	1	General user utilizes the share manager to select the delete option.
	2	System reconfirms that the user has permission to delete permissions using the share manager.
	3	System requests confirmation from the user.
	4	General user confirms the request.
	5	System deletes the requested sharing rule.
	6	System confirms to the general user that the deletion occurred as requested.
Extensions	Step	Branching Action
	2a	< Permission Update > : On the system's renewed check of the user permission it finds the user does not have permission to delete sharing rules. Deletion denied.
	4a	< Deletion Cancellation > : General user cancels the request for deleting a share rule.
Open Issues		

Number	62	
Name	Share publicly	
Summary	This requirement allows a general user to share their project to the public	
Priority	3	
Preconditions	A project must exists in the database	
Postconditions	The project is shared on the platform the general user has chosen	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	The general user selects the share project option	
Main Scenario	Step	Action
	1	A general user selects the share project button
	2	The system retrieves a list of projects that belong to the user
	3	The system displays a new window opens with a list of the projects
	4	The general user selects the project to share
	5	The system saves the selection and provides a link to the share location
	6	The user selects the link text and hits close
	7	The system closes the window
Extensions	Step	Branching Action
	6a	The user selects the link text and hits close : 6a1. The user selects the link text manually 6a2. The user selects the copy link option
Open Issues	Use buttons or menu options	

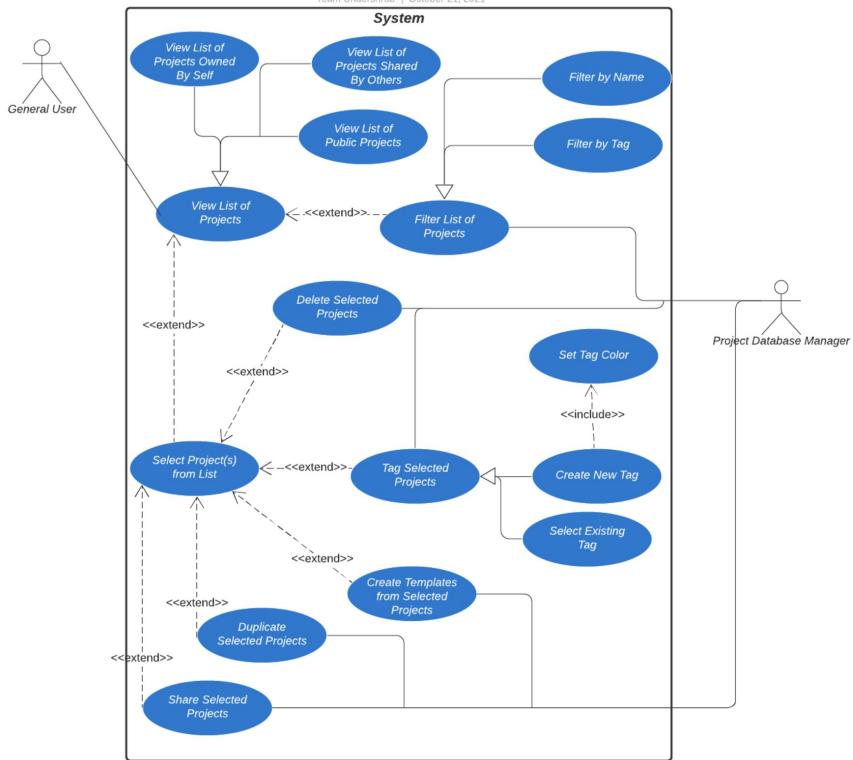
Number	63	
Name	Share with group/organization	
Summary	The project is shared according to the individuals the general user has chosen	
Priority	3	
Preconditions	A project must exists in the database and the user is a part of a group	
Postconditions	The project was shared with the group	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	The general user selects the share with group option	
Main Scenario	Step	Action
	1	The general user selects the share with group option
	2	The system retrieves a list of projects that belong to the user
	3	The system displays a new window opens with a list of the projects
	4	The general user selects the project to share and the group to share it with
	5	The system shares the project with the selected group
	6	The system closes the window
Extensions	Step	Branching Action
Open Issues	Use buttons or menu options	

Number	64	
Name	Send Project Invitation Notification	
Summary	This requirement allows the system to notify a user or groups to be notified of a project invitation	
Priority	3	
Preconditions	A project must exist in the database and a user must choose this option	
Postconditions	A notification is sent to the specified user or group	
Primary Actor	General user	
Secondary Actors	Project database manager	
Trigger	The user chooses to share a project to a user within the web portal	
Main Scenario	Step	Action
	1	The user selects the share a project option
	2	The system retrieves a list of projects that belong to the user
	3	The system displays a new window opens with a list of the projects
	4	The general user selects the project to share and whom to share it with
	5	The system shares the project with the selected group
	6	The system closes the window
Extensions	Step	Branching Action
	4a	The general user selects the project to share and whom to share it with: 4a1. Share with group/organization 4a2. Share with specific user
Open Issues	Use buttons or menu options	

Number	65	
Name	Anonymous Viewing of Public Project	
Summary	An anonymous user views a general user's public project.	
Priority	2	
Preconditions	Some number of projects have been created and made public, and an anonymous user utilizes the project viewing services.	
Postconditions	Anonymous user views a public project.	
Primary Actor	Anonymous user	
Secondary Actors	Project Database Manager, general user	
Trigger	Anonymous user attempts to view a list of public projects.	
Main Scenario	Step	Action
	1	Anonymous user utilizes a special version of the project viewer.
	2	System responds to the use of the anonymous project viewer by displaying a list of public projects.
	3	Anonymous user picks a project to view.
	4	System displays the public project to the anonymous user.
Extensions	Step	Branching Action
Open Issues	Allowing project owners to have some limited capacity for monitoring anonymous traffic?	

Project List Use Case Diagram

Team Undershuh | October 21, 2021



Number	66	
Name	View List of Projects Owned By Self	
Summary	General user views the list of projects they personally own.	
Priority	3	
Preconditions	General user must be viewing the list of projects.	
Postconditions	General user narrows the search down to just their owned projects.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user attempts to refine the projects they're viewing.	
Main Scenario	Step	Action
	1	General user uses the project view window to navigate to a tab that shows purely projects the user themselves own.
	2	System retrieves a list of projects owned by that user.
	3	System displays all self owned projects.
Extensions	Step	Branching Action
	3a	< No Projects Available > : If no projects are available for display the system returns a screen where the search result area shows a notice regarding the lack of results.
Open Issues		

Number	67	
Name	View List of Projects Shared By Others	
Summary	General user views all projects they themselves did not create.	
Priority	3	
Preconditions	General user must be viewing the list of projects.	
Postconditions	General user narrows the search down to just those they do not own.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user attempts to refine the projects they're viewing.	
Main Scenario	1	General user uses the project view window to navigate to a tab that shows purely projects shared with the user.
	2	System retrieves a list of projects shared with that user.
	3	System displays all shared projects.
Extensions	Step	Branching Action
	3a	< No Projects Available > : If no projects are available for display the system returns a screen where the search result area shows a notice regarding the lack of results.
Open Issues		

Number	68	
Name	View List of Public Projects	
Summary	General user views all public projects.	
Priority	3	
Preconditions	General user must be viewing the list of projects.	
Postconditions	General user narrows the search down to just public projects.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user attempts to refine the projects they're viewing.	
Main Scenario	1	General user uses the project view window to navigate to a tab that shows purely public projects.
	2	System retrieves a list of all public projects
	3	System displays all public projects.
	Step	Branching Action
Extensions	3a	< No Projects Available > : If no projects are available for display the system returns a screen where the search result area shows a notice regarding the lack of results.
Open Issues		

Number	69	
Name	View List of Projects	
Summary	General user views a list of all visible projects.	
Priority	4	
Preconditions	General user is logged in, and some amount of projects exist.	
Postconditions	General user is given a view window showing all visible projects.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user uses a UI element to view all visible projects.	
Main Scenario	Step	Action
	1	General user chooses to view all visible projects.
	2	System retrieves a list of all visible projects
	3	System displays all visible projects.
Extensions	Step	Branching Action
	3a	< No Projects Available > : If no projects are available for display the system returns a screen where the search result area shows a notice regarding the lack of results.
Open Issues		

Number	70	
Name	Filter List of Projects	
Summary	General user filters the list of visible projects via a defined criteria.	
Priority	2	
Preconditions	General user is viewing the list of visible projects.	
Postconditions	Project list refined to match the filter.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user selects the filter option.	
Main Scenario	Step	Action
	1	Project Database Manager fetches a running list of all filter types for the project viewer.
	2	Project Database Manager displays all filter types to the user.
	3	General user selects one or more filter types and submits them to the Project Database Manager.
	4	Project Database Manager takes the inputted filters and narrows the search result.
	5	Project Database Manager returns the new search result.
Extensions	Step	Branching Action
	1a	< Filter Cancellation > : General user closes out of the filter selection.
	5a	< No Projects Available > : Project Database Manager displays empty result with a notice for lack of matching projects.
Open Issues		

Number	71	
Name	Filter by Name	
Summary	General user filters the list of visible projects via a defined name.	
Priority	2	
Preconditions	General user is viewing the list of visible projects.	
Postconditions	Project list refined in attempt to find a project with matching, or near matching, name.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user selects the filter option.	
Main Scenario	Step	Action
	1	General user chooses to filter by name via inputting a name into a text box.
	2	Project Database Manager takes and sanitizes input.
	3	Project Database Manager searches for matching, or near matching, projects.
	4	Project Database Manager sorts the list of results based on closest match.
	5	Project Database Manager displays the valid list of projects.
Extensions	Step	Branching Action
	4a	< Exact Match > : In cases of exact matches the Project Database Manager highlights the match.
	5a	< No Projects Available > : Project Database Manager displays empty result with a notice for lack of matching projects.
Open Issues		

Number	72	
Name	Filter by Tag	
Summary	General user filters the list of visible projects via one or more defined tags.	
Priority	2	
Preconditions	General user is viewing the list of visible projects.	
Postconditions	Project list refined in an attempt to find all projects that fit the defined tag(s).	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user selects the filter option.	
Main Scenario	Step	Action
	1	Project Database Manager fetches a running list of all existing tags.
	2	Project Database Manager displays the list of tags to the user.
	3	General user looks through the list of tags to find those that match their ideal search filter.
	4	General user selects one or more tags and submits them.
	5	Project Database Manager takes the inputted tags and narrows the search result.
	6	Project Database Manager returns the new search result.
Extensions	Step	Branching Action
	1a	< Filter Cancellation > : General user closes out of the filter selection.
	3a	< Text Search > : [Optional feature to consider]: general user types an input into a text box, narrowing the list of tags to exactly what they're looking for.
	4a	< Filtering Method > : General user can select to narrow search result via alternative means. By default the search filters for projects that meet every tag. Other options: either or, not both, not either or.
	6a	< No Projects Available > : Project Database Manager displays empty result with a notice for lack of matching projects.
Open Issues	< list of issues awaiting decisions that affect the use case >	

Number	73	
Name	Delete Selected Projects	
Summary	General user deletes selected projects assuming it's valid for them to do so.	
Priority	2	
Preconditions	General user is viewing existing projects.	
Postconditions	General user deletes the project assuming it is valid for them to do so.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user selects a project.	
Main Scenario	Step	Action
	1	General user selects the UI option for deleting a project.
	2	System makes a check to confirm that it is valid for the user to delete the selected project.
	3	System requests confirmation for deleting the selected project.
	4	General user confirms the request to delete.
	5	Project Database Manager deletes the requested project.
Extensions	Step	Branching Action
	1a	< Option Denied > : User does not have the appropriate level of ownership for the project, the deletion option is unavailable.
	3a	< System Denies Request > : Some change happened since the user opened the project view window, the user no longer has the appropriate ownership and is denied.
	4a	< Deletion Cancellation > : User declines to continue the process of deleting the project.
	4a2	< Cancellation Notification > : System alerts user that the deletion was cancelled.
	5a	< Error Deleting > : An error occurs during deletion process, user is alerted via a notice detailing the failure in deletion.
Open Issues		

Number	74	
Name	Select Project(s) from List	
Summary	User selects one or more projects from a list of projects.	
Priority	4	
Preconditions	User has viewed a list of projects.	
Postconditions	User has one or more selected projects.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	User attempts to interact with the list of projects.	
Main Scenario	Step	Action
	1	General user utilizes the project list UI to highlight a particular project.
	2	System registers the particular project highlighted.
	3	System responds to the user by visibly “selecting” the project in their UI instance.
Extensions	Step	Branching Action
	1a	< Multi-Select > : The user picks multiple projects to be highlighted and selected.
Open Issues		

Number	75	
Name	Share Selected Projects	
Summary	General user shares the selected project assuming they have the valid ownership/permission.	
Priority	3	
Preconditions	General user has selected one or more projects.	
Postconditions	General user shares all selected projects.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user desires to share the project.	
Main Scenario	Step	Action
	1	General user selects a UI element for sharing selected projects.
	2	System retrieves the view window for sharing projects.
	3	System displays a view window for the general user.
	4	General user inputs a list of users, or a defined group, to share selected projects with.
	5	General user sets what kind of permissions will be given to the shared with individuals.
	6	System receives user input and adds permissions to inputted users.
Extensions	Step	Branching Action
	1a	< Lack of Initial Permissions > : General user lacks the permissions to share the selected project(s).
	4a	< Non-Existent User/Group > : An inputted user/group does not exist. System highlights non-existent inputs.
	6a	< System Error > : Some system error occurs, the user is notified that the share attempt was terminated.
Open Issues		

Number	76	
Name	Duplicate Selected Projects	
Summary	General user duplicates the selected project.	
Priority	1	
Preconditions	General user has selected a specific project and has the appropriate permissions.	
Postconditions	Selected project is copied and duplicated.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user desires to copy a specific project.	
Main Scenario	Step	Action
	1	General user goes through the process to select one or more projects.
	2	General chooses the UI option for copying and pasting the project.
	3	System responds by offering a view window with settings for the duplicated project.
	4	User inputs selection of settings for the duped project(s).
	5	System duplicates projects and alerts general user with a notice regarding the duplication success.
Extensions	Step	Branching Action
	1a	< Lack of Initial Permissions > : General user lacks the permissions to duplicate the selected project(s).
	4a	< Default Settings > : General user can skip setting specific settings, under default settings the system will duplicate each project with its specific permissions.
	5a	< System Error > : Some system error occurs, the user is notified that the duplication attempt was terminated.
Open Issues		

Number	77	
Name	Tag Selected Projects	
Summary	General user applies a tag to a selected project(s).	
Priority	2	
Preconditions	General user selects a valid project, and some amount of tags exist in the system.	
Postconditions	Selected project(s) given one or more tags for future search filtering.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user wishes to make searching for their project easier.	
Main Scenario	Step	Action
	1	General user utilizes the UI to choose the tagging option for a project.
	2	System fetches a list of tags.
	3	System displays list of tags in a new view window.
	4	General user manually looks through the list for tags.
	5	General user selects a subsection of tags.
	6	System updates the project's associated tags.
	7	System displays a success notification for the user.
Extensions	Step	Branching Action
	1a	< Lack of Initial Permissions > : General user lacks the permissions to tag the selected project(s).
	7a	< System Error > : Some system error occurs, the user is notified that the tagging attempt was terminated.
Open Issues		

Number	78	
Name	Create Templates from Selected Projects	
Summary	General user turns a selected project into a template.	
Priority	1	
Preconditions	General user selects some number of valid projects.	
Postconditions	General user creates one or more templates.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user wants to streamline the creation of future projects.	
Main Scenario	Step	Action
	1	General user chooses a templating option for the selected project(s).
	2	System displays a new window containing template options.
	3	User picks the appropriate template options and submits.
	4	System stores new template options for the user.
Extensions	Step	Branching Action
	1a	< Lack of Initial Permissions > : General user lacks the permissions to make templates from the selected project(s).
Open Issues		

Number	79	
Name	Create New Tag	
Summary	General user creates a new type of tag.	
Priority	1	
Preconditions	General user has a project they're attempting to tag.	
Postconditions	General user creates a new kind of tag.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user wishes to apply custom filter tags to their project.	
Main Scenario	Step	Action
	1	General user selects to add a tag to their project.
	2	General user selects to add a custom tag.
	3	System responds with a UI element for inputting a new tag, and a tag description.
	4	General user responds by inputting a tag name.
	5	System validates created tag.
	6	System responds with a success notification.
Extensions	Step	Branching Action
	5a	< Input Sanitation & Validation > : System sanitizes and validates user input.
	6a	< System Error > : Some system error occurs, the user is notified that the tag creation attempt was terminated.
Open Issues	Method for making sure users do not abusively have hundreds of fodder tags.	

Number	80	
Name	Set Tag Color	
Summary	General user gives a tag they made a unique color for visual identification.	
Priority	1	
Preconditions	General user has created their own tag.	
Postconditions	General user gives their tag a color identifier.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user wants to make their tag more visually distinct.	
Main Scenario	Step	Action
	1	General user chooses to edit the color of a tag.
	2	System displays the options of a color matrix, RGB input, and a hex code.
	3	General user chooses one option and inputs a color.
	4	System updates the tag's associated color based on input.
	5	System responds to the user with a success notification.
Extensions	Step	Branching Action
	1a	< Lack of Initial Permissions > : General user lacks the permissions to tag the selected project(s).
	5a	< System Error > : Some system error occurs, the user is notified that the tagging attempt was terminated.
Open Issues		

Number	81	
Name	Select Existing Tag	
Summary	General user selects an existing tag for options.	
Priority	1	
Preconditions	General user is looking through the list of tags.	
Postconditions	General user successfully selects an existing tag, seeing either options or a description.	
Primary Actor	General user	
Secondary Actors	Project Database Manager	
Trigger	General user wishes to view a particular tag.	
Main Scenario	Step	Action
	1	General user tries to highlight a specific tag.
	2	System responds by fetching the description for the tag.
	3	System displays the description.
Extensions	Step	Branching Action
	2a	< Higher Permissions > : If the user is the tag's creator, or someone of higher permission, the system fetches options for the tag in addition to the description.
Open Issues		

2.2 Test Cases

Test Case ID:	Test Objective:	Precondition:	Steps:	Test Data:	Expected Result:	Post-condition:
1_Create_Script	create an empty script	Authenticated user	1. A user selects the open script editor option 2. The system opens a new window and the user types in their script 3. The user selects the save script option	predefined scripts	The script window opens, the user is able to create a script and it is saved to the users account	The script appears in the users account
2_Use_Script	Uses a, already created script	Authenticated User	1. A user selects or writes a script 2. A user selects run script 3. The script runs and performs its intended function	predefined scripts	The script is run through a docker container and performs the intended function.	The user can edit the script, close the script editing window or leave it open.
12_File_tests	Test the various file options: view, add, edit and delete	Authenticated user	1. select view files 2. select add file and add a file 3. Save the file then hit the edit button 4. edit the file 5. selected the edited file and hit delete	various file types	A file is addable, viewable, editable, and can be deleted.	The file is added, edited and removed from the database
10_Roles	Test the create and delete roles feature	Authenticated group or system moderator	1. Select Create Role option 2. Add in a role 3. Delete the role	NA	A role can be successfully added and deleted	The role has been added and saved or a previous one has been removed
16_Manage_role	Test the manage roles with giving and revoking permissions per role	Authenticated group or system moderator	1. Selects an already created role 2. select the give permissions option 3. Select a user in the group 4. Give them permissions 5. Test to see if they can perform the permissions granted 6. Revoke their permissions	NA	A role can be given permissions and revoked successfully	If a role is granted that role can now perform those duties until revoked.

Test Case ID:	Test Objective:	Precondition:	Steps:	Test Data:	Expected Result:	Post-condition:
22_Del_Data	Delete user data	Existing Data	1. Select data 2. Select/click delete data	Various data types	The user's data is deleted.	The data is removed from the users account
15_Add_Data	Save users data to the database	Authenticated user	1. User selects add data 2. User selects the data to add 3. The user selects/clicks the add button	Various data types (TIFF, JPEG, DEM, SHP, KML)	A user's data is uploaded and saved to the database	The data appears in the users data list
Valid_Login	Successful Login	Valid Account	1. Click login button 2. Enter Credentials	Valid username	A user is authenticated	The user is brought to their homepage
Invalid_Login	Unsuccessful Login	Invalid Account	1. Click login button 2. Enter Credentials 3. Hit login	Invalid username	A user is not authenticated	The user is asked for credentials again
Download_Data	Successful Download of Data	Already added data to the system.	1. Select data. 2. Select/click download data. 3. System will download the data to the user's system.	Various data types (TIFF, JPEG, DEM, SHP, KML)	The data is correctly downloaded to the user's system.	The data is marked as downloaded.
Check_Auto_Refresh	Successful completion of a refresh.	System timer of 10 minutes.	1. Create a 10 minute timer. 2. Create a check to see if the system refreshes within 10 minutes of the timer start.	The web application.	The web application completes both an automatic refresh	The system's information is refreshed.
Check_Refresh	Successful completion of a refresh.	Added functionality to refresh the page.	1. Click the refresh button. 2. Check to see if the system refreshes.	The web application.	The web application completes a manual refresh.	The system's information is refreshed.

Test Case ID:	Test Objective:	Precondition:	Steps:	Test Data:	Expected Result:	Post-condition:
Check_Buffer	Measure how long a loading screen takes.	System timer measuring in milliseconds.	1. Set up a timer measured in milliseconds. 2. Click onto another page.	The web application.	The web application loads in less than one second.	The system is loaded in less than a second.

3. Non-Functional Requirements

Decide on a standard format for the non-functional requirements (NFRs). Included in the format should be a unique number for each NFR, a priority (1 = lowest, 5 = highest), a clear, concise description, and the test(s) that will be used during system and acceptance testing to verify that the requirement has been met. Make sure that the test numbers correspond to the NFR numbers. Note that you must include a minimum of 10 NFRs specific to product requirements, organizational requirements, and external requirements.

ID #	Priority	User Story	Requirement	Testcase
NF01	4	As a user, I need my data available to view 99% of the time.		The aftermath of an Add_Data test will allow the ability to see if any additional data is added to the system and is viewable from the menu.
NF02	1	As a user, my data must remain private to anyone not in my group's hierarchy.		Roles and Manage_Rolls are the two best test cases to see if data marked for a specific roll are viewable by others rolls if marked private.
NF03	3	As a product owner, I need the web application to work on Windows OS and MacOS browsers.		This can only be tested after a successful Valid_Login check to open the browser application.
NF04	3	As the user, I need to be able to login on the first attempt 99.9% of the time.		Valid_Login and Invalid_Login are the test cases which will see if a login has been correctly carried out by the system.
NF05	2	As a product owner, I want the web application to give (at least) limited access on mobile devices.		While there is no specific test case for this condition, you would just need to login to the application on a phone browser to see if the UI functions correctly.
NF06	3	As a user worried about security, I need my data secured from those without permission to access.		Once again, Roles and Manage_Rolls are suitable for this test as you can mark a specific variable for one subclass and see if it's viewable by another.
NF07	5	As a product owner, I want the web application to be available 99% of the time.		This can be tested through viewing the web application, with no particular test case being needed.
NF08	4	As a user with good payment standing, I must be able to download my data at any time.		Download_Data can be used to see if a file format can be downloaded and if any errors occur.

NF09	3	As a site administrator, I need management information to dynamically refresh every 10 minutes or when I choose to manually refresh it.		Check_Auto_Refresh and Check_Refesh can be used to see if the automatic and manual refresh functions correctly execute.
NF10	3	As a user, I would like the website to never load/buffer on a still screen for longer than a second.		You can use the Check_Buffer test to measure how long a loading screen takes to finish.
NF11	5	As a site administrator, python scripts need to be run such that they are contained without the capacity of damaging the larger systems.		This testing would rely on Docker's built in functionality and therefore cannot be easily tested with a simple test case.
NF12	4	As a user, my data uploads should not fail 99.9% of the time.		The function Add_Data can be used to test if there are any errors in data uploading, easily done through running the test case until finding a degree of accuracy.
NF13	2	As a general user, I want the UI to move/transition smoothly to improve my overall experience.		This cannot be tested until the UI development phase and is judged aesthetically rather than a setting function.

4. User Interface

See the User Interface Design Document for Geospatial Data Portal attached to this document.

5. Deliverables

These deliverable artifacts are available in electronic format alongside this document and they can be printed for hard copies when needed by either a customer, client or team member.

- **System's Requirement Specification (SRS)**
 - Delivery date: Oct 25th 2021

- The SRS document will be available in .PDF and .DOCX formats within the shared team Github repository for the Geospatial Data Portal alongside a private drive available to any employee of Blue Marble Geographics.
- **System Design Document (SDD)**
 - Delivery date: Nov. 10th
 - The SSD document will be available in .PDF and .DOCX formats within the shared team Github repository for the Geospatial Data Portal alongside a private drive available to any employee of Blue Marble Geographics.
- **User Interface Design Document (UIDD)**
 - Delivery date: Nov. 19th 2021
 - The UIDD document will be available in .PDF and .DOCX formats within the shared team Github repository for the Geospatial Data Portal alongside a private drive available to any employee of Blue Marble Geographics.
- **User Manual (UM)**
 - Delivery date: Spring 2022
 - The user manual will be available in both the .PDF and .DOCX formats within the shared team Github repository for the Geospatial Data Portal alongside being available within a public google drive where any individual will be allowed to download the file.
- **Administrator Manual (AM)**
 - Delivery date: Spring 2022
 - The administrator manual will be available in both the .PDF and .DOCX formats within the shared team Github repository for the Geospatial Data Portal alongside being available within a public google drive where any individual will be allowed to download the file.

These deliverable artifacts are **only available** in electronic form.

- **Source code for the Geospatial Data Portal.**
 - Delivery date: Continuous
 - This source code for the Geospatial Data Portal will be available on Github within the shared team repository for Team Undershrub.
- **The executable of the Geospatial Data Portal.**
 - Tentative delivery date: May 10th 2022
 - The executable for the Geospatial Data Portal will be a website linked off the main portal for Blue Marble Geographics at their official web address <https://www.bluemarblegeo.com/>.
- **A brief description and link to any required software for installation and execution of the Geospatial Data Portal.**