

Project Requirements

Use Case Listing

ID	Use Case
1	Register an account
2	Login
3	Logout
4	Reset password
5	Change password
6	Delete account
7	View Movie
8	Sort list of Terms for a specific movie
9	View Term for a specific movie
10	View Term for all movies
11	View Component
12	Upload raw data
13	Delete raw data
14	View uploaded raw data
15	View raw data information

Use Case	1: Register an Account
Primary Actors	Neuroscientist user
Secondary Actors	
Preconditions	Actor not logged in, does not have an account
Main Flow	<ol style="list-style-type: none"> Click "Register" from navigation bar Enter personal information Click "Submit" button
Post Conditions	New account registered, logged in, return to "My Collections" page
Alternative Flows	Failed to register new account, error message(s) shown on same page A) Duplicate email. B) Field(s) left blank.

Use Case	2: Login
Primary Actors	Neuroscientist user
Secondary Actors	
Preconditions	Actor not logged in, owns an account
Main Flow	<ol style="list-style-type: none"> Click "Login" from navigation bar Enter Login information Click "Login" button
Post Conditions	Actor logged in, return to "My Collections" page
Alternative Flows	Invalid Login, error message shown on same page "Invalid Login, please login using registered email address and password, or register"

Use Case	3: Logout
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Actor logged in
Main Flow	<ol style="list-style-type: none"> Click "User" on navigation bar Click "Logout" from drop down menu
Post Conditions	Return to home page, logged out
Alternative Flows	

Use Case	4: View Movie
Primary Actors	Neuroscientist User, Public User
Secondary Actors	
Preconditions	
Main Flow	Select Movie 1. From "latest movies" list on home page 2. Or from list on "Movies" page
Post Conditions	View page for selected movie
Alternative Flows	

Use Case	5: View Term for Specific Movie
Primary Actors	Neuroscientist user, Public User
Secondary Actors	
Preconditions	
Main Flow	1. View Movie 2. From list of terms under the "Terms" tab, select a term.
Post Conditions	On page for selected term in selected movie
Alternative Flows	

Use Case	6: View Term in All Movies
Primary Actors	Neuroscientist User, Public User
Secondary Actors	
Preconditions	
Main Flow	1. Select "Terms" tab on navigation bar 2. Select a term from list of terms. Or 1. View Term for Specific Movie 2. Click "View (term) in all movies"
Post Conditions	On page for selected term in all movies
Alternative Flows	

Use Case	7: View Component
Primary Actors	Neuroscientist User, Public User
Secondary Actors	
Preconditions	
Main Flow	1. View Movie 2. From list of components under "Components" tab, select a component Or 1. View Term (either for specific movie or all movies) 2. From list of components under "Components" tab, select a component
Post Conditions	On page for selected component
Alternative Flows	

Use Case	8: Upload Raw Data
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Logged In
Main Flow	1. Click "Contribute" tab on navigation bar 2. Click "Choose file" button 3. Choose File(s) from computer 4. Fill in fields for information about contribution 5. Click "Submit" button 6. Read through disclaimer / terms & condition, click "Confirm"
Post Conditions	New data uploaded, analysis pending
Alternative Flows	1. Data not uploaded 2. Return to "Contribute" page

Use Case	9: View Uploaded Raw Data Information
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Logged In, Previously Uploaded Data
Main Flow	<ol style="list-style-type: none"> 1. Click (user's name) tab 2. From drop-down menu click "My Collections" 3. From list of uploaded data, select one
Post Conditions	On page with information about uploaded data
Alternative Flows	

Use Case	10: Edit Uploaded Raw Data Information
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Logged In, Previously Uploaded Data
Main Flow	<ol style="list-style-type: none"> 1. View Uploaded Raw Data Information 2. Click "Edit Information" 3. On editing page, update any fields that requires new information 4. Click "Submit"
Post Conditions	On page with UPDATED information about uploaded data
Alternative Flows	Return to information page without updated information.

Use Case	11: Change Password
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Actor logged in
Main Flow	<ol style="list-style-type: none"> 1. Click (user's name) tab 2. Click "My Account" 3. Click "Change Password" 4. Fill in fields: <ol style="list-style-type: none"> a. Old Password b. New Password c. Confirm New Password (retype new password) 5. Click "Submit"
Post Conditions	User's password changed. Return to login page, prompt user to login with new password.
Alternative Flows	Stay on "Change Password" page, no changes to password A) incorrect old password B) new password does not fit requirements

Use Case	11: Reset Password
Primary Actors	Neuroscientist User
Secondary Actors	
Preconditions	Actor registered, logged out
Main Flow	<ol style="list-style-type: none"> 1. On Login Page, click "Forgot Password" 2. Enter email address associated with registered account in appropriate field 3. Click "Submit" 4. Email sent to email address if a registered account is found 5. Click link provided in email, 6. Fill in fields: <ol style="list-style-type: none"> a. New Password b. Confirm New Password (retype new password) 7. Click "Submit"
Post Conditions	User's password changed. Return to login page, prompt user to login with new password.
Alternative Flows	Stay on "Forgot Password" page, no changes to password. A) no account associated with email address

Functional and Non-functional Requirements

ID	Category	Requirement	Functional?	Priority	Users
1	Availability	The Repository shall be available at all time.	Non-functional	Should	All
2	Performance	The Repository shall be able to support 10 concurrent users at anytime.	Non-functional	Must	All
3	User Interface	The Repository shall use a web browser as its interface.	Non-functional	Must	All
4	User Interface	The Repository shall support major modern browsers like Google Chrome, Firefox and Internet Explorer.	Non-functional	Should	All
5	User Interface	The Repository shall have a responsive layout.	Non-functional	Could	All
6	Repository Browsing	The Repository shall display a list of latest 10 movies with Processed Dataset.	Functional	Must	All
7	Repository Browsing	The Repository shall display a search box for movies with Processed Dataset.	Functional	Must	All
8	Repository Browsing	The Repository shall display a paginated list of all movies with Processed Dataset.	Functional	Must	All
9	Repository Browsing	The Repository shall display the 3-axis average image of all brain images for a specific movie.	Functional	Must	All
10	Repository Browsing	The Repository shall display a 3-tabs layout for Terms (default), Components and Details.	Functional	Must	All
11	Repository Browsing	The Repository shall display a list of highly associated Terms for a specific movie.	Functional	Must	All
12	Repository Browsing	The Repository shall display a list of all Components for a specific movie.	Functional	Must	All
13	Repository Browsing	The Repository shall display the 3-axis average image of all Components for a specific Term for a specific movie.	Functional	Must	All
14	Repository Browsing	The Repository shall display a list of all Components for a specific Term for a specific movie.	Functional	Must	All
15	Repository Browsing	The Repository shall display a list of all movies associated with specific Terms.	Functional	Must	All
16	Repository Browsing	The Repository shall display an option to view selected Term for all movies.	Functional	Must	All
17	Repository Browsing	The Repository shall display the 3-axis image of specific Component for a specific movie.	Functional	Must	All
18	Repository Browsing	The Repository shall display a list of Terms available for a specific Component for a specific movie.	Functional	Must	All
19	Repository Browsing	The Repository shall display a list of all Terms matched to any Component in the database.	Functional	Must	All
20	Repository Browsing	The repository shall display the average image of all Components for a specific Term for all movies.	Functional	Must	All
21	Repository Browsing	The Repository shall display a questions and answers layout explaining How to use, Terms and Components.	Functional	Must	All
22	Data Submission	The Repository shall allow user to upload their Raw Dataset to the server.	Functional	Must	All
23	Data Submission	The Repository shall allow user to upload multiple files.	Functional	Must	All
24	Data Submission	The Repository shall allow user to the describe the files to be uploaded.	Functional	Must	All
25	Data Submission	The Repository shall ensure that the upload process is reliable with more than 95% success rate.	Non-functional	Could	All
26	Data Submission	The Repository shall display an FAQ for questions that might arise with regard to collecting the Raw Dataset.	Functional	Must	All
27	Data Submission	The Repository shall allow user to input Essentials information of the raw data.	Functional	Must	All
28	Data Submission	The Repository shall allow user to input Participants information of the raw data.	Functional	Must	All
29	Data Submission	The Repository shall allow user to input Design information of the raw data.	Functional	Must	All
30	Data Submission	The Repository shall allow user to input Acquisition information of the raw data.	Functional	Must	All

31	Data Submission	The Repository shall allow user to input Movie information of the Raw Dataset.	Functional	Must	All
32	Data Submission	The Repository shall display an animated progress bar and percentage during the uploading process.	Functional	Must	All
33	Data Submission	The Repository shall display a warning dialog when user try to close the page when the uploading process is ongoing.	Functional	Must	All
34	Data Submission	The Repository shall display a list of user's uploaded Raw Datasets.	Functional	Must	All
35	Data Submission	The Repository shall display information of the dataset.	Functional	Must	All
36	Data Submission	The Repository shall display a disclaimer policy on data collected.	Functional	Must	All
37	Data Submission	The Repository shall allow user to delete his/her uploaded datasets during a grace period of 24 hours.	Functional	Must	All
38	Data Submission	The Repository shall display a warning dialog when user try to delete a dataset.	Functional	Must	All
39	User Management	The Repository shall allow user to register an account with email, initial, first and last name.	Functional	Must	All
40	User Management	The Repository shall allow user to login and logout.	Functional	Must	All
41	User Management	The Repository shall allow user to reset password.	Functional	Must	All
42	User Management	The Repository shall allow user to change password.	Functional	Must	All
43	User Management	The Repository shall allow user to delete account.	Functional	Should	All
44	User Management	The Repository shall allow user to edit initial.	Functional	Must	All
45	User Management	The Repository shall allow user to edit first and last name.	Functional	Must	All
46	User Management	The Repository shall allow user to add affiliation.	Functional	Must	All
47	Admin	The Repository shall allow administrator to download Raw Dataset using command line.	Functional	Must	Admin
48	Admin	The Repository shall allow administrator to upload Processed Dataset using command line.	Functional	Must	Admin

Glossary of Terms

Term	Definition
Term	The keyword that describe the brain activation.
Component	An analysed image that contain the x-y-z axis of a dataset.
Repository or INcDb	The web application that will be publically available.
Processed Dataset	The set of files that are produced after our client has run the analysis process on the Raw Dataset.
Raw Dataset	The set of brain images collected by researcher when someone watch a movie.