Term Project – Group 4

CS633

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Project Scope and Composition

# Scope

The Loans & Grants website is a specialized web site focused on providing loan and grant information for businesses and entrepreneurs via interactive search tools and intuitive user design. The website uses the Small Business Administration database and its Web APi by providing keywords or different criteria such as industry, loan type and more.

# Tools and Technologies

* Small Business Administration API: <http://api.sba.gov/doc/loans_grants.html>
* Bootstrap (UI Framework): <https://bootswatch.com/cerulean/>
* IDE - Visual Studio 2013
* SQL Server Express 2014
* Git (Source Code Control)
* IIS Web Server
* HTML 5
* ASP.NET MVC 5
* AngularJS

# Collaboration Tools

* GitHub
* Pivotal Tracker
* Google + Hangouts
* Emails
* Phone

# Team Composition

**Team Lead – Aleksandra Trendafilova**

* Plans and facilitates the meetings, sends reminders and follow-ups.
* Creates meeting agendas.
* Keeps track of weekly deliverables, meetings’ minutes, attendees and tasks
* Overlooks the flow of the project to make sure everybody is on track.
* Coordinates and assists with all tasks.
* Directs the project flow and handles conflicts.

**Senior developer – Waseem Awan**

* Guides resolution of merge conflicts.
* Performs research work on the technology and industry trends.
* Consults on platforms and program languages to be used for the development of a product.
* The senior developer is in charge of the product's architecture and design.

**Usability lead – Marvin Brown**

* Captures User Experience of the overall project from beginning to end.
* Performs user research and testing.
* Sets the user standards and acts as the users' advocate in the development process.
* Aids in project requirements and assists the team in design conception with the use of wireframes or prototypes.
* Participates in the testing process to ensure the effectiveness of the design and determines if goals are met through user testing.
* Evaluate the success of the project from the perspective of user satisfaction.

**Test expert – Guy O’Neal**

* Creates test cases/scenarios.
* Creates test scripts.
* Tests functional and non-functional requirements.
* Verifies the system's integrity and stability.

# Project Policy

* Our product is a specialized web site focused on providing loan and grant information for businesses and entrepreneurs via interactive search tools and intuitive user design.
* Our product is not just a search engine, it is a personal assistant that can find any loan and grant information that users may need to make informed decisions.
* All team members understand the value of having professionals from different fields in the team and believe in collaboration and team work. Each member is a subject matter expert but it will also participate in all tasks by advising, peer review, pair programming, ideas and more.
* The team will meet two times a week and will regularly maintain communication via email and phone. Agenda will be posted on Wiki in advance of each meeting. Failure to commit to the team project may result in different individual grades.
* All weekly deliverables will be reviewed and assigned during the first meeting. A demo will be conducted at the end of each week for approval. All final revisions will be consolidated and submitted to the facilitator.

User Personas

## Personas Definition v.1.0

##### **Public User**

A public user is a person who visits the website and searches for loans and grants information. This user has not shared any personal information within the website and may or may not visit the website frequently.

##### **Registered User**

A registered user is a person who performs searches for loans and grants information and, in addition, he/she has created a personal account within the website. By having an account, the registered user can see his/her search history, perform advanced searches and save his/her favorite search results.

##### **Super User**

A super user is a person who manages the website. He/she is involved with the website configuration, user design, content and more. A super user has all administrative rights on the website. There may be more than one super user.

##### **Support User**

A support user is a person who responds to customer issues, questions and requests. He/she can assist with troubleshooting and resolving any issues related to the website. The support user has some administrative rights in order to assist customers with creating and maintaining their accounts, retrieving search history, etc.

##### **Web API**

The Web API is a system that feeds data to the website. All loans and grants information will be retrieved from it. For the initial setup of the website the WEB API will be SBA Web API. However, in the future development of the website, there may be other Web APIs that may be used.

# Personas RASCI v1.0

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **User Story** | | **Public User** | **Registered User** | **Support User** | **Super User** | **SBA API** |
| Register for an account | | R | R | S | I | S |
| Logs into an account | | R | R | S | I | S |
| Troubleshoots | | I | I | R | C | S |
| Search for loans/grants | | R | R | S | C | S |
| Save to Favorites | | R | R | S | C | S |
| Review Search History | | R | R | S | C | S |
| Share Search Results | | R | R | S | C | S |
|  | |  |  |  |  |  |
|  | |  |  |  |  |  |
|  | |  |  |  |  |  |
| **R=Responsible** | Owns the task | | | | | |
| **A=Accountable** | Whoever responsible accounts to | | | | | |
| **S=Supporting** | Supports the task | | | | | |
| **C=Consulted** | Has the capability to complete the task | | | | | |
| **I=Informed** | Must be notified of the results | | | | | |

User Requirements

# User Stories\_v2.0

As a public user, I want to be able to register for an account, so I can save my personal information and searches. [Register for an account](https://www.pivotaltracker.com/story/show/95163892)

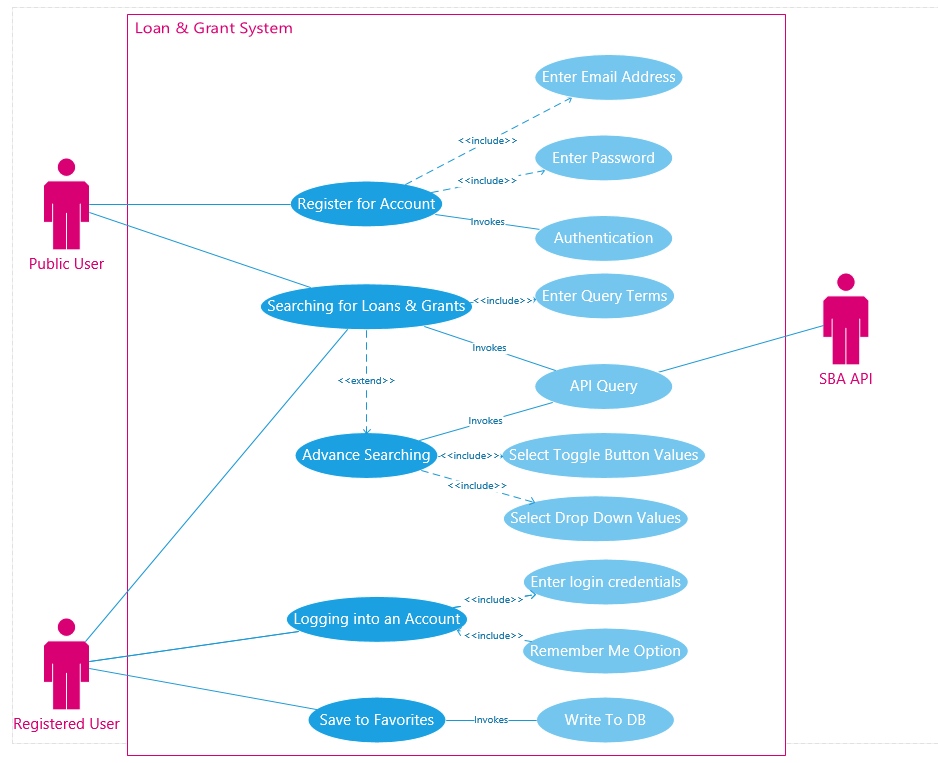
As a registered user, I want to be able to log into my account, so I can look up my personal information and searches. [Logging into an account](https://www.pivotaltracker.com/story/show/95163674)

As a public user, I want to be able to search for loans and grants, so that I can find financing for my project. [Searching for loans and grants](https://www.pivotaltracker.com/story/show/95113814)

As a public or registered user, I would like to be able to apply advance search filters, so I can easily find the information I am looking for. [Advance Searching](https://www.pivotaltracker.com/story/show/95818194)

UML Diagrams and Use Cases

# Use Case Diagram\_v2.0



# Use Cases

**001 registration\_v2.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Register for Account | Version: | 2.0 |
| **Number:** | 001 | Date Created: | 5/26/2015 |
| **Service Package:** | Functional | Date Last Updated: | 6/1/2015 |
| **UML Diagram:** | UML v2.0 | Domain Expert(s): | Waseem, Marvin |
| **Initial Event:** | User accesses registration page | | |
| **Primary Actor(s):** | Public User | | |
| **Secondary Actor(s):** | N/A | | |
| **Brief Description:** | As a public user, I want to be able to create an account, so I can save my personal information and previous searches. | | |
| **Performance:** |  | | |
| *Volume:* | Loan & Grant (L&G) application shall handle 1,000 concurrent registration processes | | |
| *Response Time:* | L&G shall return a successful message within five (5) seconds of user submission | | |
| **Normal Flow Of Events:** | * User clicks "Register" button on "Mega Menu" * User is presented with "Register" screen * User provides unique email address (validated) * User provides a password * User confirms password * User clicks "Register" * L&G confirms email address is unique * L&G validates password for complexity * L&G writes registration information to DB * User is presented with "Success" message | | |
| *Pre-conditions:* | User is at “Registration” page  “Registration” page returned no errors  User has unique email address | | |
| *Post-conditions:* | User is registered and can record personal information and previous searches.  User can review previous searches. | | |
| **Alternative Flow Of Events:** | Registration error | | |
| *Scenarios:* | A friendly message will indicate the cause of error | | |
| **Assumptions/Issues/ Questions/Notes:** | N/A | | |

**002 Search for Loans and Grants\_v1.1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Search For Loans & Grants | Version: | 1.1 |
| **Number:** | 002 | Date Created: | 5/31/2015 |
| **Service Package:** | Functional | Date Last Updated: | 6/1/2015 |
| **UML Diagram:** | UML v2.0.vsdx | Domain Expert(s): | Waseem, Marvin |
| **Initial Event:** | User accesses Home Page (search page) | | |
| **Primary Actor(s):** | Registered User, Public User, SBA API | | |
| **Secondary Actor(s):** | N/A | | |
| **Brief Description:** | As a user (registered or public), I want to be able to provide the application with keywords, so that I can query the SBA API and view related results | | |
| **Performance:** |  | | |
| *Volume:* | Loan & Grant Finder shall be capable of completing 50,000 simultaneous requests | | |
| *Response Time:* | Loan & Grant Finder shall display results within three (3) seconds of user submission | | |
| **Normal Flow Of Events:** | * User provides keyword(s) to input field * User clicks “Submit” button * Loan & Grant (L&G) Finder transmits query to SBA API * SBA API returns results to L&G * SBA API renders results on “Search Results” page | | |
| *Pre-conditions:* | User (public or registered) is at “Home Page”  “Home Page” returned no errors  User provides value(s) to query | | |
| *Post-conditions:* | User is provided with a list of loans and grants related to queried terms, as provided by SBA API | | |
| **Alternative Flow Of Events:** | Search failure  Advanced Search – See 005 – Advanced Search | | |
| *Scenarios:* | A friendly message will indicate if there are no results found | | |
| **Assumptions/Issues/ Questions/Notes:** | N/A | | |

**004 Logging into an Account\_v1.1**

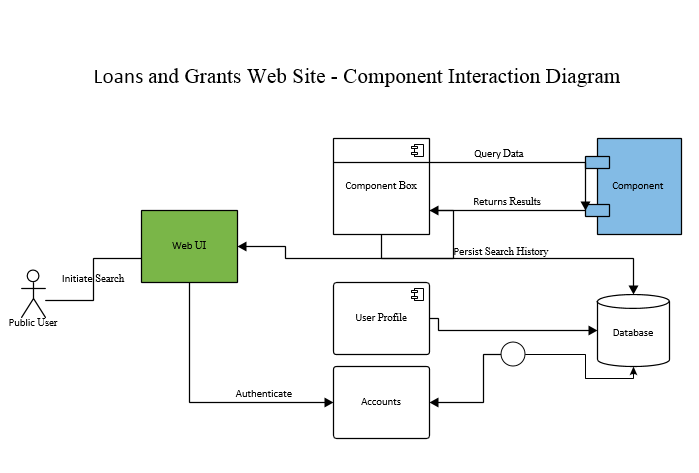
|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Logging into an Account | Version: | 1.1 |
| **Number:** | 004 | Date Created: | 5/31/2015 |
| **Service Package:** | Functional | Date Last Updated: | 6/1/2015 |
| **UML Diagram:** | UML v2.0.vsdx | Domain Expert(s): | Waseem, Marvin |
| **Initial Event:** | Registered User is viewing “Log in” page | | |
| **Primary Actor(s):** | Registered User | | |
| **Secondary Actor(s):** | N/A | | |
| **Brief Description:** | As a Registered User, I want to be able to enter my credentials, so I can access additional features. | | |
| **Performance:** |  | | |
| *Volume:* | Loan & Grant Finder (L&G) shall be capable of completing 50,000 simultaneous requests. | | |
| *Response Time:* | Loan & Grant Finder shall deliver Registered User to Log In landing page within 3 seconds of credential submission | | |
| **Normal Flow Of Events:** | * Registered User provides valid email * L&G validates email address matches required convention (Note 1)   + L&G displays message if User provides non-conventional email address * Registered User provides password   + User may select “Remember Me” – Scenario is covered in Alternative Flow Of Events, below * Registered User clicks “Log in” | | |
| *Pre-conditions:* | User is Registered  “Log in” page returns no errors | | |
| *Post-conditions:* | Registered User is logged into their account and delivered to Landing page. | | |
| **Alternative Flow Of Events:** | Log in failure  Registered User selects “Remember Me” | | |
| *Scenarios:* | The system will display a message “Invalid Login attempt”  User is logged into incorrect account.  Registered user selects ‘Remember me’.  The user credentials are saved, allowing user to return directly to Log In Landing. Page when accessing L&G from same device.  User manually Logs Out of account, if desired. | | |
| **Assumptions/Issues/ Questions/Notes:** | Note 1 –   * + Uppercase and lowercase English letters (a-z, A-Z)   + Digits 0 to 9   + Characters ! # $ % & ' \* + - / = ? ^ \_ ` { | } ~   + Character . (dot, period, full stop) provided that it is not the first or last character, and provided also that it does not appear two or more times consecutively. | | |

**005 Advance Search\_v1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Advanced Search | Version: | 1.0 |
| **Number:** | 005 | Date Created: | 6/1/2015 |
| **Service Package:** | Functional | Date Last Updated: | 6/1/2015 |
| **UML Diagram:** | UML v2.0 | Domain Expert(s): | Waseem, Marvin |
| **Initial Event:** | User has accessed the Advanced Search page within Loan & Grant (L&G) | | |
| **Primary Actor(s):** | Registered User, Public User | | |
| **Secondary Actor(s):** | SBA API | | |
| **Brief Description:** | Users will have the ability to target specific search criteria in order to return results more relevant to their needs | | |
| **Performance:** |  | | |
| *Volume:* | L&G shall be capable of completing 50,000 simultaneous requests. | | |
| *Response Time:* | Loan & Grant Finder shall display results within five (5) seconds of user submission | | |
| **Normal Flow Of Events:** | * User provides values to the provided drop downs   + Government Type   + Industry   + Loan Type * User selects appropriate toggle buttons   + General Purpose   + Development   + Exporting   + Contractor   + Green   + Military   + Disabled   + Rural   + Disaster * User clicks “Search” * Loan & Grant (L&G) Finder transmits query to SBA API * SBA API returns results to L&G * SBA API renders results on “Search Results” page | | |
| *Pre-conditions:* | User (public or registered) is at “Advanced Search” page  “Advanced Search” page returned no errors  User provides value(s) to at least one selection menu (drop-down or toggle buttons) | | |
| *Post-conditions:* | User is provided with a list of loans and grants related to queried conditions, as provided by SBA API | | |
| **Alternative Flow Of Events:** | Search failure  Basic Search – See 002 – Search For Loans & Grants | | |
| *Scenarios:* | A friendly message will indicate if there are no results found | | |
| **Assumptions/Issues/ Questions/Notes:** | N/A | | |

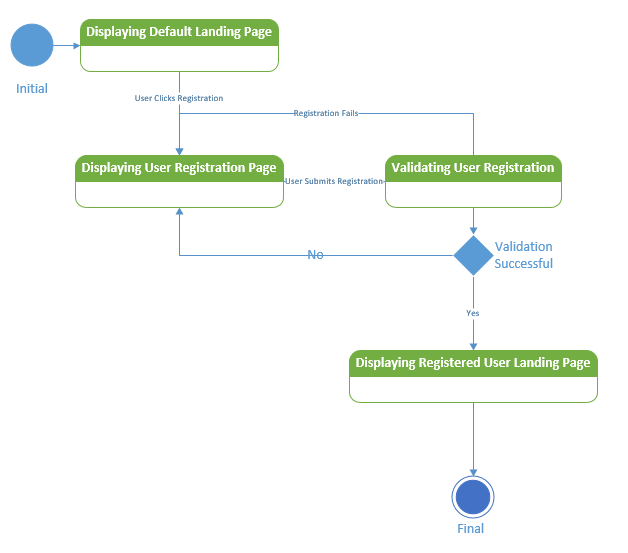
\*Please see Appendices 2 for an additional use case for the ‘Save to Favorites’ story which is projected for the upcoming Sprint.

# Components Interaction Diagram v2.0

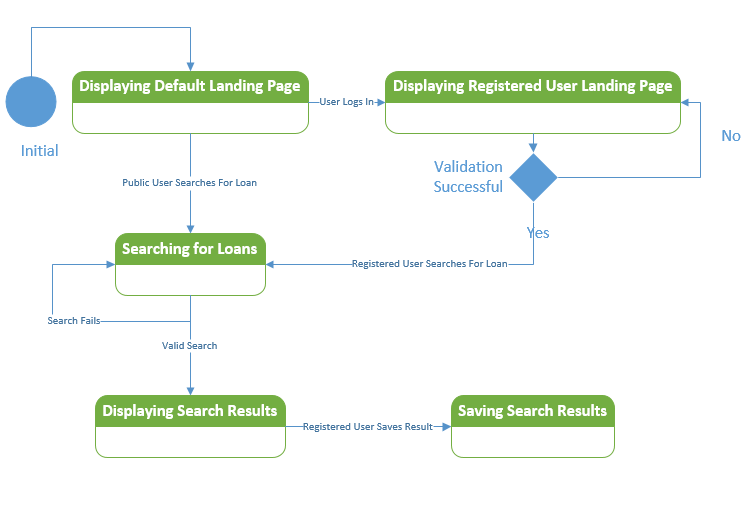


# State Transition Diagrams

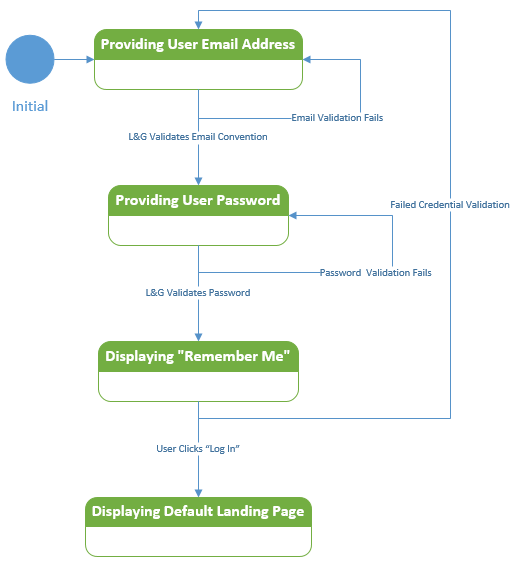
**001 Registration\_v2.0**



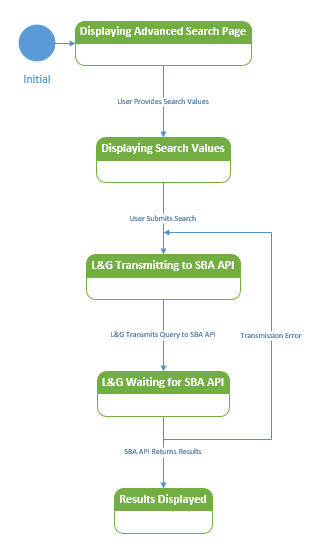
**002 Search for Loans and Grants \_v2.0**



**004 Logging into an Account\_v2.0**

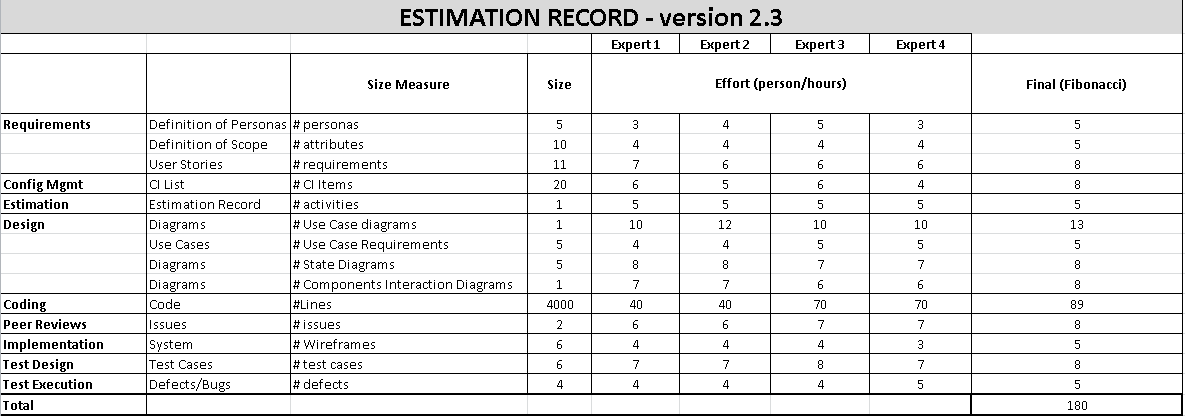


**005 Advance Search\_v2.0**



\*Please see Appendices 1 for an additional state diagram for the ‘Save to Favorites’ story which is projected for the upcoming Sprint.

Estimation Record

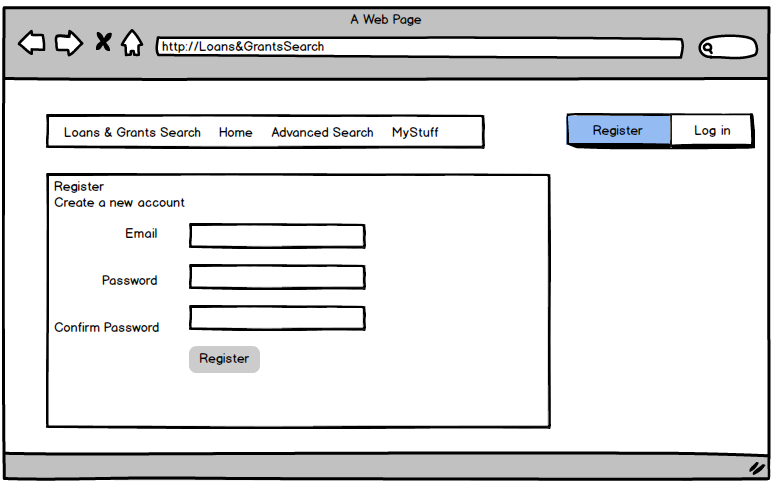


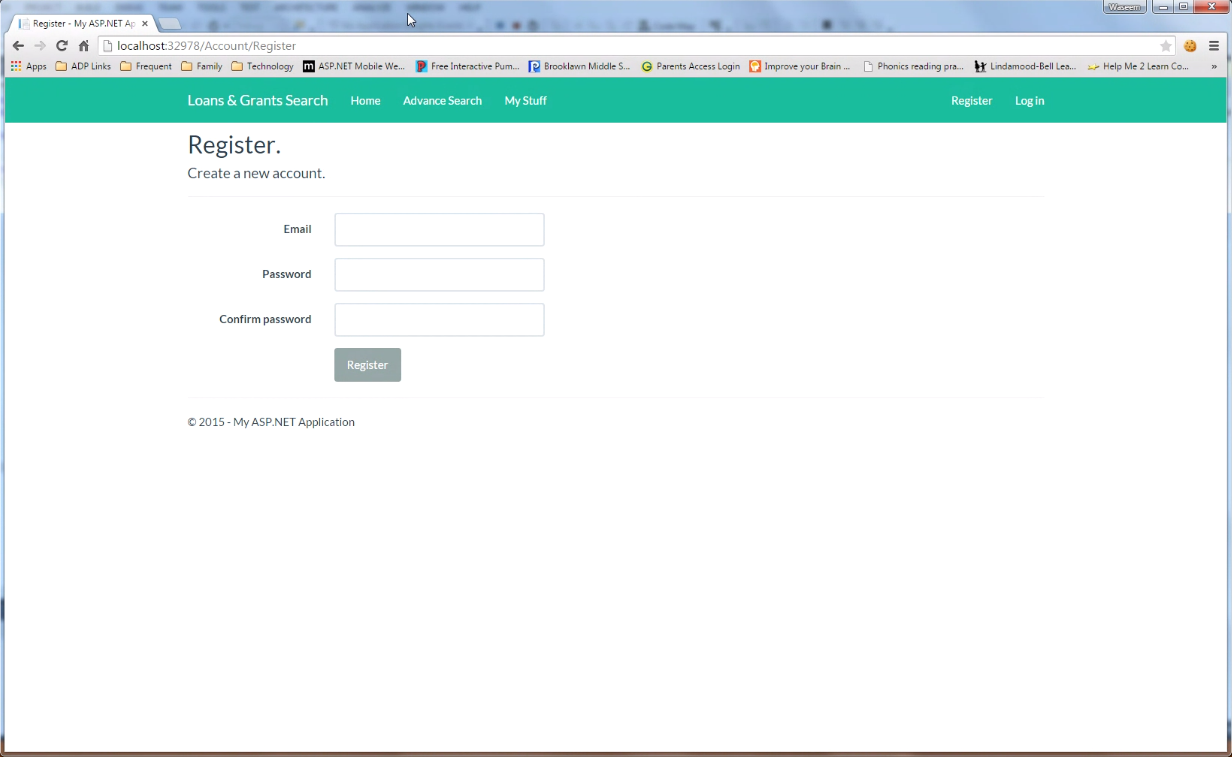
Configuration Items List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **CI LIST v.4.1** | | | | |
|  | **Configuration Item Name** | **Version** | **Date** | **Owner** | **Repository** |
| **1** | Definition of Scope and Team Compositions | 1.0 | 5/17/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Project%20Proposal%20and%20Team%20Composition.docx) |
| **2** | Definition of Personas | 1.0 | 5/22/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Personas.docx) |
| **3** | Requirements List/User Stories | 2.0 | 6/3/2015 | Team-Four | [Pivotal Tracker](https://www.pivotaltracker.com/n/projects/1349388) |
| **4** | Use Case UML | 1.0-2.0 | 6/7/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/tree/master/Documents/Final%20Use%20Cases) |
| **5** | UML - Components Diagram | 2.0 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Components%20Interaction%20Diagram_V2.0.vsdx) |
| **6** | UML - State Diagrams | 2.0 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/tree/master/Documents/Final%20State%20Transitions%20Diagrams) |
| **7** | Use cases | 1.0 | 5/31/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/tree/master/Documents/Final%20Use%20Cases) |
| **8** | Estimation Record | 2.3 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Estimation%20Record%20V2.3.xlsx) |
| **9** | Configuration Items Lists | 4.1 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Configuration%20Items%20List%20v4.1.xlsx) |
| **10** | Mocks ups/Wireframes | 2.0 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/blob/master/Documents/Mock%20ups%20to%20Wireframes%20v%202.0.docx) |
| **11** | Test Cases | 1.2 | 6/20/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/tree/master/Documents/Final%20Test%20Cases) |
| **12** | Software - MS SQL | MS SQL Express Server 2014 | 5/24/2015 | Team-Four | Developers' Sand Boxes |
| **13** | Software - Visual Studio | Visual Studio 2013 | 5/24/2015 | Team-Four | Developers' Sand Boxes |
| **14** | Software - IIS | IIS 7.0 | 5/24/2015 | Team-Four | Developers' Sand Boxes |
| **15** | Software - GitHub tools | 3.0 | 5/15/2015 | Team-Four | GitHub |
| **16** | Software - Pivotal Tracker tools | 3.0 | 5/15/2015 | Team-Four | [Pivotal Tracker](https://www.pivotaltracker.com/n/projects/1349388) |
| **17** | Website for searching for grants and loans | 1.0 | 6/2/2015 | Team-Four | [Loans and Grants Website](http://loangrants.azurewebsites.net/) |
| **18** | Database - SBA API | N/A | 6/2/2015 | Team-Four | Developers' Sand Boxes |
| **19** | Bugs | N/A | 6/19/2015 | Team-Four | [Pivotal Tracker](https://www.pivotaltracker.com/n/projects/1349388) |
| **20** | Issues from Peer Reviews retained | N/A | 6/19/2015 | Team-Four | [GitHub](https://github.com/wshahzad/Team-Four/issues?q=is%3Aissue+is%3Aclosed) |

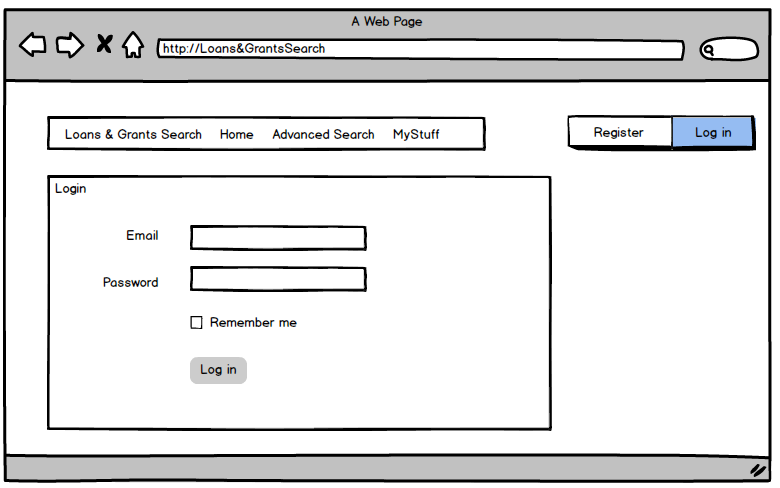
Mock ups and Wireframes v2.0

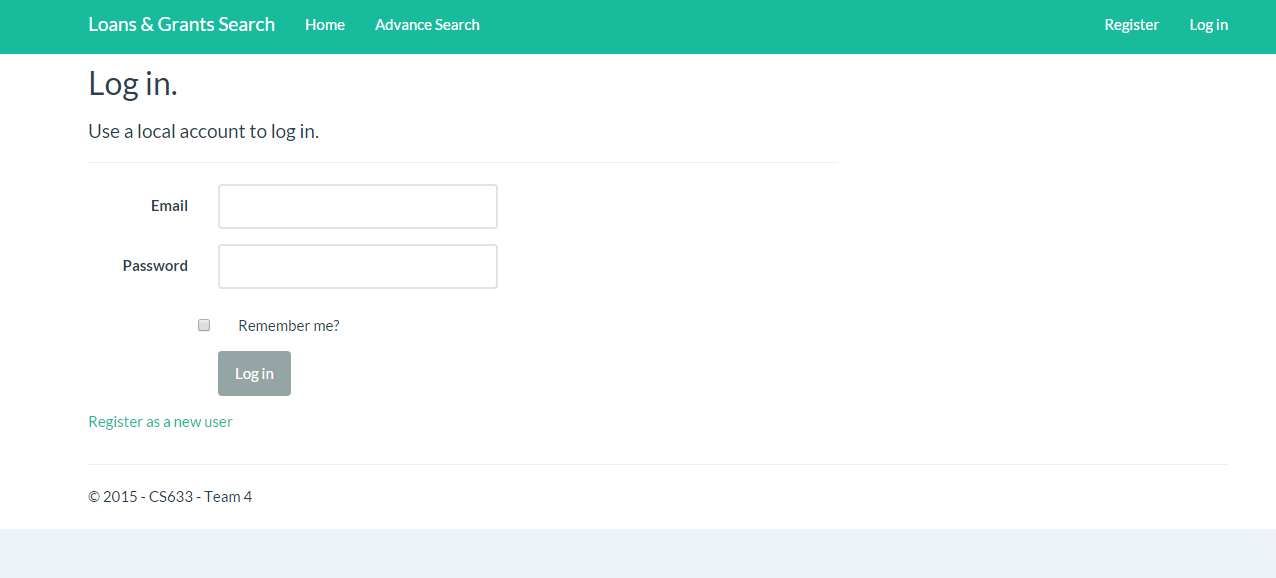
# Register Page



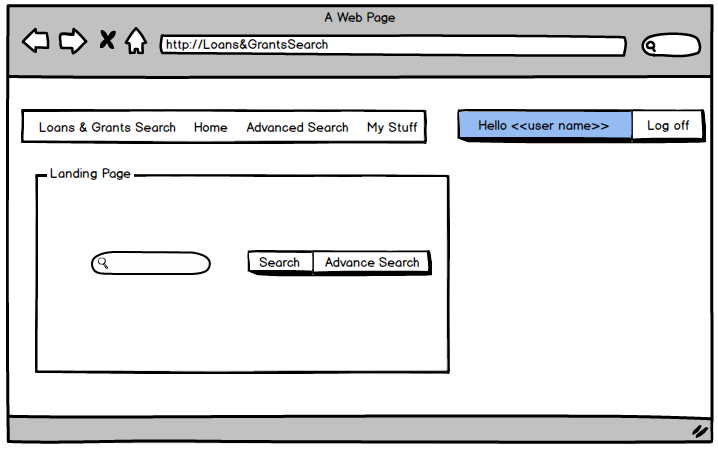


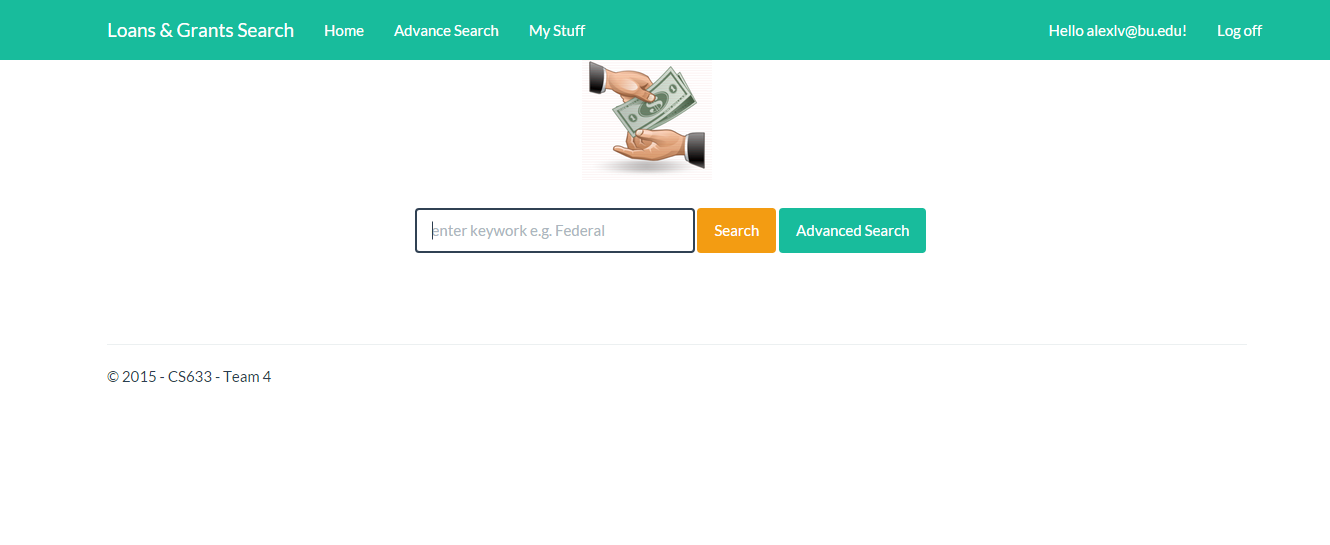
# Login Page



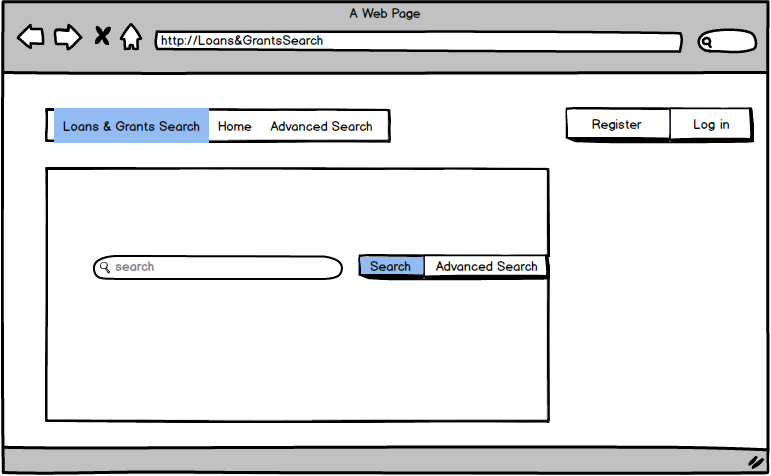


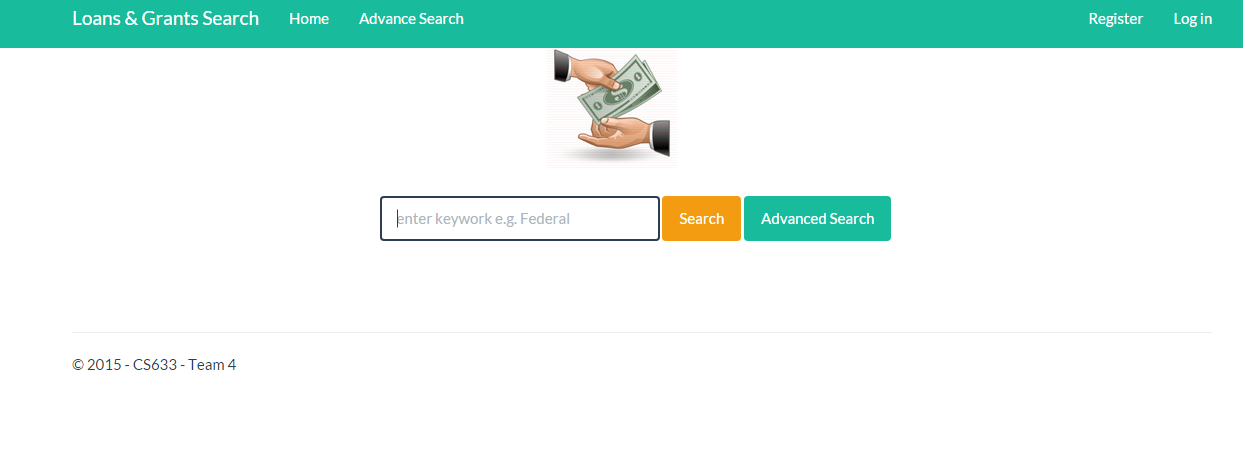
# Login Landing Page



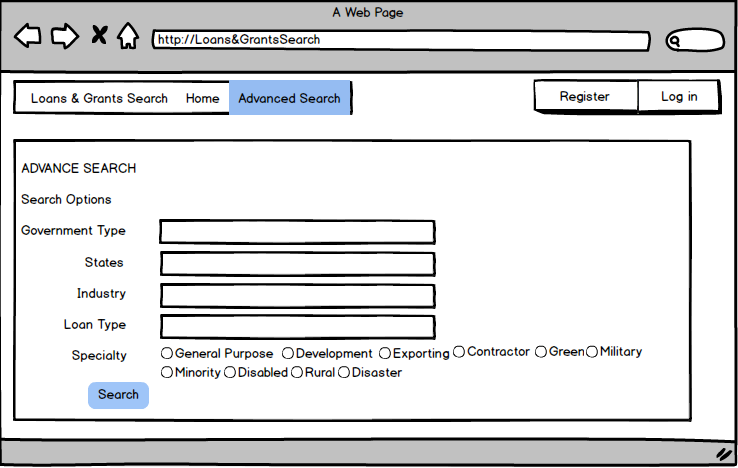


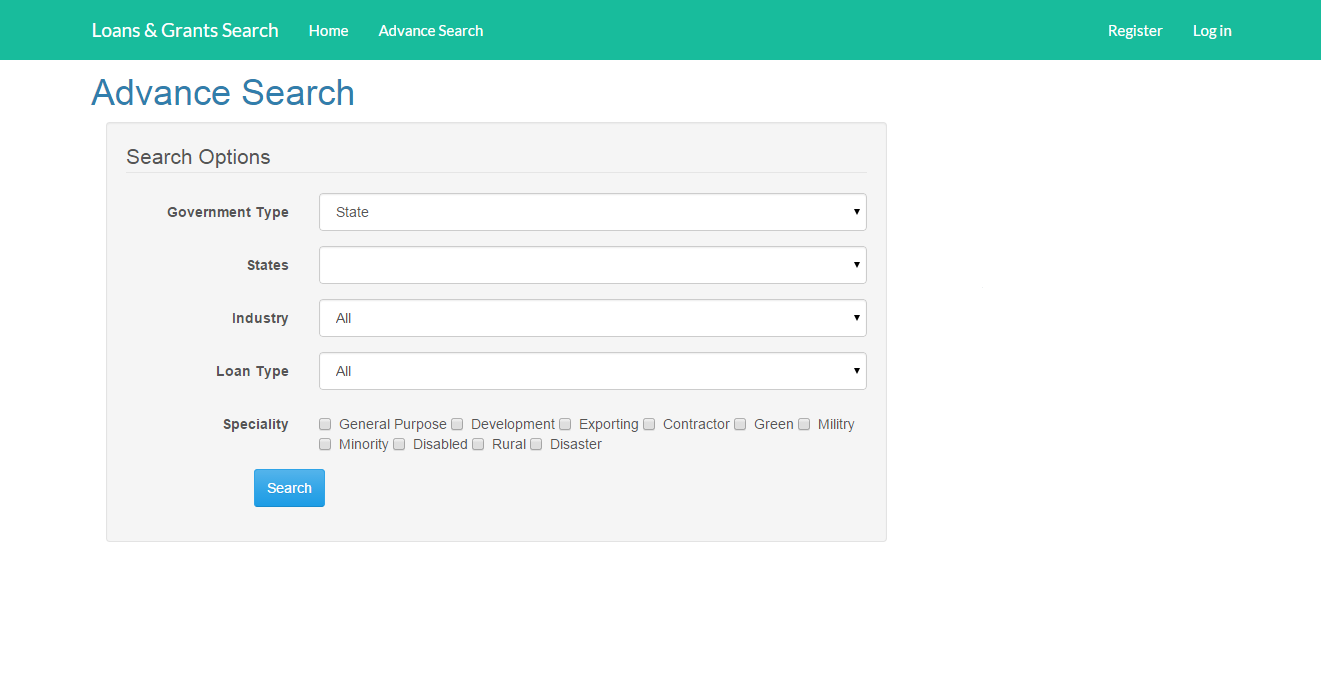
# Search page





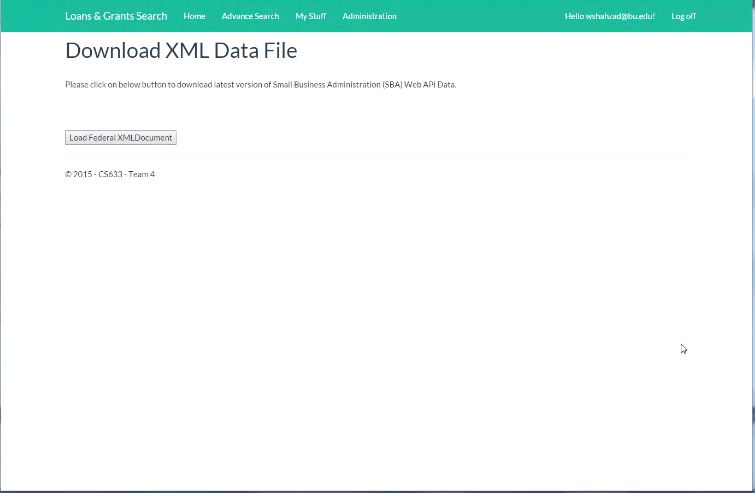
# Advance Search Page





# ****Admin Page****





Testing

# Test Cases

**001\_Loans & Grant Simple Search Test\_v1.2**

|  |  |
| --- | --- |
| **GENERAL INFORMATION** | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | ☒Functionality | ☒Positive | ☐Negative | | ☐Performance | ☐Regression | ☐Overload | |
| **Test Number:** | 1 | | **Test Date:** |  |
| **Test Case Description:** | Verify that user is able to provide simple search criteria to Loan & Grant system and then submit the same to the SBA API. |
| **Results:** | |  |  | | --- | --- | | ☐Pass | ☐Fail | |
| **INTRODUCTION** | |
| **Requirement(s) to be tested:** | All relevant data is provided to SBA API from Loan & Grant System.  Related to use case 002 and may be expanded to include 005 |
| **Set Up and Constraints:** | To complete this test user must have an internet connection and the ability to review the response returned from SBA. |
| **TEST** | |
| **Input:** | The user will enter the following values within the text box on the Home Page of the Loan & Grant System.     * Loan * Grant * Null (no information is provided to text box) * $500,000 * 500000 * Five Hundred Thousand * Half a million |
| **Procedural Steps:** | 1. Enter search term in text box 2. Click “Submit” 3. Confirm successful transmission of data by viewing the data returned by the web site. |
| **Expected Results:** | The user will successfully provide simple search input to the text box and transmit the information to the SBA API.   * Successful transmission of search criteria * Successful transmission of search criteria * Successful transmission of search criteria * Successful transmission of search criteria * Successful transmission of search criteria * Successful transmission of search criteria * Successful transmission of search criteria |
| **ACTUAL RESULTS** | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: |
| **Comments:** |  |

**002\_Register Screen Test\_v1.2**

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | ☒Functionality | ☒Positive | ☐Negative | | ☐Performance | ☐Regression | ☐Overload | | | |
| **Test Number:** | 2 | **Test Date:** | 6/16/2015 |
| **Test Case Description:** | Verify that the user is able to register within the Loan & Grant system by creating an Account. | | |
| **Results:** | |  |  | | --- | --- | | ☐Pass | ☐Fail | | | |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | * A user will be able to create an account. * Provide a unique email address and password. * User will be directed to a landing page after sign up indicating successful creation of account.   Related to use case 001. | | |
| **Set Up and Constraints:** | To complete this test user must have an internet connection and an email address | | |
| **TEST** | | | |
| **Input:** | The user will enter the following values within the text box on the Register Page of the Loan & Grant System.     * Valid email address: testemail2@invalidemail.com * Valid password: Pa$5word * Confirm password: Pa$5word | | |
| **Procedural Steps:** | 1. Enter email address into the email text box field 2. Enter Password into the password text field 3. Re-enter password into confirm password field 4. Click the “Register” button 5. Confirm successful creation of account when homepage is displayed showing your email address. 6. Repeat the process using the same credentials to verify email uniqueness feature. (Test Case 004) | | |
| **Expected Results:** | The application should display the homepage greeting the user with the registered user’s email address in the top right corner of the screen.   * Successful registration of user’s account | | |
| **ACTUAL RESULTS** | | | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: | | |
| **Comments:** |  | | |

**003\_Account Login Invalid Password Test\_v1.2**

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | ☒Functionality | ☒Positive | ☐Negative | | ☐Performance | ☐Regression | ☐Overload | | | |
| **Test Number:** | 3 | **Test Date:** | 6/16/2015 |
| **Test Case Description:** | Verify that in the event a user provides an invalid password the system rejects the authentication. | | |
| **Results:** | |  |  | | --- | --- | | ☐Pass | ☐Fail | | | |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Valid password required to access user account.  Related to use case 004 | | |
| **Set Up and Constraints:** | To complete this test user must have an internet connection and a valid user account | | |
| **TEST** | | | |
| **Input:** | The user will enter the following values within the text box on the Login Page of the Loan & Grant System.     * Valid email address: guyonealiv@gmail.com * Invalid password: anything value other than “Gr3@tPr0j3k7” satisfies this requirement | | |
| **Procedural Steps:** | 1. Enter email address into the email text box field 2. Enter invalid password into the password text field 3. Click the “Log in” button 4. Confirm successful of test by receiving “Invalid login attempt.” error | | |
| **Expected Results:** | The application should display the invalid login attempt message and allow the user to attempt authentication once more. For convenience the email address is to be retained in the Email text box. | | |
| **ACTUAL RESULTS** | | | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: | | |
| **Comments:** |  | | |

**004\_Registration Email Uniqueness Test\_v1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | ☒Functionality | ☐ Positive | ☒Negative | | ☐Performance | ☐Regression | ☐Overload | | | |
| **Test Number:** | 4 | **Test Date:** | 6/16/2015 |
| **Test Case Description:** | Verify that email addresses will only be registered to one user. | | |
| **Results:** | |  |  | | --- | --- | | ☐Pass | ☐Fail | | | |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | * A user must provide a unique email address in order to create an account.   Related to use case 001. | | |
| **Set Up and Constraints:** | To complete this test user must have an internet connection and a previously registered email address | | |
| **TEST** | | | |
| **Input:** | The user will enter the following values within the text box on the Register Page of the Loan & Grant System.     * Previously used email address: testemail1@invalidemail.com * Valid password: Pa$5word * Confirm password: Pa$5word | | |
| **Procedural Steps:** | 1. Enter email address into the email text box field 2. Enter Password into the password text field 3. Re-enter password into confirm password field 4. Click the “Register” button | | |
| **Expected Results:** | The application should display an error indicating that the Name and Email address provided have been taken.   * Failure to register user’s account | | |
| **ACTUAL RESULTS** | | | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: | | |
| **Comments:** |  | | |

**005\_Valid User Credentials Test\_v1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | Functionality | Positive | Negative | | Performance | Regression | Overload | | | |
| **Test Number:** | 5 | **Test Date:** |  |
| **Test Case Description:** | Registered user is logged into account upon successful authentication. | | |
| **Results:** | |  |  | | --- | --- | | Pass | Fail | | | |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Related to use case 004 | | |
| **Set Up and Constraints:** | User must have valid user credentials | | |
| **TEST** | | | |
| **Input:** | Instruction.   * Email: guyonealiv@gmail.com * Password: “Gr3@tPr0j3k7” | | |
| **Procedural Steps:** | 1. Visit <http://loangrants.azurewebsites.net/> 2. Click Log-in 3. Provide email in email text box 4. Provide password in password text box 5. Click Log-in button | | |
| **Expected Results:** | The application should display the homepage greeting the user with the registered user’s email address in the top right corner of the screen.   * Successful autnentication of user. | | |
| **ACTUAL RESULTS** | | | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: | | |
| **Comments:** |  | | |

**006\_Account Login Invalid Username Test\_v1.0**

|  |  |  |  |
| --- | --- | --- | --- |
| **GENERAL INFORMATION** | | | |
| **Test Type:** | |  |  |  | | --- | --- | --- | | ☒Functionality | ☐Positive | ☒Negative | | ☐Performance | ☐Regression | ☐Overload | | | |
| **Test Number:** | 6 | **Test Date:** | 6/16/2015 |
| **Test Case Description:** | Verify that in the event a user provides an invalid username the system rejects the authentication. | | |
| **Results:** | |  |  | | --- | --- | | ☐Pass | ☐Fail | | | |
| **INTRODUCTION** | | | |
| **Requirement(s) to be tested:** | Valid username required to access user account.  Related to use case 004 | | |
| **Set Up and Constraints:** | To complete this test user must have an internet connection and an invalid user account name | | |
| **TEST** | | | |
| **Input:** | The user will enter the following values within the text box on the Login Page of the Loan & Grant System.     * Valid email address: notanemail@enail.com * Password that meets complexity requirements: “Pa$5word” | | |
| **Procedural Steps:** | 1. Enter invalid email address into the email text box field 2. Enter password into the password text field (password will not need to be “valid” but should meet complexity requirements for testing purposes. 3. Click the “Log in” button 4. Confirm successful of test by receiving “Invalid login attempt.” error | | |
| **Expected Results:** | The application should display the invalid login attempt message and allow the user to attempt authentication once more. For convenience the email address is to be retained in the Email text box. | | |
| **ACTUAL RESULTS** | | | |
| **Actual Results:** | Relevant outputs from the procedural steps:  Step 1:  Step 2:  Step 3: | | |
| **Comments:** |  | | |

# AllPairs Test Combinations

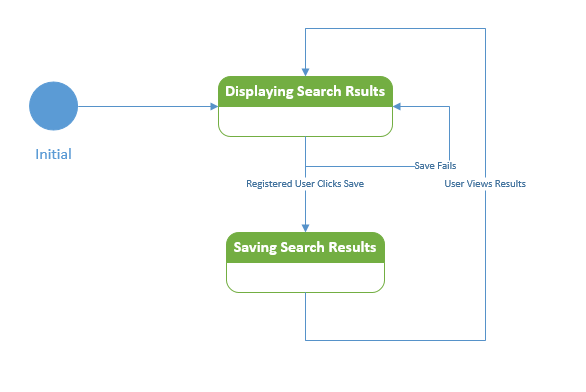


DEMO

[Loans and Grants Website DEMO](http://loangrants.azurewebsites.net/)

# Appendices

1. Save to Favorites State Diagram\_v2.0



1. 003 Save to Favorites\_v1.1

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case Name:** | Save to Favorites | Version: | 1.1 |
| **Number:** | 003 | Date Created: | 5/31/2015 |
| **Service Package:** | Functional | Date Last Updated: | 6/1/2015 |
| **UML Diagram:** | UML v2.0.vsdx | Domain Expert(s): | Waseem, Marvin |
| **Initial Event:** | Loan & Grant Finder has successfully returned search results to a registered user who is currently logged in | | |
| **Primary Actor(s):** | Registered User | | |
| **Secondary Actor(s):** | N/A | | |
| **Brief Description:** | As a Registered Users, I want to be able to save my search results to favorites, so I can review them in the future. | | |
| **Performance:** |  | | |
| *Volume:* | Loan & Grant Finder (L&G) shall be capable of completing 50,000 simultaneous requests. | | |
| *Response Time:* | L&G will indicate successful save within one (1) second of user action.  Registered user will be able to review saved search in “My Stuff” within five (5) seconds of receiving notification of successful save. | | |
| **Normal Flow Of Events:** | * L&G has is displaying query results to Registered User * Registered User clicks “Save to Favorites” (see “Requirements Specifications.docx”) * Selected item is saved to Registered User account   + Result Title – From SBA   + Result URL – From SBA   + Result Description – From SBA   + Query – From L&G   + Search Date and Time – From L&G | | |
| *Pre-conditions:* | Registered User is at “Search Results” page  “Search Results” page returned no errors  Registered User clicks “Save to Favorites”  L&G writes favorite to L&G DB | | |
| *Post-conditions:* | “Search Results” page displays “Remove” next to result; previous value was “Save to Favorites”  Registered User can view “Saved” result in “My Stuff” | | |
| **Alternative Flow Of Events:** | Save Failure | | |
| *Scenarios:* | The system will display a message that the saving was unsuccessful. | | |
| **Assumptions/Issues/ Questions/Notes:** | This assumes that in the event an auto-logout feature is added the necessary duration has not expired. | | |