SPA System Agreements Requirements Specification

for

UCI OIT

Version 1.0

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Informatics 117

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Revision History

Revision Number	Revision Date	Nature of Revision
1	10/30/2019	Document Creation
2	11/5/2019	Finished draft of Non functional req.
3	11/26/2019	Finalized Non functional req. As well as small edits to most field.
4	12/6/2019	Updated document with feedback from sponsors and additional functionality added

1. Introduction

1.1 Purpose

The purpose of this document is to describe the functionality the SPA system needs to fulfill all stakeholders' (system officers, system analysts, system principle investigator) needs. SPA will be operating system independent and accessible with any standards-compliant browser.

1.2 Intended Audience

The intended audience for this document includes Developers, Project Managers, and Users (System Officers, System Analysts, Principal Investigators).

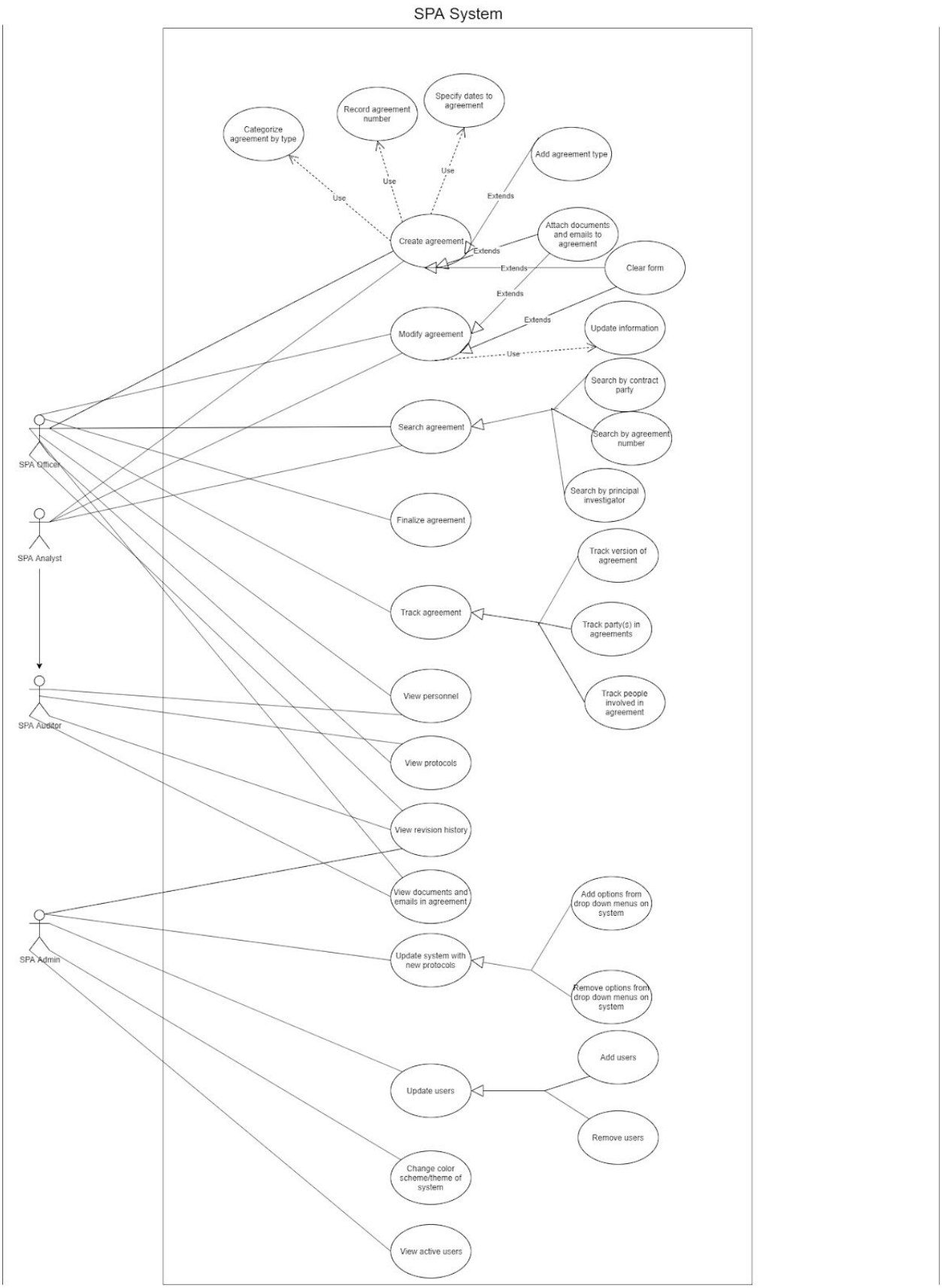
1.3 Project Scope

The project team will present a mockup of a revamped SPA system, including implementing changes to the user interface and specific UI components. The objective of the redesign is to alleviate task burden for different types of users of the system, create smooth and consistent workflows in the agreement process, and provide an intuitive experience.

2. Overall Description

2.1 Product Features Overview

The SPA system allows users to manage a database of legal agreements documents. Users should be able to create new agreements and view and edit existing agreements. Fields which are included in agreements include relevant dates, personnel involved in the agreement, contract parties, notes, and attachments.


SPA System
Categorize agreement by type
Record agreement number
Specify dates to agreement
Add agreement type
Use
Use
Use
Extends
Create agreement
Attach documents and emails to agreement
Extends
Clear form
Extends
Extends
Modify agreement
Extends
Update information
Use
Search by contract party
Search agreement
Search by agreement number
Search by principal investigator
SPA Officer
SPA Analyst
Finalize agreement
Track version of agreement
Track agreement
Track party(s) in agreements
Track people involved in agreement
SPA Auditor
View personnel
View protocols
View revision history
View documents and emails in agreement
Add options from drop down menus on system
SPA Admin
Update system with new protocols
Remove options from drop down menus on system
Add users
Update users
Remove users
Change color scheme/theme of system
View active users

2.2 User Classes and Characteristics

There are three types of users will be using this system:

System Analyst: Primarily perform initial data entry for agreements. Have access to adding, searching for, and editing agreements.

System Officer: Follow the agreements from beginning to end, making changes as necessary and finalizing them when complete. Same access level as System Analyst, with the addition of being able to finalize documents.

System Administrator: Has the same access as System Officer and System Analyst. On top of that, they also manage user access levels as well as perform any system modifications such as modifying agreement types.

2.3 Operating Environment

The SPA system will be a web application for use in the University of California, Irvine. SPA will be a modern redesign of the existing Visual Basic 6 SPA application. This product is designed to run on any desktop system that is capable of using web browsers. The user will be required to have a web browser and an active internet connection.

SPA will be built using modern web technologies such as React, Angular, and Bootstrap for maximum compatibility and ease of future iteration.

2.4 User Documentation

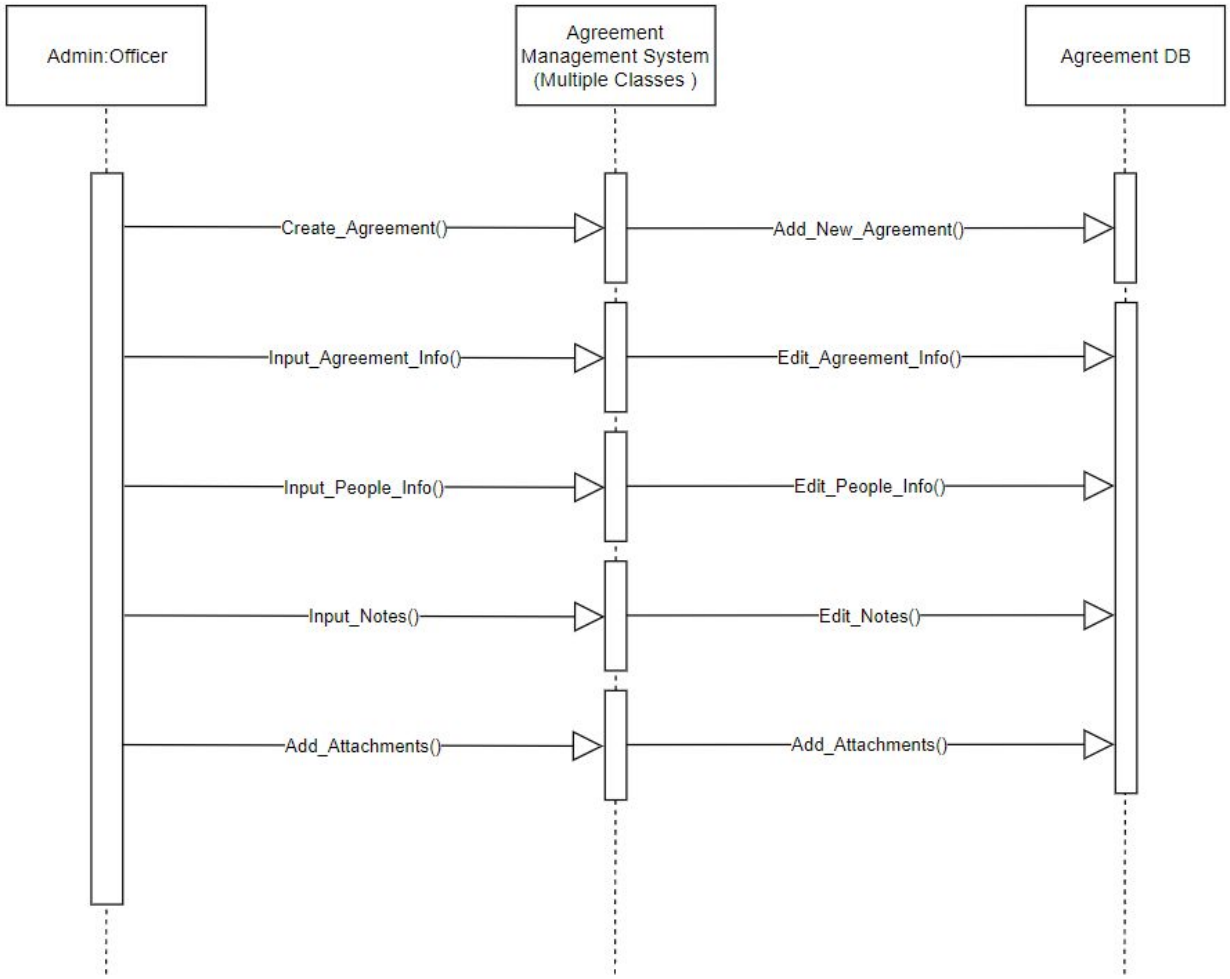
Online help and tutorials will be available through OIT. A user guide will be available to help users navigate through the system. The user guide will contain step-by-step processes, including screenshots, on how to perform all tasks, such as creating a new agreement or editing an agreement.

2.5 Assumptions and Dependencies

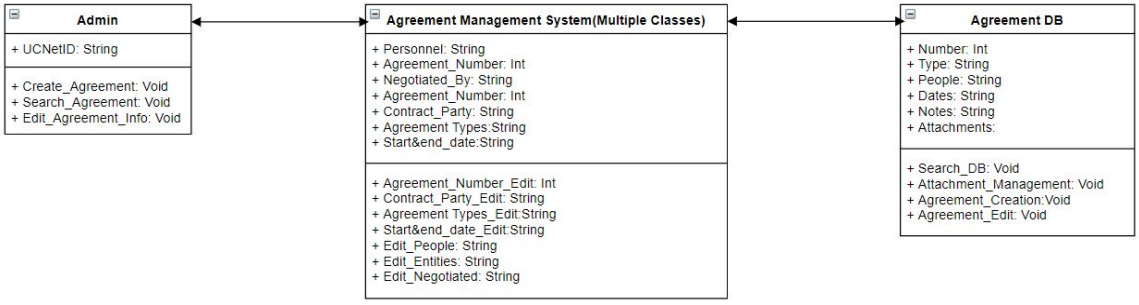
- Users will have internet access
- Users know how to navigate a web browser
- SPA is accessed through a desktop browser on a desktop or laptop, not a mobile device with a smaller screen.
- Third party APIs are available for integration, such as FileNet and Kuali Research

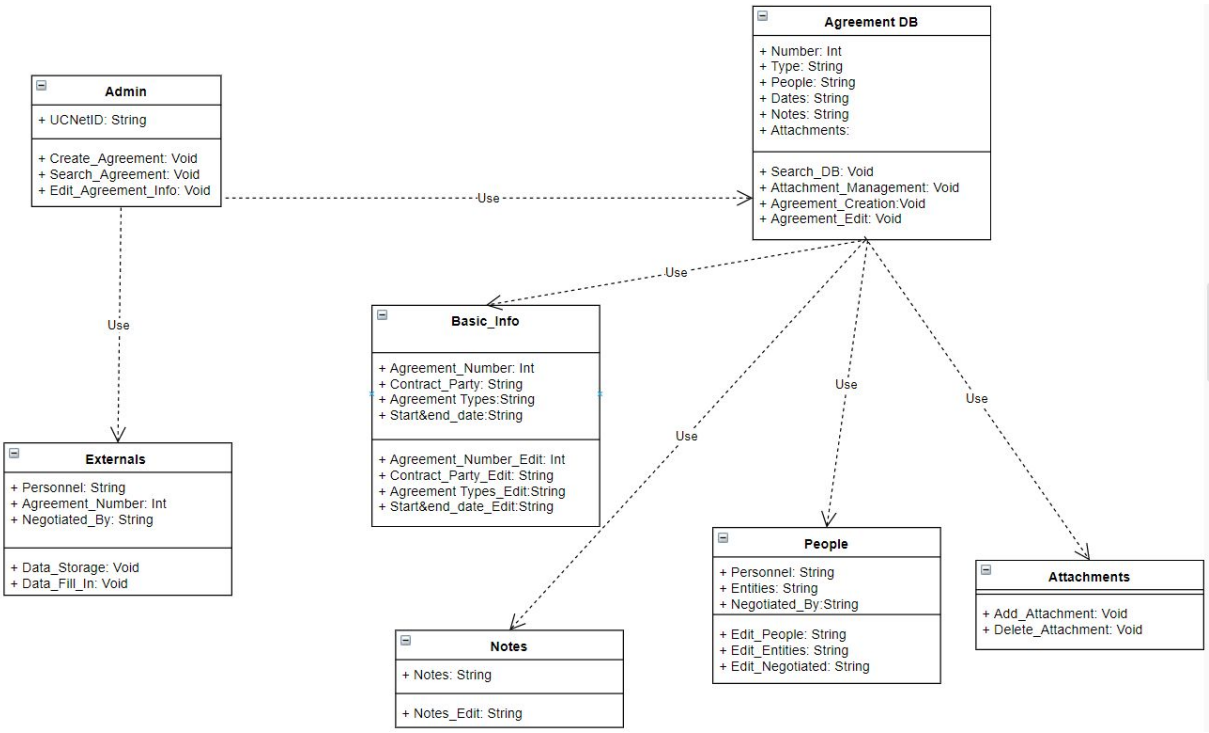
2.6 System Structure Diagrams

UML Sequence Diagram



Class Diagram





3. System Features

3.1 New Agreement

3.1.1 Description and Priority

High priority. The user must be able to add a new agreement to the system easily whenever one is negotiated, entering all the available details, which are automatically saved as they are entered.

3.1.2 Stimulus/Response Sequences

New Agreement is triggered when the user clicks the “New Agreement” page on the home screen. A blank agreement details page opens in the same browser tab.

3.2 Open and Edit Existing Agreement

3.2.1 Description and Priority

High priority. The user must be able to open an existing agreement that is in the system, and be able to modify all details, which are automatically saved as they are entered.

3.2.2 Stimulus/Response Sequences

Opening and editing an agreement is triggered when the user clicks on the relevant agreement on the Search Results page. The agreement details page opens in the same browser tab.

3.3 Search

3.3.1 Description and Priority

High priority. The user must be able to find an existing agreement that is in the system. There are two search modes, a standard Search mode which uses a fuzzy search (finding agreements that are likely to be relevant, even if they do not exactly match the search term) algorithm to find matching agreements by searching all fields, and an Advanced Search mode which similarly uses a fuzzy search algorithm, but allows the user to specify details for each field they would like to search. Search results are a clickable list of matching agreements, with details of the agreement displayed and the matching search term in the details highlighted in bold.

3.3.2 Stimulus/Response Sequences

Search is triggered by the user entering a search term into the home screen. Results are displayed when the user clicks Search or presses Enter.

Advanced Search is triggered by the user clicking the “Advanced Search” button on the home screen. Results are displayed when the user clicks Search or presses Enter.

If a search returns only one result, the system takes the user directly to that agreement instead of showing a results list.

3.4 Agreement Details

3.4.1 Description and Priority

High priority. The user must be able to add new details to an agreement as well as view and edit all details currently associated with an agreement.

3.4.2 Stimulus/Response Sequences

The Agreement Details screen is triggered by either creating a New Agreement, in which case the fields will be empty, or by opening an existing agreement, in which case the fields will load the existing data from the agreement.

3.4.3 Detail Descriptions

3.4.3.1 Agreement Number

The Agreement Number is generated by the system in the format “2016-2520-1”. The first section is the year in which the agreement begins; the second section is the agreement number within that year, assigned sequentially; the third section is the revision number. The user never enters a custom agreement number; it is always generated by the system.

3.4.3.2 Other Entity Agreement Number

This field allows any text input, and is optional. If the other party of the agreement has their own agreement number, it is listed here in the other party’s format. This allows the user to search using the other entity’s number if needed.

3.4.3.3 Action

This is a dropdown menu which allows the user to select “New” or “Updated,” depending on the type of the agreement.

3.4.3.4 Entry Date

This is a calendar picker which stores the date the data for the agreement was initially entered into SPA.

3.4.3.5 Start and End Dates

The user can select dates for the agreement to start and end. The user can either enter the date with their keyboard, or select from a dropdown calendar picker.

3.4.3.6 Negotiated By

This field allows the selection of a user that negotiated the agreement. The users that can be selected here are limited to users of SPA.

3.4.3.7 Agreement Type

This is a dropdown menu where the category of the agreement can be listed. The options for categories include Confidentiality, CDA-Industry CT, Master Agreement, Offsite Research, Other Agreement, Teaming Agreement, Data Transfer Agreement, and Data Use Agreement. This list in this document may not be complete and needs to be verified before implementation, and should be easily editable by an Administrator to account for future agreement types.

3.4.3.8 Contract Parties

This is where the other party of the agreement, besides UCI, is listed. If there are multiple parties, they can all be listed here. When the “Add” button is pressed, the user can search and select from already existing parties, or add a new third party.

3.4.3.9 Personnel

This section allows people who are involved with the agreement to be listed who are not users of the system. These people can optionally be associated with a UCInetID.

3.4.3.10 Notes

This is a text field where the user can enter notes about the agreement.

3.4.3.11 Attachments

The system should allow the user to attach relevant documents to the agreement, tagging them with the document type. Some tags might include “Research Proposal” or “Human Research Protocol.” Once they are added, they can be clicked to be opened. If the document can be opened in a browser, it should be opened in its own tab. Otherwise, the system should download the file.

3.4.3.12 Update History

The Update History appears in a sidebar, allowing the user to see a list of revision numbers, times, and users who made them.

3.5 Import and Export

3.5.1 Description and Priority

Medium priority. The system should provide an extensible interface for importing and exporting agreements to other systems (see section 4.2 Software Interfaces).

3.5.2 Stimulus/Response Sequences

Importing and exporting are triggered with a menu in the sidebar. The user selects Import or Export, then the service they wish to interface with.

3.6 Finalize Agreement

3.6.1 Description and Priority

Once an agreement is finished, the user can mark it as finalized. This prevents future users from modifying the agreement unintentionally.

3.6.2 Stimulus/Response Sequences

The user clicks a “Finalize Agreement” button in the sidebar. The interface creates a revision for finalization, and greys out all editable fields, leaving them readable but making it clear they cannot be edited.

3.6 Account Management

3.6.1 Description and Priority

The user should be able to see the name of the current logged in user, and log in and out of the system.

3.6.2 Stimulus/Response Sequences

The login screen will redirect to the UCInetID authentication screen when SPA is opened or logged out. The current user and “Log Out” buttons should be on the top right.

4. External Interface Requirements

4.1 User Interfaces

SPA will be in an Arial font with black text and white and gray background. The color palette to be used follows the UCI Brand Guidelines, including UCI Blue, UCI Gold, and UCI Light Gray colors. A flat design for buttons should be used, with curved corners with no drop shadows.

4.2 Software Interfaces

Importing and exporting agreements must be implemented with a modular structure. Initially, the two implementations of this are a JSON-based file export and an integration with Kuali Research. The system design should allow for easy development of new integrations in the future.

Integration with Kuali Research is an important feature improvement in this new system, making agreement entry much more efficient. This integration should use the Kuali Research API to import and export agreements from SPA.

The system allows users to attach documents to an agreement, which are then stored in UCI's FileNet system. SPA stores only the reference to the file in FileNet. If a file is modified, a new copy is uploaded to FileNet and the new reference is stored in the updated version of the agreement.

5. Other Nonfunctional Requirements

5.1 Maintainability

- Every button or field of the system must be well documented to improve maintenance and speed up the development process
- The system must be frequently updated to prevent any system issues,
- All error messages must have a unique ID that identifies the type of error that has occurred. That error ID can be used to look up the error in the error database/documentation.
  Errors documentation must include:
    - Cause of the error
    - How to fix or avoid the error from happening again.
    - What are the damages that might of been dealt due to this error.

5.2 Security

- The system must only be accessible to current employees. To verify user identity, the system must utilize UCInetID authentication.
- The system should be frequently scanned for:
    - System breaches
    - Viruses and malware

5.3 Extensibility

- The system must be importable. Meaning it can be accessed and used from third party applications.
- The system must be adoptable. Meaning it can be used/adopted by other universities within or outside the UC system.
- The system must be integratable with already existing systems like FileNet and Kuali Research.

5.4 Reliability

- The system should not update unless all windows are closed and/or saved.
- The system should not erase any information in case of power loss, lag or crash.
- In case of a certain task/action taking too long (between 1-5 minutes) to complete, that task must time out without erasing any of the already-filled-out field and prompt an error message letting the user know that the task has timed out. This is to prevent needing to restart the whole system in case of a system issue.
- The system should prompt a warning if one user tries opening an agreement that is open by another user to avoid overwriting and date loss.

5.5 Usability

- All labels to all fields and buttons must be relevant and clear
- The system must be ADA (Americans with Disabilities Act) Compliant
    - Must follow level AA compliance level.
- The system interface must follow UCI's user interface guidelines
- The user must have the option to go back to the home/search screen at any time.