Software Requirements Specification

for SISCalendar

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Organization: SIS.io

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Revision History

Name	Date	Reason For Changes	Version
Initial	10/1/13	First Version	1.0
Revision	10/3/13	Updated System Requirements	1.1
Revision 2	10/8/13	Fixed wording of some requirements	1.2
Revision 3	10/29/13	Updated liability requirement 3.3.2.4	1.3

1. Introduction

1.1 Purpose

The product described in this SRS is the "Name of our application". It describes the entire scope of this product which is responsible for providing an export of a student's schedule to be imported into a digital calendar, as well as provide the location of classes on the RIT map.

1.2 Document Conventions

- 1.2.1 We use arial font throughout, 11 point font for general descriptions, 18 point bolded font for headers and 24 point bolded font for Section Headers.
- 1.2.2 Requirements within section 3 (System Features) are placed within a table due to formatting concerns. Sub-identifiers for requirements are denoted by placing an extra dash ("-") after the super-identifier. So a requirement with the identifier EX-2-3 would be a sub-identifier of EX-2.
- 1.2.3 Subheadings are used for organization when appropriate, as shown here.

1.3 Intended Audience and Reading Suggestions

- 1.3.1 This document is intended for developers of the software, any project managers, documentation writers, and users/testers.
- 1.3.2 Most of the document can be read in the order it is presented, however it may benefit the reader to read the glossary in Appendix A and the document conventions in section 1.2 before anything else. Both of these sections contain information about other parts of the document and therefore can be very helpful the first time reading through this document.

1.4 Project Scope

The scope of this project is the completion of an application that will use RIT's central authentication server to authenticate a student, get their class information and export it to an iCal file, and to display their class's location on the RIT map. For a further breakdown of the project scope, please refer to section 2.2 of the Project Plan.

1.5 References

- 1.5.1 Use Case Document for project: SISCalendar
- 1.5.2 Project Plan for: SISCalendar

2. Overall Description

2.1 Product Perspective

This application will provide students and additional way to access their class schedule without having to use SIS. This application will allow for students to export their class calendar as an iCal file, as well as to view their class location on the RIT map.

2.2 Product Features

Release 1

- 2.2.1 The application shall accomplish user authentication via the campus' central Shibboleth Authentication system.
- 2.2.2 The application shall provide an export of the logged in user's class schedule in an iCal format
- 2.2.3 The application shall provide the logged in user a view of their schedule that links the class's locations to the RIT map

Releases 2 & 3

- 2.2.4 The application shall correctly adjust to the current academic calendar, including holidays and reading days. (optional)
- 2.2.5 The application shall directly send the logged in user's class calendar to their associated RIT Gmail calendar. (optional)

2.3 User Classes and Characteristics

- 2.3.1 Students: The majority of students shall use this application during the start of a new semester. The technical experience of these users should not matter as the system will be straightforward and easy to use.
- 2.3.2 ITS Staff: ITS staff will be the primary maintainers of the application and may have to perform some administrative functions relating to the academic calendar and holidays. The ITS Staff will have a technical background.

2.4 Operating Environment

The application shall be hosted hosted by ITS and accessible from any web browser on a majority of devices.

2.5 Functional Requirements

- 2.5.1 Must use the campuses central Shibboleth Authentication system.
- 2.5.2 Must be able to access across multiple platforms and be responsive.

2.6 Technical Requirements

- 2.6.1 Must be a Java web application with an Oracle Database(if needed).
- 2.6.2 ITS naming and coding standards/conventions shall be used to allow ITS EWA to continue support and maintenance for the application.

2.7 User Documentation

A separate, printed user manual for each user role should be delivered with this software which will document how the software should be maintained. Additionally a tutorial shall be provided for the users describing the major use cases for each role.

2.8 Assumptions and Dependencies

2.7.1 - Assumptions:

2.7.2 - Dependencies:

ITS providing the necessary data needed from SIS through the central gateway web application.

3. System Features

3.1 Login

3.1.1 Description

The user will be asked to enter their RIT computer account information to use the web application and all of its features.

- 3.1.2 Functional Requirements
- 3.1.2.1: Users shall only be able to login with valid RIT computer accounts.
- 3.1.2.2 : The system shall authenticate login credentials (username and password), using Shibboleth.

- 3.1.2.3 : If the user's login credentials fail Shibboleth authentication, the system shall display a message to the user indicating that authentication has failed.
- 3.1.2.4 : If the user's login credentials fail Shibboleth authorization, the system shall redirect the user to an "Not Authorized" Page.
- 3.1.2.5 : After a successful login, the system shall manage a user's sessions.
- 3.1.2.6 : Session data that will be stored in the user's cookies will be:
 - First Name
 - Last Name
 - User ID
- 3.1.2.7: Upon successful login, the system will redisplay the current page to the user with the new privelages.

3.1.3 Non-Functional Requirements

3.1.3.1: The user shall be able to login from any screen in the SIS.io application.

3.2 Logout

3.2.1 Description

The user clicks on "Logout" to terminate their session on the website.

3.2.2 Functional Requirements

- 3.2.2.1: The system shall provide a mechanism for logged in users to log out of the system.
- 3.2.2.2 When logging out a user the system shall invalidate the cookie storing the session data.
- 3.2.2.3: When logging out a user the session data will be removed.

3.2.3 Non-Functional Requirements

3.2.3.1: The user shall be able to logout from any screen in the SIS.io application

3.3 Exporting Calendar to iCal File

3.3.1 Description

The user will click on the "Export schedule to iCal button"

3.3.2 Functional Requirements

- 3.3.2.1: The system shall allow a way for a user to download their calendar in iCal format.
- 3.3.2.2: The system shall authenticate a user before permitting a download.
- 3.3.2.3: The system shall provide the following information in the exported iCal file:
 - Course Name (Event Title)
 - Professor's Last name (Event Description)
 - Course Number (Event Description)
 - Location (Event Location) with link to location on map
 - Days (Event)
 - Time (Event)
- 3.3.2.4: The system shall display a liability notice to students downloading an iCal. With the following text: "SISCalendar serves as a resource for students who are seeking assistance with time management efforts, including but not limited to, the scheduling of classes and exams. SISCalendar is not intended to, nor does it, provide monitoring of class schedules and exams. Use of this product requires individual monitoring of class schedules and exams by the student, who retains ultimate responsibility for ensuring the accuracy of the information provided to SISCalendar. Your acknowledgement below is your understanding that individual monitoring is your responsibility, that SISCalendar does not update class schedules and exams, and that SIS Calendar assumes no liability for the accuracy of any information provided." The user must then accept the liability to be able to download the iCal file.
- 3.3.2.5: The iCal shall have a relevant filename.
- 3.3.3 Non-Functional Requirements
- 3.3.3.1: The system shall provide the exported iCal file within 20 seconds of the button being pressed.
- 3.3.3.2: The system shall require no more than 1 navigation from the main SIS.io Application page to download an iCal file.

3.4 View class on RIT Map

3.4.1 Description

The user will click on one of their classes, and the location will be displayed on the RIT Interactive Map.

3.4.2 Functional Requirements

- 3.4.2.1: The system shall provide a method for users to view the location of a class they are enrolled in on the RIT Interactive Map.
- 3.4.2.2: The system shall not provide a way for users to view the location of a class that is in a building not displayed on the RIT Interactive Map.
- 3.4.2.3: The system shall not provide a way for users to view the location of an online class on the RIT Interactive Map.
- 3.4.2.4: The system shall open the Interactive Map in a new tab when a class location is requested.
- 3.4.2.5: The system shall only display one class location at a time on the RIT Interactive Map.
- 3.4.2.6: The location of the link shall also be in the class description of the iCal file.

3.4.3 Non-functional Requirements

3.4.3.1: The system shall display a location on the map in no more than 30 seconds.