

Acceptance Test

Appendix A: Test Plan and Results

Smart Scheduling

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Smart Scheduling

Detailed Design

Appendix A: Test Plan

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Test Plan Identifier and Introduction

1.1 Introduction

The Test Plan should preview and test the functionality of the inner workings of Smart Scheduling. There are several types of tests that Empire Unlimited will be using to check the functionality of Smart Scheduling. These test types include:

Test Case – The simplest form of testing, concerns a particular action and has two forms: pass or fail.

Unit Test – concerned with the knowledge about testing a program unit, typically developed by a single individual, to determine that it is free of data, logic, or standards errors. This unit includes knowledge of dynamic analysis (equivalent partitioning, boundary value analysis, cause-effect graphing, logic based testing, random testing, and syntax testing) and static analysis (complete path testing, decision testing, condition testing, and data-flow testing). *Extracted from *Software Engineering Body of Knowledge Version 1.0*

Integration Test – concerned with knowledge about validating that software components, which have been unit tested separately, interact correctly when they are put together to perform a higher order function. This unit also includes knowledge about dependency checking for class, data, and processes, and about interface checking in terms of range, type compatibility, representation, number and order of parameters, and method of transfer. *Extracted from *Software Engineering Body of Knowledge Version 1.0*

System Test – concerned with the knowledge about validating the specified functional requirements of a system. This unit includes knowledge about techniques to design and enact an independent testing process of all of the system's functions described in the software requirements specification. *Extracted from *Software Engineering Body of Knowledge Version 1.0*

Acceptance Test – concerned with the knowledge about validating the functional and non – functional requirements of a purchased or acquired system. This unit includes knowledge about techniques for using the contract, the statement of work, the software requirements specification, and the request for proposal to ensure that the delivered system meets all of the requirements (as perceived by the purchasing or acquiring organization) *Extracted from *Software Engineering Body of Knowledge Version 1.0*

1.2 Test Plan Identifier

The test plan is a dynamic aspect of the documentation for Smart Scheduling. The content of this test plan is meant as a detailed checklist of how the software is meant to perform. The test plan will be adjusted as changes are made to the requirements, either added or deleted, to the software. This document will provide a record of any changes, as well as whether a test is passing or failing at that point in time. An updated version will be provided at the end of the Detailed Design phase, and a finalized version will be provided at the end of the Acceptance Test phase.

Item Pass/Fail Criteria

2.1 Functional Requirements Inventory

This section is the part of the test plan that checks to see if the functional requirements of Smart Scheduling are met. The functional requirements can be physically tested since they are either classified as met or unmet depending on the data that the unit tests provide. It will serve as a high level checklist during our more detailed testing, ensuring Dr. Yoder's requirements are met. The following is a list of the functional requirements for each user.

The requirements are grouped based on the 3 different user types of Smart Scheduling.

2.1.1 Course Coordinator

Will be able to find common time slots to schedule departmental meetings or new classes.

YES NO

Will be able to modify the schedule.

YES NO

Will be able to delete previous schedules.

YES NO

Will be able to delete classes.

YES NO

Will be able to modify classes.

YES NO

Will be able to add new classes.

YES NO

Will be able to securely log into the system using a registered username and password.

YES NO

Will be able to view the current schedule.

YES NO

Will be able to filter the schedule by professor(s).

YES NO

Will be able to filter the schedule by classroom(s).

YES NO

Will be able to create a faculty account, where faculty will be able to access the system.

YES NO

Will be able to view and print room reports.

YES NO

2.1.2 Faculty

Will be able to securely log into the system using a registered username and password.

YES NO

Will be able to view the current schedule.

YES NO

Will be able to filter the schedule by professor(s).

YES NO

Will be able to filter the schedule by classroom(s).

YES NO

Will be able to view and print room reports.

YES NO

Will be able to add office hours or other meeting, where they will be available in order to meet with students or fellow teachers.

YES NO

2.1.3 General User

Will be able to view and print room reports.

YES NO

Will be able to view the current schedule.

YES NO

Will be able to filter the schedule by professor(s).

YES NO

Will be able to filter the schedule by classroom(s).

YES NO

2.2 Non-functional Requirements Inventory

The system will be easily maintained.

The process of maintaining the system should not be time consuming and should require minimal backend programming.

The system will be viewable on multiple browsers.

The software should work well and pass our unit tests independent of the user's web browser choice.

The system will be efficient.

Barring external factors (user latency) the system itself should be fast and responsive.

The system will be user friendly and easy to use.

The interface and general web design should not hinder the user from utilizing the software.

Result's of Brian's Aunt Test: Passed

Brian's Aunt is an Associate Professor in Psychology at the University of Southern Florida. She has tested our software for usability and ease of use, and reported back that it was easy to use and would be helpful if she had to create a schedule.

2.3 Exception Handling To Test

There are certain areas in Smart Scheduling where errors can occur due to actions made outside the systems control. The system must be able to handle these types of exceptions.

If a user forgets their password, there must be a method of handling it without having the user be forced to create a new account. If a faculty user forgets their password they will click the “Forgot Password” link found on the login screen, which will send them to another page that will ask them for their email address. Once their email address is submitted an automated email will be sent to them with a link they can follow back to Smart Scheduling where they can change their password.

There are various pages in the system where users will have to fill out a form, such as to write on someone’s wall or to add content to their profile tab. Any required fields will be first handled by JavaScript checking to make sure there is data in them. If there are any required fields that have not been filled in then the submit button will not be active for them to click. A second measure of handling will take place once all fields are filled in by checking that the data is in fact valid.

2.4 Testing Approach

The method our team will use to test Smart Scheduling will be to follow the functional and non-functional requirements as defined in this document and others. The first formal test will be the exhaustive Unit Test as defined below. The Unit Test will test the lowest level functions of the application across each type of screen a user of the system may encounter. Each test will have detailed descriptions of each test. The tester(s) will go through each page in the system checking each test off as passing or failing. The tester(s) will repeat this test on the various web browsers that have been stated below in the acceptance test. An Integration/Regression Test (defined later in this document) will then be implemented to ensure that while each unit in the Unit Test is passed, it does not interfere with other units in the Unit Test. Our hope is that this will help to ensure that no errors are overlooked and can be fixed or at the very least reported on in the comments section.

When errors occur or Unit Tests are failed, the team will coordinate to come up with a solution to the problem and then the Unit Test will be performed again, completely, to ensure that nothing else was changed in fixing the previous problem. The Integration/Regression Test will be implemented once we are satisfied that the Unit Test has been passed acceptably, with all failed units either fixed or reported on. If the Regression Test determines that there are issues of one feature breaking another feature, the team will again coordinate to fix the problem. The Unit Test should then be re-implemented to ensure that while fixing the problem another problem was not caused and then re-implementing the Regression Test.

In order to test the Non-Functional Requirements the tester(s) will have to use the system keeping in mind each of the specific Non-Functional Requirement and weighing whether Smart Scheduling passes each one.

2.5 Acceptance Test – Acceptance Criteria

A software project test plan is a document that describes the objectives, scope, approach, and focus of a software testing effort. The process of preparing a test plan is a useful way to think through the efforts needed to validate the acceptability of a software product. The completed test plan will serve to help anyone that is not involved in the testing to understand the ‘why’ and ‘how’ of product validation. The test plan documents the approach that will be used to authenticate and make certain that a product or system that is being tested meets the requirements and other conditions.

The acceptance criteria will be determined by the functional requirements inventory listed in section 1.3 of this document and the non-functional requirements inventory listed in section 1.4 of this document. By definition, functional requirements are what the system will be able to do and what is testable about the system while in contrast, the non-functional requirements define how the system will be; the elements of the system that are not testable. At the completion of this project, team Empire Unlimited will determine which of these requirements were met and which were not met. Please refer to the sections listed above, functional and non-functional requirements, to see the complete listing but keep in mind that these requirements are subject to change and can be added to as more information is gathered.

Smart Scheduling will be tested on both Windows and Mac operating systems and with the four major browsers Internet Explorer 7 and 8, Mozilla Firefox, Safari and Google Chrome. Testing requirements will be decided upon and developed by Empire Unlimited. The first set of tests will be a set of individual unit tests that will break the system down into separate modules. Each individual unit of the module will be tested separately from every other unit and module. Once it has been determined that each individual unit works correctly, the module test will be performed, which will test all units of that module together. Next the integration test will be preformed. This test will bring all the modules together to be tested and make sure they run properly. The system test will be a combination of all tests. This will connect all of the units and modules and bring the entire system back together to be tested further as one whole entity. In the next document, the Detailed Design, tests will be written out for each unit and then the results of all of these tests will be presented in the Acceptance Test document where it will be determined whether or not all requirements were met.

2.6 Unit Test Directory

The following is a list of all separate units that will be tested. Once each of these unit tests passes, a full system test will be performed to ensure correctness and efficiency.

List of Units

- Authenticate
- Notes
- Users
- View All Rooms
- View Current Courses
- View All Faculty
- Check Conflicts
- View Current Offerings
- View All Terms
- New Rooms
- New Courses
- New Faculty
- New Offering
- New Term
- Add/Edit Term
- Header
- Footer
- Schedule View

2.6.1 Unit Test Cases

A test case includes the test number and description of the test. The action to be performed, or the input entered by the user, the state before the test, and the expected result are described for the three units below. There are cases described for the correct actions of users as well as incorrect actions. After the tests have actually been performed, the observed results will be recorded.

There is a column in the Unit Test Directory that tells which units are integrated with the other units. When something in one of the units is changed we must test the related units to make sure they still work. This is an example of integration testing in our test plan

2.6.2 Directory of Unit Test

Team Name Empire Unlimited
 Project Name Smart Scheduling
 Client Name Dr. Yoder

Directory of *Unit Tests* (note: this could also be called an *Index* or a *Catalog*)

Pass/Fail Status	Unit Number	Unit Test Name	Date Last Tested	Comments or brief description	Integrated with these units
P	1	Authenticate	4/20/2011		1, 2, 10,11,12,13,14,15
P	2	Notes	4/20/2011		1
P	3	Users	4/20/2011		1
P	4	View All Rooms	4/20/2011		
P	5	View Current Courses	4/20/2011		7, 18
P	6	View All Faculty	4/20/2011		7
P	7	Check Conflicts	4/20/2011		5, 8, 18
P	8	View Current Offerings	4/20/2011		
P	9	View All Terms	4/20/2011		
P	10	New Room	4/20/2011		2, 4
P	11	New Course	4/20/2011		2, 5
P	12	New Faculty	4/20/2011		2, 6
P	13	New Offering	4/20/2011		2, 8
P	14	New Term	4/20/2011		2, 9
P	15	Add / Edit User	4/20/2011		2
P	16	Header	4/20/2011		
P	17	Footer	4/20/2011		
P	18	Schedule View	4/20/2011		4

Smart Scheduling
Authenticate
 Allows users to log on using their accounts.

2.6.3 Authenticate

Pass/Fail Status	Test Number	Description	Action to perform test (Input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	1.001	Null Username Field	Leave username field blank.	Fill out remainder of form. Press submit.	Empty Form.	Displays message "Invalid email or password"	"Invalid email or password" error message.		MS	4/21/11
P	1.002	Null Password Field	Leave password field blank.	Fill out remainder of form. Press submit.	Empty Form.	Displays message "Invalid email or password"	"Invalid email or password" error message.		MS	4/21/11
P	1.003	Incorrect Password for given username.	Input incorrect Username and password combination.	Press submit.	Empty Form.	Displays message "Invalid email or password"	"Invalid email or password" error message.		MS	4/21/11
P	1.004	Non-existing username.	Input a username which does not exist.	Fill out remainder of form. Press submit.	Empty Form.	Displays message "Invalid email or password"	"Invalid email or password" error message.		MS	4/21/11
P	1.005	Link to "Forgot your password?"	Click on link.	Click on the "Forgot your password?" link.	Empty Form.	Should redirect to reset password screen.	Screen where you can enter a registered email address, and your password will be sent to that email.		MS	4/21/11
P	1.006	Remember me checkbox.	Click checkbox.	Click checkbox.	Empty Form.	Should remember user name and password.	Remembers a user, so you do not have to log in if you leave your computer running.		MS	4/21/11
P	1.007	Correct Information is put in Username field	Enter valid Information into the Username Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding the Username field. Redirected to home page.	As long as you put in your correct password as well, you are directed to the home page.		MS	4/21/2011
P	1.008	Correct Information is put in Password field	Enter valid Information into the Password Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding the Password field. Redirected to home page.	As long as you put in your correct username as well, you are directed to the home page.		MS	4/21/2011
P	= Unit Summary 8 tests		100% passing	8 passed 0 failed				Date of last test =		4/21/11

Test Case		Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	2.001	Populates Load page	Hit refresh button after a change	Pre- Populated form	List of all notes	List of current notes loads when you enter the notes portion of the site.		BM	4/21/11
P	2.002	New Click "New" symbol	Click "new" symbol	Pre- Populated form	Allows you to create a new note.	Brings you to a form where you can enter the name, description, and status of a note.		BM	4/21/11
P	2.003	Edit Click "Edit" symbol	Click "Edit" symbol	Pre- Populated form	Allows you to edit the selected note.	Brings you to a form where you can edit an active note.		BM	4/21/11
P	2.004	Delete Click "Delete" symbol	Click "Delete" symbol	Pre- Populated form	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a note or cancel the request.		BM	4/21/11
P	= Unit Summary 4 tests		100% passing	4 passed 0 failed			Date of last test =		4/21/11

2.6.4 Notes

Smart Scheduling
Users
Users on the site

Test Case		Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	3:001	Populates	Load page	Hit refresh button after a change	Pre- Populated form	List of current users loads when you enter the Users portion of the site.		MS	4/21/2011
P	3:002	Add User	Click "Add User" button	Pre- Populated form	Allows you to create a new user.	Brings you to a form where you can enter information regarding a new user.		MS	4/21/2011
P	3:003	Edit	Click "Edit" symbol	Pre- Populated form	Allows you to edit the selected user with the desired fields.	Brings you to a form where you can edit a current user.		MS	4/21/2011
P	3:004	Delete	Click "Delete" symbol	Pre- Populated form	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a user or cancel the request.		MS	4/21/2011
P	= Unit Summary 4 tests	100% passing	4 passed 0 failed	Date of last test =	4/21/11				

2.6.5 Users

2.6.6 View All Rooms

Smart Scheduling										
View All Rooms										
View All Rooms in the Building										
Test Case										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	4.001	Populates	Load page	Hit refresh button after a change	Pre-Populated form	Displays all rooms.	List of current rooms loads when you enter the Rooms portion of the site. Also lists the rooms relevant data.		BM	4/21/11
P	4.002	Show Room	Click on Magnifying glass icon.	Click on Magnifying glass.	Populated form.	Displays room information.	Information about the room is displayed.		BM	4/21/11
P	4.003	Edit Room	Click on Pencil icon.	Click on pencil.	Populated form.	Room information will be displayed, which can be edited.	Several fields appear where you can edit the room.		BM	4/21/11
P	4.004	Delete Room	Click on red "X" icon.	Click on red "X"	Populated form.	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a room or cancel the request.		BM	4/21/11
P	4.005	Show calendar	Click on "calendar" icon	Click on "calendar" icon	Populated form	A calendar view showing a rooms classes	Takes you to a weekly calendar view of the room, showing all classes in that room.		BM	4/21/11
P	= Unit Summary		100% passing		5 passed		Date of last test =		4/21/11	
	5	tests			0 failed					

2.6.7 View Current Courses

Smart Scheduling										
View Current Courses										
View all Courses Being Taught										
		Test Case								
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	5.001	Populates	Load page	Hit refresh button after a change	Pre- Populated form	List of all courses.	List of Current Courses loads when you enter the Rooms portion of the site. Also lists the rooms relevant data.		MS	4/21/11
P	5.002	View Course	Click on magnifying glass icon.	Click magnifying glass	Populated form.	Course information will appear.	More detailed information about the course is displayed.		MS	4/21/11
P	5.003	Edit course	Click on pencil icon.	Click on the pencil.	Populated form.	Course edit screen will appear. The same screen as new course.	Brings you to a form where editable fields display the course information. You can edit the course from here.		MS	4/21/11
P	5.004	Delete Course	Click on red "X"	Click on red "X"	Populated form.	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a course or cancel the request.		MS	4/21/11
P	= Unit Summary		4 tests	100% passing	4	4 passed		Date of last test =		4/21/11

Smart Scheduling
View All Faculty
View All Faculty Accounts

Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	6.001	Populates	Load page	Hit refresh button after a change	Pre-Populated form	List of all faculty members.	List of faculty members loads when you enter the Faculty Members portion of the site. Also lists the rooms relevant data.		BM	4/21/11
P	6.002	Show faculty member	Click on Magnifying glass icon.	Click on Magnifying glass.	Populated form	Faculty information will be displayed.	More detailed information about the faculty member is displayed.		BM	4/21/11
P	6.003	Edit faculty member	Click on Pencil icon.	Click on pencil.	Populated form	Faculty information will be displayed which can be edited (includes office hours).	Brings you to a form where editable fields display the faculty member information. You can edit the faculty member from here.		BM	4/21/11
P	6.004	Delete Faculty	Click on red "X" icon.	Click on red "X"	Populated form	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a faculty member or cancel the request.		BM	4/21/11
P	6.005	Show calendar	Click on "calendar" icon	Click on "calendar" icon	Populated form	A calendar view showing a faculty members classes	Takes you to a weekly calendar view of the room, showing all classes that faculty member teaches, and information about those classes.		BM	4/21/11
F	= Unit Summary		5 tests	100% passing	5 passed	0 failed		Date of last test =	4/21/11	

2.6.8 View All Faculty

2.6.9 Check Conflicts

Smart Scheduling										
Check Conflicts										
Check Conflicts										
	Test Case									
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	7.001	Populates	Load page	Hit refresh button after a change	Pre- Populated list of conflicts	Displays all conflicts.	Lists all conflicts and what courses are conflicting with what.		MS	4/21/11
P	7.002	Click on conflicted course name	Click on course name	Edit class to change conflict	Pre- Populated form	Form will repopulate, and this conflict will no longer be listed.	Course is no longer on the conflict list.		MS	4/21/11
P	= Unit Summary		100% passing	2 tests	2 passed	0 failed			Date of last test =	4/21/11

2.6.10 View Current Offerings

Smart Scheduling										
View Current Offerings										
View all Courses Being Taught										
Test Case										
Pass/Fail Status	Test Number	Description	Action to perform test (Input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	8.001	Populates	Load page	Hit refresh button after a change	Pre-Populated form	Displays change that was just made.	List of current offerings loads when you enter the Course Offerings portion of the site. Also lists relevant data.		BM	4/21/11
P	8.002	View Conflicts	Click on conflict icon.	Click on conflict icon	Populated form	Information regarding whether the course has conflicts is displayed.	Information is displayed making it clear whether the course has a conflict, and if so, with what.		BM	4/21/11
	8.003	Edit Course	Click on Pencil icon.	Click on pencil.	Populated form	Course information will be displayed which can be edited.	Brings you to a form where editable fields display the course information. You can edit the course from here.		BM	4/21/11
	8.004	Delete Course	Click on red "X" icon.	Click on red "X"	Populated form	A notification displaying "Are you sure" with an ok and cancel button.	A notification box appears allowing you to delete a course or cancel the request.		BM	4/21/11
P	= Unit Summary		100% passing	2 passed				Date of last test =	4/21/11	

2.6.11 View All Terms

Smart Scheduling										
View All Terms										
View All Terms										
Test Case										
Pass/Fail Status	Test Number	Description	Action to perform test (Input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	9.001	Populates	Load page	Hit refresh button after a change	Pre-Populated form	List of all terms.	All terms are listed, and are selectable.		MS	4/21/11
P	9.002	Click on Term name	Click on term link	Click on link	Populated form	New term will be set as current term	Notification appears, affirming your selection.		MS	4/21/11
P	9.003	Edit term	Click on Edit Term	Click on link.	Populated form	Term information will be displayed which can be edited.	Form appears where you can edit term information, and copy the term.		MS	4/21/11
P	= Unit Summary		100% passing	3 passed	0 failed	Date of last test =		4/21/11		
		3 tests								

2.6.12 New Room

Smart Scheduling										
New Rooms										
Edit information regarding a room										
	Test Case		Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
Pass/Fail Status	Test Number	Description								
P	10.001	Null Number	Leave Number field blank	Press Submit	Null	Error message	Displays message "1 error prohibiting this item from being saved."		BM	4/21/11
P	10.002	Null Capacity	Leave Capacity field blank	Press Submit	Null	Error message	Displays message "1 error prohibiting this item from being saved."		BM	4/21/11
P	10.003	Lab field	Check the lab checkbox	click the lab checkbox	empty checkbox	Creates a room as a lab.	The room is added as a lab.		BM	4/21/11
P	= Unit Summary		100% passing		3 passed	0 failed			Date of last test =	4/21/11
	3	tests								

2.6.13 New Course

Smart Scheduling										
New Course										
The coordinator updates a class.										
Test Case										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	11.001	Null Course Number	Leave Course Number field blank	Press Submit	Null	Error message regarding Course Number.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	11.002	Null Name	Leave Name field blank	Press Submit	Null	Error message regarding Name field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	11.003	Null Department	Leave department field blank.	Press Submit	Null	Error message regarding department field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	11.004	Null Credits	Leave Credits field blank	Press Submit	Null	Error message regarding the credits field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	11.005	Correct Information is put in Course Number field	Enter valid information into the Course Number Field	Fill out the remainder of the form, press submit.	Original Data	No error message should appear regarding the Course Number field.	Course is added with correct Course Number.		MS	4/21/11
P	11.006	Correct Information is put in Name field	Enter valid information into the Name Field	Fill out the remainder of the form, press submit.	Original Data	No error message should appear regarding the Name field.	Course is added with correct Name.		MS	4/21/11
P	11.007	Correct Information is put in Department field	Enter valid information into the Department Field	Fill out the remainder of the form, press submit.	Original Data	No error message should appear regarding the Department field.	Course is added with correct Department information.		MS	4/21/11
P	11.008	Correct Information is put in Credits field	Enter valid information into the Credits Field	Fill out the remainder of the form, press submit.	Original Data	No error message should appear regarding the Credits field.	Course is added with the correct number of credits.		MS	4/21/11
P	11.009	Lab checkbox	Check lab checkbox	Check lab checkbox, press submit	Original Data	No error message should appear regarding the Lab checkbox.	Course is added with correct status (lab or not).		MS	4/21/11
P	= Unit Summary 9 tests		100% passing	9 passed 0 failed	Date of last test =	4/21/11				

2.6.14 New Faculty

Smart Scheduling		New Faculty		Test Case		Test Case		Test Case		Test Case		Test Case		Test Case		Test Case		Test Case	
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date									
P	12.001	Null First Name Field	Leave name field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding name field.	Displays message "1 error prohibiting this item from being saved."		EM	4/21/11									
P	12.002	Null Last Name Field	Leave last name field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding last name field.	Displays message "1 error prohibiting this item from being saved."		EM	4/21/11									
P	12.003	Null Email Field	Leave email field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding email field.	Displays message "1 error prohibiting this item from being saved."		EM	4/21/11									
P	12.004	Null Status Field	Leave status field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding status field.	Displays message "1 error prohibiting this item from being saved."		EM	4/21/11									
P	12.005	Invalid Character Entry in email Field	Needs to have @ in email.	Press submit.	Empty Form.	Error message regarding email field.	Error message "Invalid Email"		EM	4/21/11									
P	12.006	Correct Information is put in First Name	Enter valid information into the First Name Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding the First Name field.	A new faculty member is created with a correct first name.		EM	4/21/11									
P	12.007	Correct Information is put in Last Name	Enter valid information into the Last Name Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding the Last Name field.	A new faculty member is created with a correct last name.		EM	4/21/11									
P	12.008	Correct Information is put in email	Enter valid information into the email Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding email.	A new faculty member is created with a correct email.		EM	4/21/11									
P	12.009	Correct Information is put in Status	Enter valid information into Status Field	Fill out the remainder of the form, press submit.	Empty Form.	No error message should appear regarding the status field.	A new faculty member is created with a correct status field.		EM	4/21/11									
P	= Unit Summary		9 tests	100% passing	9 passed	0 failed		Date of last test =	4/21/11										

Smart Scheduling

New Offering

New Course Offering

		Test Case											
Pass/Fail Status	Test Number	Description	Action to perform test (Input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date			
P	13.001	Faculty	Select a faculty member from the dropdown list.	Select a faculty member	Null	Faculty member is displayed.	Selected faculty member is shown instead of "Please Select"		MS	4/21/11			
P	13.002	Room	Select a room from the dropdown list.	Select a room	Null	Room is displayed	Selected room is shown instead of "Please Select"		MS	4/21/11			
P	13.003	Course	Select a course from the dropdown list.	Select a course	Null	Course is displayed	Selected course is shown instead of "Please Select"		MS	4/21/11			
P	13.004	Logistics	Check which days the course is going to take place	check the Monday, Tuesday, Wednesday, Thursday or Friday checkbox.	Null	Course days are displayed	Selected checkboxes stay selected.		MS	4/21/11			
P	13.005	Start Time	Enter a start time string.	Enter a start time like the one shown as an example.	Null	Start time is displayed	Start time is shown in the field.		MS	4/21/11			
P	13.006	End Time	Enter an end time string.	Enter an end time like the one shown as an example.	Null	End time is displayed	End time is shown in the field.		MS	4/21/11			
P	13.007	Create button	click the "Create Course Offering" button	Click the "Create Course Offering" button	Course offering does not exist	New course is created. Notification displayed.	A new Course Offering is created with all of the information that was inputted.		MS	4/21/11			
P		= Unit Summary	7 tests	100% passing	7 passed	0 failed		Date of last test =	4/21/11				

2.6.15 New Offering

2.6.16 New Term

Smart Scheduling										
New Term										
New Term										
Test Case										
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	14.001	Year	Input a year	Type in a year	Null	Correct year will be displayed on created term	Information is saved in the field and displayed correctly at the end of the process.		BMI	4/21/11
P	14.002	Semester	Select a Semester from the dropdown list.	Select a semester	Null	Correct semester will be displayed on created term.	Selected faculty member is shown instead of "Please Select".		BMI	4/21/11
P	14.003	Make Default Term?	Mark checkbox	Check box	Null	Make default term	Term is made the default term after "Create Term" button is clicked.		BMI	4/21/11
P	14.004	Create Term button	click the "Create Term button"	Click the "Create Course Offering" button	Term does not exist	New term is created. Notification displayed.	A new term is created with all of the information that was inputted.		BMI	4/21/11
P	= Unit Summary		4 tests	100% passing	4 passed	0 failed	Date of last test =	4/21/11		

2.6.17 Add/Edit User

Smart Scheduling											
Add / Edit user											
Users on the site											
Pass/Fail Status	Test Number	Test Case		Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
		Description									
P	15.001	Null Username Field		Leave username field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding username field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	15.002	Null Email Field		Leave email field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding email field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	15.003	Association		Dropdown list of associated faculty members.	Select a faculty member from the dropdown.	Empty List	Faculty member is shown as the associated faculty record.	Selected faculty member is shown instead of "Please Select".		MS	4/21/11
P	15.004	Rights		Select users rights from dropdown list	Select rights from the dropdown list	Empty List	Rights are shown regarding the user.	Selected user is shown instead of "Please Select".		MS	4/21/11
P	15.005	Password		Leave password field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding password field	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	15.006	Password Confirmation		Leave password confirmation field blank.	Fill out remainder of form. Press submit.	Empty Form.	Error message regarding password confirmation field.	Displays message "1 error prohibiting this item from being saved."		MS	4/21/11
P	= Unit Summary			100% passing	6 passed	0 failed			Date of last test =		4/21/11
	6	tests									

2.6.18 Header

Smart Scheduling Header		Test Case		Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	16.001	Smart Scheduling	Load current schedule	Click on smart scheduling link	Current Courses page	Displays current schedule	Displays Current courses			BM	4/21/11
P	16.002	Notes	Click "Notes" links	Click Notes link	Current courses page	Shows list of notes	Displays list of notes			BM	4/21/11
P	16.003	User	Click "Users" links	Click Users link	Current courses page	Shows list of users	Displays list of users			BM	4/21/11
P	16.004	Email Address	Click the email address link	Click on email address link	Current courses page	Shows Edit user for that username	Displays editable information for the current user.			BM	4/21/11
P	16.005	Sign Out	Click the sign out link	Click on sign out link	Current courses page	Signs out of that users account	Signs out the current user, and makes the default user a general user.			BM	4/21/11
P	16.006	Rooms	Click on Rooms link	Click on room link	Current courses page	Shows list of all rooms	Displays list of all rooms and relevant information.			BM	4/21/11
P	16.007	Courses	Click on Courses link	Click on courses link	Current courses page	Shows list of all courses	Displays list of all courses and relevant information.			BM	4/21/11
P	16.008	Faculty	Click on Faculty link	Click on faculty link	Current courses page	Shows list of all faculty	Displays list of all faculty and relevant information.			BM	4/21/11
P	= Unit Summary		100% passing	8 passed		0 failed		Date of last test =		4/21/11	
		8 tests									

Smart Scheduling
Footer Test footer links

Pass/Fail Status	Test Number	Description	Action to perform test	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	17.001	View all faculty	Click on "View all Faculty"	Click on "View all Faculty"	Current courses page	Displays all faculty	Displays a list of all faculty and relevant information.		MS	4/21/11
P	17.002	New faculty	Click on "New Faculty"	Click on "New Faculty"	Current courses page	Displays New faculty form	Displays a new faculty form where you make a new faculty member.		MS	4/21/11
P	17.003	View all Rooms	Click on "View all rooms"	Click on "View all Rooms"	Current courses page	Displays all rooms	Displays a list of all rooms and relevant information.		MS	4/21/11
P	17.004	New rooms	Click on "New rooms"	Click on "New Rooms"	Current courses page	Displays New rooms form	Displays a form where you can make a new room.		MS	4/21/11
P	17.005	View all Current Courses	Click on "Current Courses"	Click on "View Current Courses"	Current courses page	Displays Current Courses	Displays a list of all courses and relevant information.		MS	4/21/11
P	17.006	New Courses	Click on "New Courses"	Click on "New Courses"	Current courses page	Displays New courses form	Displays a new courses form where you can make a new course.		MS	4/21/11
P	17.007	View current offerings	Click on "View current offerings"	Click on "View current offerings"	Current courses page	Displays current offerings	Displays a list of all course offerings and relevant information.		MS	4/21/11
P	17.008	New offering	Click on "New offering"	Click on "New offering"	Current courses page	Displays New offering	Displays a new course offering form where you can make a new course offering.		MS	4/21/11
P	17.009	View All Terms	Click on "View all terms"	Click on "View Terms"	Current courses page	Displays All terms	Displays a list of all terms.		MS	4/21/11
P	17.010	New Term	Click on "New Term"	Click on "New Term"	Current courses page	Displays New Term	Displays a new term form where you can create a new term.		MS	4/21/11
P	17.011	This Week	Click on "This Week"	Click on "This Week"	Current courses page	Displays This Week	Week layout appears		MS	4/21/11
P	17.012	Today	Click on "Today"	Click on "Today"	Current courses page	Displays Today's schedule	Today's classes appear		MS	4/21/11
P	= Unit Summary		12 tests	100% passing	12 passed	0 failed		Date of last test =		4/21/11

2.6.19 Footer

2.6.20 Schedule View

Smart Scheduling										
Schedule View										
Shows Schedule										
		Test Case								
Pass/Fail Status	Test Number	Description	Action to perform test (input)	Steps to be Executed	State Before Test	Expected result	Observed result	Comments	Tested By	Test Date
P	18.001	Populates	Load page	Hit refresh button after a change	Pre- Populated form	Displays calendar for either faculty or rooms (depending on how you got to calendar view)	Calendar with days for columns, and times for rows. Classes are color coordinated, and editable when you click them (if you are admin).		EM	4/21/11
P	18.002	Week / Day view	Select week or day button.	Click either "week" or "day" button	N/A	Correct view of either day or week view depending on selection	If you are on "day" view and click "week", you go to the weekly view. Vicer Versa.		EM	4/21/11
P	18.003	Course Box	Click on Course Box	Click on Course Box	Course boxes populating form	Course information which can be edited.	Pop up with the options to edit or delete course. You can do either from this form.		EM	4/21/11
P	18.004	Movement	Drag Course Box	Drag Course Box to new time slot	Pre- Populated form	Course box is now located in a different time slot and Course Box information has changed.	Course can be dragged to different time slots, and data in the Course Box is updated. Does not save data in the database.		EM	4/21/11
P	= Unit Summary		4 tests	100% passing	4 passed	0 failed		Date of last test =	4/21/11	

Integration Testing

Integration Testing is concerned with knowledge about validating that software components which have been unit tested separately. It checks that the units interact correctly when they are put together to perform a higher order function. This testing unit also includes knowledge about dependency checking for calls, data, and processes, and about interface checking in terms of range, type compatibility, representation, number and order of parameters, and method of transfer.