



# FOUNDATION PORTAL

UI Testing

Villacis Calderon, Eduardo David

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## Scope

### In Scope

This project will address User Interface testing over the Foundation Portal:

- Documentation of user interaction and importance with the business functionality.
- Enhancement of testing features enlisted in the requirement section.

### Out of Scope

The testing coverage will rely on the UI Testing definition scope. This meaning it is out of the scope of testing all the server side processing and information manipulation. The testing will only focus on how the data is loaded into the web browser. The requirements will only address some of the UI Testing that is consider critical for the solution. And on the definition of test project, it is out of scope any code improvement into the system that helps pass the tests, this last thing can be considered entirely as a separated project.

## Objectives

Objective	Desired Outcome	Impact
Documentation of user interaction and importance with the business functionality.	Document a flowchart / flow diagram on the user interaction highlighting the business functionalities	Improved documentation to begin UI Testing.  Better understanding of importance of UI Testing in relation with the functionalities of the site.
Enhancement of testing features enlisted in the requirement section.	Achieve desired UI automated testing	Ensure functionality. Ensure portability. Ensure user interaction.

# Requirements

## User interaction documentation

1. List of business features	
1.1	Description business functionalities
1.2	Description business user types
1.3	Description of user infrastructure
2. Interaction flow diagram	
2.1	User interaction with functionalities
2.1.1	Functionalities diagram
2.1.2	Functionalities flow chart
2.1.3	User input data integrity
2.2	User interaction by types of user flow
2.2.1	Authentication and classification of users
2.2.2	Information to be displayed and functions to each type of user
2.3	Client Infrastructure interaction with the portal
2.3.1	Description of different devices and resolution systems
2.3.2	Response flow chart to different client infrastructure

## UI Testing

1. Multiple platform support	
1.1	Test page load correctly in multiple browsers
1.2	Test page functionality in multiple browsers
1.3	Test page interface maintains proper format in multiple browsers
2. Multiple systems	
2.1	Test responsiveness for different devices resolution
2.2	Test responsiveness for different devices interaction
3. Input validation	
3.1	Test form validation
3.2	Test fields input validation
3.3	Test URL [GET] parameters validation
4. User interaction responses	
4.1	Test interaction with <select> <ul><li> elements response
4.2	Test links availability
4.3	Test responses while filling forms
4.4	Test files links availability in form
5. Proper and accurate display of calculations	
5.1	Test display of calculations from input fields in forms

5.2	Test between reports
5.2.1	Reports by area
5.2.2	Reports by all areas
5.2.3	Reports by other area
5.3	Test narrative display of calculations
6. Ensure specific functions are present and responsive	
6.1	Test list of funds and interactions between areas
6.2	Test funds function
6.2.1	Create fund
6.2.2	Update fund
6.2.3	Delete fund
6.3	Test report function
7. Client side responsiveness	
7.1	Test client response time

## Schedule

Week 9 – 13 June		
12	1. List of business features	
	1.1	Description business functionalities
	1.2	Description business user types
	1.3	Description of user infrastructure
	2. Interaction flow diagram	
	2.1	User interaction with functionalities
	2.1.1	Functionalities flow chart
	2.1.2	User interaction of functionalities
	2.1.3	User input data integrity
13	2.2	User interaction by types of user flow
	2.2.1	Authentication and classification of users
	2.2.2	Information to be displayed and functions to each type of user
	2.3	Client Infrastructure interaction with the portal
	2.3.1	Description of different devices and resolution systems
	2.3.2	Response flow chart to different client infrastructure
Week 16 – 20 June		
16	1. Multiple platform support	
	1.1	Test page load correctly in multiple browsers
	1.2	Test page functionality in multiple browsers
	1.3	Test page interface maintains proper format in multiple browsers
17	2. Multiple systems	
18	2.1	Test responsiveness for different devices resolution
19	2.2	Test responsiveness for different devices interaction
	3. Input validation	

	3.1	Test form validation
	3.2	Test fields input validation
	3.3	Test URL [GET] parameters validation
20	4. User interaction responses	
	4.1	Test interaction with <select> <ul><li> elements response
	4.2	Test links availability
	4.3	Test responses while filling forms
	4.4	Test files links availability in form
Week 23 -27 June		
23	5. Proper and accurate display of calculations	
24	5.1	Test display of calculations from input fields in forms
	5.2	Test between reports
	5.2.1	Reports by area
	5.2.2	Reports by all areas
	5.2.3	Reports by other area
	5.3	Test narrative display of calculations
25	6. Ensure specific functions are present and responsive	
26	6.1	Test list of funds and interactions between areas
	6.2	Test funds function
	6.2.1	Create fund
	6.2.2	Update fund
	6.2.3	Delete fund
	6.3	Test report function
	7. Client side responsiveness	
	7.1	Test client response time
27	Wrap up testing documentation and report	

## Appendix

Area Description: Initial home screen

Controller: funds/browse

**FoundationPortal**

**FUNDS**

Create a new fund

Requesting area  
Senior Vice President & Provost

Fund number	Title	Responsible person	Current fiscal year approved budget	Current fiscal year projected expenditures	Requested budget	Variance	Status	Attachments
2013-423703	Faculty of Health Sciences	McNamee	\$0	\$0	\$20,000	(\$20,000)	Final	
871011	Honors Program Support [Scholarship Program]	McNamee	\$32,200	\$32,200	\$32,200	\$0	Final	
871072	Provost Office Institutional Support	McNamee	\$30,000	\$30,000	\$30,000	\$0	Final	
872645	Vice President and Executive Director, NCR	McNamee	\$2,000	\$2,000	\$2,500	(\$500)	Final	
873532	Graduate Student Travel Fund Program	McNamee	\$4,500	\$4,500	\$4,500	\$0	Final	
873994	India Initiative	McNamee	\$15,000	\$15,000	\$15,000	\$0	Final	
875416	NCR Tower Club Membership	McNamee	\$2,500	\$2,500	\$2,500	\$0	Final	
881460	Vice President and Dean for Graduate Education	McNamee	\$2,000	\$2,000	\$2,500	(\$500)	Final	

order

Color Code	Object Type	Description	Test
	Select Tag	Let's choose between the different requesting areas	+ Should load different founding, according to the selected option + Should be enabled and selectable
	Anchor Tag	Links must redirect to appropriate views	+ Links are fully working, no broken links + Links relate to information clicked on
	Td Tag	The information displayed from the founding	+ Values must be formatted + Variance must show red and in parenthesis when negative. + Variance must show black when positive or 0
	Img & anchor tag	Displays an icon to access to the attached scanned forms	+ Attachment must be shown if there are + Link to files must work properly
	Th tags	Columns of information	+ Must be clickable and enabled + Must alter the order when clicked + Must enable different ways of ordering

FoundationPortal						
FUNDING REQUEST REPORT						
<a href="#">Download Excel version</a>						
Fund number	Title	Responsible person	Current fiscal year approved budget	Current fiscal year projected expenditures	Requested budget	Variance
President						
21333	New Found A	Person A	\$24,576	\$23,867	\$51,365	(\$26,789)
871013	Virginia Business-Higher Education Council	O'Rourke	\$20,005	\$20,000	\$20,005	\$0
871331	University Special Activities	O'Rourke	\$260,000	\$260,006	\$260,000	\$0
881856	President's Institutional Expense	O'Rourke	\$50,000	\$50,000	\$50,000	\$0
temporary-00bce870-0bfd-4087-88c5-a4621a5565e2	Freddy Smoot	Norv Turner	\$0	\$0	\$0	\$0
temporary-172cb305-fbbf-4ad0-bd79-d3b04626ff1b	Test President Fund	Greer	\$2,500	\$2,500	\$2,500	\$0
temporary-dfa4b0df-c2b4-42a1-8eae-d5c5f9769a09	Stephen Davis	Norv	\$0	\$0	\$0	\$0
Total for President			\$357,081	\$356,373	\$383,870	(\$26,789)
881852	Vice President for Administrative Services	Shelton	\$2,000	\$2,000	\$2,000	\$0
881923	Automobile Allowances	Shelton	\$32,850	\$32,550	\$32,325	\$525
881245	Alumni Relations Budget	Tillar	\$1,200,000	\$1,200,000	\$1,300,000	(\$100,000)
Total for Vice President for Finance & CFO			\$2,648,463	\$2,410,069	\$2,718,838	(\$70,375)
Grand totals			\$9,008,275	\$7,777,298	\$9,752,736	(\$744,461)
Other uses of funds						
883344	Virginia Tech Athletic Fund	Flanagan	\$2,243,794	\$2,243,794	\$2,368,230	(\$124,436)
887100	WVTF Operations	Flanagan	\$72,000	\$72,000	\$90,000	(\$18,000)
temporary-814cb1b9-338a-4c92-a84d-df8102aff8d3	Brad Johnson	Norv Turner	\$7	\$7	\$7	\$0
temporary-c5bbe569-6fee-4406-9dc8-5ca37de66a81	Fred Smoot	Norv Turner	\$5	\$5	\$5	\$0
455963	Other Found	Person OTHER	\$30,000	\$15,000	\$20,000	\$10,000
Total for Other uses of funds			\$2,345,806	\$2,330,806	\$2,478,242	(\$132,436)



Color Code	Object Type	Description	Test
	Anchor Tag	Link to export report into an excel file	+ Must have proper link + Must return an excel file
	Th Tag	Columns of information	+ Enabled and clickable + Reorder information from areas
	Tr > Td Tag	Display the area name of the funds	+ Display only the proper area + Text has to be centered
	td	Displays information and results from other columns	+ Values must be formatted + Variance must show red and in parenthesis when negative. + Variance must show black when positive or 0 + Values must have a mathematical concordance
	Tr > Td Tag	Displays total sums from areas	+ Correct formatted row + Values must be formatted + Mathematical concordance with area + All areas must have one
	Tr > Td Tag	Displays total sums from all areas not including other funds	+ Correct formatted row + Values must be formatted + Mathematical concordance with area + Must be only one

Area Description: Create new fund form

Controller: funds/create?areaid="Area"

## FoundationPortal

### FUND INFORMATION

#### Current status

Status  
Draft ✓

Fund number\*  
temporary-67a4cfa3-63a2-4ace-b4c7-7585 ✓

Title\*  
✓

This field is required.

Responsible person\*  
✓

This field is required.

Current fiscal year approved budget\*  
\$0 ✓

Current fiscal year projected expenditures\*  
\$0 ✓

Projected year-end balance: \$0

#### Next year projected budget

Projected increase or decrease\*  
\$0 ✓

Requested budget: \$0

#### Supporting information

Brief description of the program and types of expenses paid for by this fund\*  
✓

This field is required.

Reason for increase or decrease in the requested budget for this fund  
✓

#### Attachments

[Download budget request template](#)

Browse...

No files selected.

No files uploaded

Save

Color Code	Object Type	Description	Test
	Input + selection Tag	Let user input different types of data: text, numbers and selection.	<ul style="list-style-type: none"> <li>+ Validate correct input</li> <li>+ Format values after input</li> <li>+ Display appropriate format</li> </ul>
	Div>Span>Strong Tag	Displays result of mathematical operation.	<ul style="list-style-type: none"> <li>+ Should initialize on 0</li> <li>+ Display correct format: red + parenthesis on negative and black on positive or 0</li> <li>+ Compute after click outside of element</li> </ul>
	Input> File tag	Enable user to upload a file	<ul style="list-style-type: none"> <li>+ Enabled and clickable</li> <li>+ Show uploaded files</li> <li>+ Enable to delete uploaded files</li> <li>+ Return success of uploading file</li> </ul>
	Span (button) tag	Button to submit form	<ul style="list-style-type: none"> <li>+ Enabled and clickable</li> <li>+ Executes validation, shows required unfilled fields</li> <li>+ When form is validate must return to list of funds.</li> </ul>

Area Description: Edit existing fund  
Controller: funds/edit/"fund\_reference"

## FoundationPortal

### FUND INFORMATION

#### Current status

Status  
Draft ✓

Fund number\*  
21333 ✓

Title\*  
New Found A ✓

Responsible person\*  
Person A ✓

Current fiscal year approved budget\*  
\$24,576 ✓

Current fiscal year projected expenditures\*  
\$23,867 ✓

Projected year-end balance: \$709 ✓

#### Next year projected budget

Projected increase or decrease\*  
\$26,789 ✓

Requested budget: \$51,365 ✓

#### Supporting information

Brief description of the program and types of expenses paid for by this fund\*  
Reason A ✓

Reason for increase or decrease in the requested budget for this fund\*  
Reason B ✓

#### Attachments

[Download budget request template](#)

Browse...

No files selected ✓

No files uploaded

Save

Color Code	Object Type	Description	Test
	Input + selection Tag	Let user input different types of data: text, numbers and selection.	<ul style="list-style-type: none"> <li>+ Load same information from list</li> <li>+ Validate correct input</li> <li>+ Format values after input</li> <li>+ Display appropriate format</li> </ul>
	Div>Span>Strong Tag	Displays result of mathematical operation.	<ul style="list-style-type: none"> <li>+ Should initialize on original value</li> <li>+ Display correct format: red + parenthesis on negative and black on positive or 0</li> <li>+ Compute after click outside of element</li> <li>+ Show updated value if there is changes</li> </ul>
	Input> File tag	Enable user to upload a file	<ul style="list-style-type: none"> <li>+ Enabled and clickable</li> <li>+ Enable to delete uploaded files</li> <li>+ Show Uploaded files</li> <li>+ Enable to delete uploaded files</li> <li>+ Return success of uploading file</li> </ul>
	Span (button) tag	Button to submit form	<ul style="list-style-type: none"> <li>+ Enabled and clickable</li> <li>+ Executes validation, shows required unfilled fields</li> <li>+ When form is validate must return to list of funds.</li> <li>+ Check if values where updated</li> </ul>