

Business Features

FOUNDATION PORTAL

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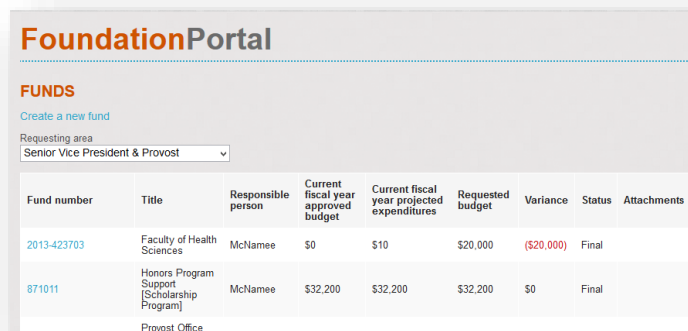
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1.1 Description of business functionalities

List funds

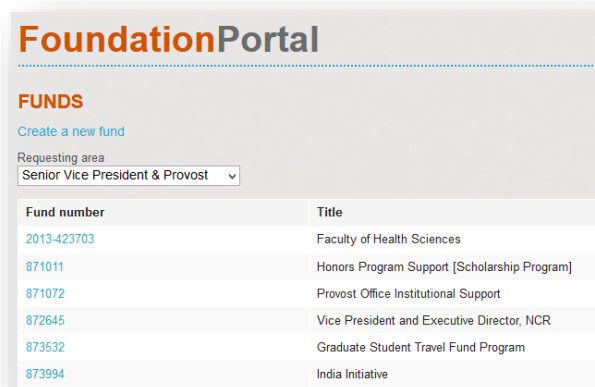
Funds are listed by Areas, they must only show their respective funds. There are 9 data fields that must show:

- Fund number
 - Will always have a link to the edit section
- Title
- Responsible person
- Current fiscal year approved budget
- Current fiscal year projected expenditures
- Requested budget
- Variance
 - Variance will be on red if negative
- Status
- Attachments



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	\$10	\$20,000	(\$20,000)	Final	
871011	Honors Program Support [Scholarship Program]	McNamee	\$32,200	\$32,200	\$32,200	\$0	Final	

Since the table has many columns when the size of the browser is not big enough, it will only show the first two columns: fund number and title.



Fund number	Title
2013-423703	Faculty of Health Sciences
871011	Honors Program Support [Scholarship Program]
871072	Provost Office Institutional Support
872645	Vice President and Executive Director, NCR
873532	Graduate Student Travel Fund Program
873994	India Initiative

In both of the cases mentioned before (big and small screen) there must be a link to proceed to create a fund on the list fund function. And the listing table might have enabled sort by functionalities on the table headers

Description of the html elements

List Elements			
Tag	Attribute	Class	Column name
a	data-bind="text: Number"		Fund number
td	data-bind="text: Title"	hide-for-medium-down	Title
td	data-bind="text: ResponsiblePerson"	hide-for-medium-down	Responsible person
td	data-bind="text: formattedCurrentBudget"	hide-for-medium-down	Current fiscal year approved budget
td	data-bind="text: formattedProjectedExpenditures"	hide-for-medium-down	Current fiscal year projected expenditures
td	data-bind="text: formattedRequestedBudget"	hide-for-medium-down	Requested budget
td	data-bind="text: formattedVariance"	hide-for-medium-down	Variance
td	data-bind="text: fundStatusText"	text-center hide-for-medium-down	Status
td	data-bind="foreach: FileUploads"	text-center hide-for-medium-down	Variance

Selection element		
Tag	Name	Label
Select	Area	Requesting area

Link to create new fund		
Tag	Attribute	Content
a	data-bind="click: navigateToCreateView"	Create a new fund

Create Fund

FoundationPortal

FUND INFORMATION

Current status

Status

Fund number*

Title*

Responsible person*

Current fiscal year approved budget*

Current fiscal year projected expenditures*

Projected year-end balance: \$0

Next year projected budget

Projected increase or decrease*

Requested budget: \$0

Supporting information

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

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

Attachments

[Download budget request template](#)

No files selected.

No files uploaded

This is the function for creating funds that will enable users to create in the authorized areas. There is a form that must be filled out, specifying which are the required fields by using a red "*" and client side validation.

Description of the html elements

Almost every input field is required, the next table describes the fields:

Required fields				
name	class	Type	Default	Description
Status	None	Select	Draft [value=1]	Options: Draft [value=1] Final [value=2] Defines: defines what type of fund and will be crucial when the type is final, since the user must not be allow to do changes.
Number	hide-on-print validationElement	Input – text & numbers	temporary- xxxxxxx-xxxx- 4xxx-yxxx- xxxxxxxxxxx	Defines: the number of the fun. It is made by randomizing number with the default format.
Title	hide-on-print	Input text	None	Defines: the name or title for the fund
ResponsiblePerson	hide-on-print	Input text	None	Defines: the name or title for the fund
CurrentBudget	hide-on-print	Input text - numbers	\$0	Defines: the current fiscal year approved budget
ProjectedExpenditures	hide-on-print	Input text - numbers	\$0	Defines: the current fiscal year projected expenditures
BudgetAdjustment	hide-on-print	Input text - numbers	\$0	Defines: the projected increase or desease on budget. Note: When inserted a negative number will turn red and will add parenthesis
Description	hide-on-print	textarea	None	Defines: a brief description of the program and type of expenses paid for by this fund

Not Required fields				
name	class	Type	Default	Description
BudgetAdjustmentNote	hide-on-print	textarea	None	Defines: a reason for increase or decrease in the requested budget for this fund Required: only when there is decrease or increase in the budget field.
files[]	None	Input file	None	Defines: attachment files for the fund, allows multiple files.

Submit Button		
class	Type	Text
Text-button	span	Save

Manage Fund

This is a functionality that enables the user with the appropriate role to delete funds that have been inserted into the system.

FoundationPortal

MANAGE FUNDS

Requesting area

President

Fund number	Title
21333	New Found A
871013	Virginia Business-Higher Education Council
871331	University Special Activities
881856	President's Institutional Expense
temporary-00bce870-0bfd-4087-88c5-a4621a5565e2	Freddy Smoot
temporary-172cb305-fbbf-4ad0-bd79-d3b04626ff1b	Test President Fund
temporary-d2492f04-ecf9-4f35-ad2b-6c1073808b98	Foobar
temporary-dfa4b0df-c2b4-42a1-8eae-d5c5f9769a09	Stephen Davis

Description of the html elements

Selection element		
Tag	Name	Label
Select	Area	Requesting area

List Elements			
Tag	Attribute	Class	Column name
table	data-bind="visible: !noItemsToShow()"	bumped	NA
th			Table Headers
Td a	data-bind="fastbutton: \$root.selectItem"		Fund number
Td a	data-bind="fastbutton: \$root.selectItem">		Title

Report

The report section is similar to the list functionality but it does make subtotals for each one of for the areas and a bottom line total for all the areas but not including "Other uses of funds".

There are 7 fields displayed in the report:

- Fund number
- Title
- Responsible person
- Current fiscal year approved budget
- Current fiscal year projected expenditures
- Requested budget
- Variance
 - Variance will be on red if negative

FoundationPortal						
FUNDING REQUEST REPORT						
Download Excel version						
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-fb6f4ad0-bd79-d3b04626ff1b	Test President Fund	Greer	\$2,500	\$2,500	\$2,500	\$0
temporary-85ad2880-c951-4a21-95e3-6d80ab303fbc	Foobar	Sometimes	\$1,000,000,000	\$1	\$1,828,388,998	(\$828,388,998)
temporary-dfa4b0df-c2b4-42a1-8eae-d5c5f9769a09	Stephen Davis	Norv	\$0	\$0	\$0	\$0
Total for President			\$1,000,357,081	\$356,374	\$1,828,772,868	(\$828,415,787)
Senior Vice President & Provost						
2013-423703	Faculty of Health	McNamee	\$0	\$10	\$21,100	(\$21,100)
temporary-20ad7629-5be4-49f9-a53f-fb6a2ae49299	Test #5	Greer	\$0	\$0	\$500	(\$500)
temporary-5ea40a6f-7886-4604-8b6d-6fbfb65ba6	Test #4	Greer	\$0	\$0	\$0	\$0
Total for Vice President for Finance & CFO			\$2,648,463	\$2,410,069	\$2,718,838	(\$70,375)
Grand totals			\$2,018,016,550	\$15,554,988	\$3,676,285,668	(\$1,658,269,118)
Other uses of funds						
455963	Other Found	Person OTHER	\$30,000	\$15,000	\$20,000	\$10,000
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)
ca37de66a81	Fred Smoot	Norv Turner	\$5	\$5	\$5	\$0
d8102aff8d3	Brad Johnson	Norv Turner	\$7	\$7	\$7	\$0
Total for Other uses of funds			\$2,345,806	\$2,330,806	\$2,478,242	(\$132,436)

Description of the html elements

List Elements			
Tag	Attribute	Class	Column name
a	data-bind="text: Number"		Fund number
td	data-bind="text: Title"	hide-for-medium-down	Title
td	data-bind="text: ResponsiblePerson"	hide-for-medium-down	Responsible person
td	data-bind="text: formattedCurrentBudget"	hide-for-medium-down	Current fiscal year approved budget
td	data-bind="text: formattedProjectedExpenditures"	hide-for-medium-down	Current fiscal year projected expenditures
td	data-bind="text: formattedRequestedBudget"	hide-for-medium-down	Requested budget
td	data-bind="text: formattedVariance"	hide-for-medium-down	Variance

Subtotals Rows			
Tag	Attributes	Class	Element content
tr	none	subtotal	Area name
td	data-bind="text: formattedCurrentBudget"	hide-for-medium-down	Current fiscal year approved budget
td	data-bind="text: formattedProjectedExpenditures"	hide-for-medium-down	Current fiscal year projected expenditures
td	data-bind="text: formattedRequestedBudget"	hide-for-medium-down	Requested budget
td	data-bind="text: formattedVariance"	hide-for-medium-down	Variance

Total Row			
Tag	Attributes	Class	Element content
tr	none	grandtotal	Grand totals
td	data-bind="text: formattedCurrentBudget"	hide-for-medium-down	Current fiscal year approved budget
td	data-bind="text: formattedProjectedExpenditures"	hide-for-medium-down	Current fiscal year projected expenditures
td	data-bind="text: formattedRequestedBudget"	hide-for-medium-down	Requested budget
td	data-bind="text: formattedVariance"	hide-for-medium-down	Variance

1.3 Description of user infrastructure

The users will use different devices to connect to the website, this will require from the system to handle different resolutions while not losing format or by adapting a mobile format. The resolutions enlisted in the requirement for the build were:

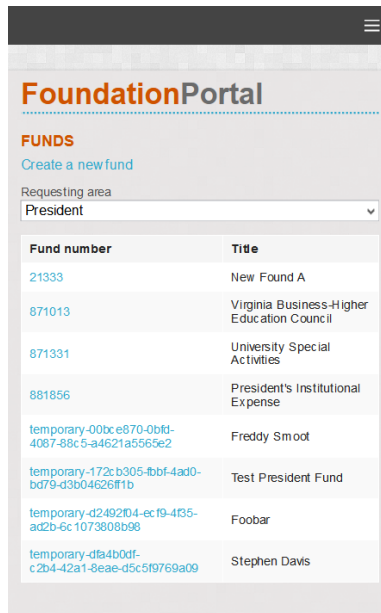
- Desktop (1280x800)
- Tablet/Classic (1024x768)
- Mobile (320x568)
- Large Mobile (480x800)

Fund number	Title	Responsible person	Current fiscal year approved budget	Current fiscal year projected expenditures	Requested budget	Variance	Status	Attachments
21333	New Found A	Person A	\$24,870	\$23,867	\$7,781	\$16,780	Draft	
871013	Virginia Business-Higher Education Council	ORourke	\$20,005	\$20,000	\$20,005	\$0	Final	
871331	University Special Activities	ORourke	\$260,000	\$260,005	\$260,000	\$0	Final	
881856	President's Institutional Expense	ORourke	\$50,000	\$50,000	\$50,000	\$0	Final	
temporary-00bce870-0b8d-4087-88c5-a4621a5555e2	Freddy Smoot	Novak Turner	\$0	\$0	\$0	\$0	Draft	
temporary-172cb305-fbbf-4ad0-bd79-d3b04626f1b	Test President Fund	Greer	\$2,500	\$2,500	\$2,500	\$0	Draft	
temporary-d2492f04-ecf9-4855-ad2b-6c1073808b98	Footbar	Peterson	\$1,231	\$1,231	\$1,543	(\$312)	Draft	
temporary-dfa4b0df-c2b4-42a1-8eae-d5c58769a09	Stephen Davis	Novak	\$0	\$0	\$0	\$0	Draft	

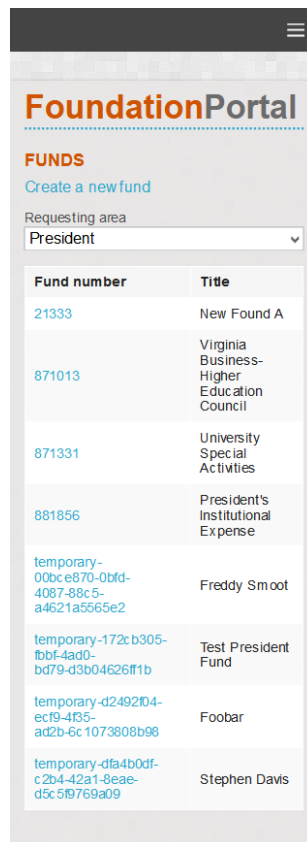
Desktop (1280x800)

Fund number	Title
21333	New Found A
871013	Virginia Business-Higher Education Council
871331	University Special Activities
881856	President's Institutional Expense
temporary-00bce870-0b8d-4087-88c5-a4621a5555e2	Freddy Smoot
temporary-172cb305-fbbf-4ad0-bd79-d3b04626f1b	Test President Fund
temporary-d2492f04-ecf9-4855-ad2b-6c1073808b98	Footbar
temporary-dfa4b0df-c2b4-42a1-8eae-d5c58769a09	Stephen Davis

Tablet/Classic (1024x768)



Mobile (320x568)



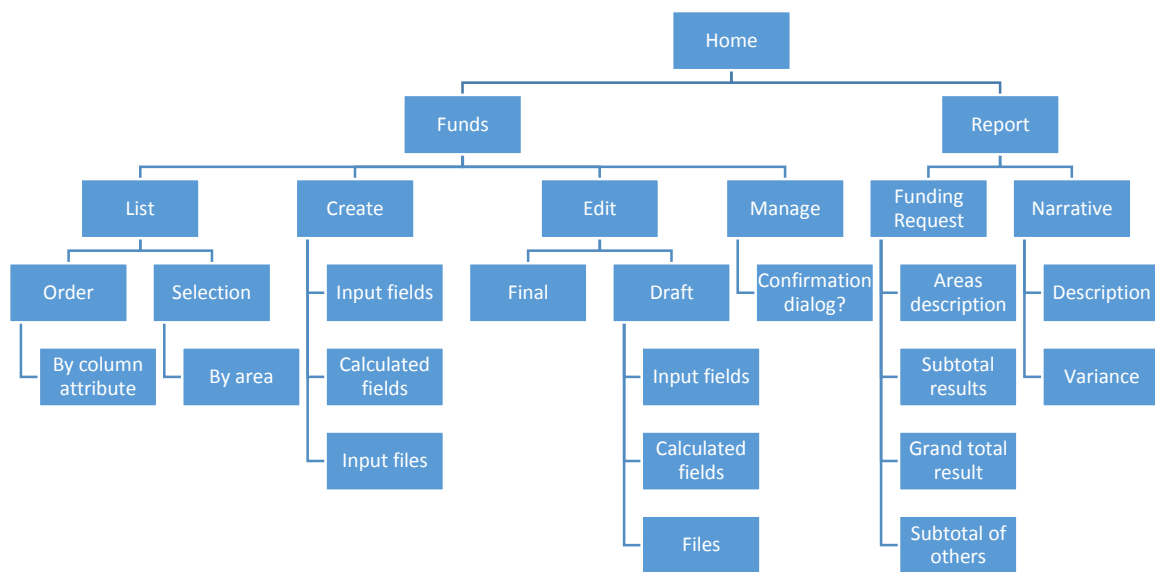
Large Mobile (480x800)

This devices will also have a different user interaction, this is mostly because they don't use the same peripherals to interact with the site. Principal problems between desktop and mobile devices are:

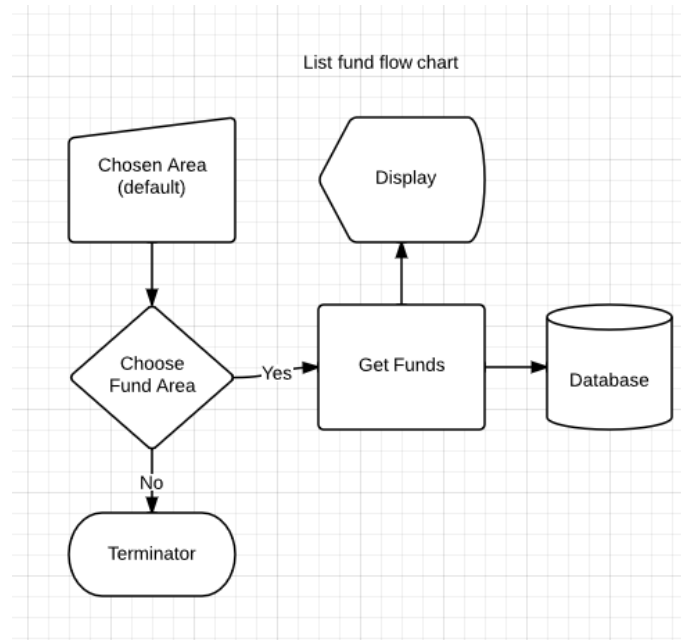
- Click feature: done by a mouse on a computer and done by a touchable screen on the mobile devices.
- Hover feature: there is no hover feature on mobile devices
- Long information: mobile interfaces have to be able to display an understandable version of a long width wise line.
 - In the list function: there is only the visualization of the number of fund and the title.
 - In the report function: there is only the visualization of title and requested budget.

2.1 User Interaction with functionalities

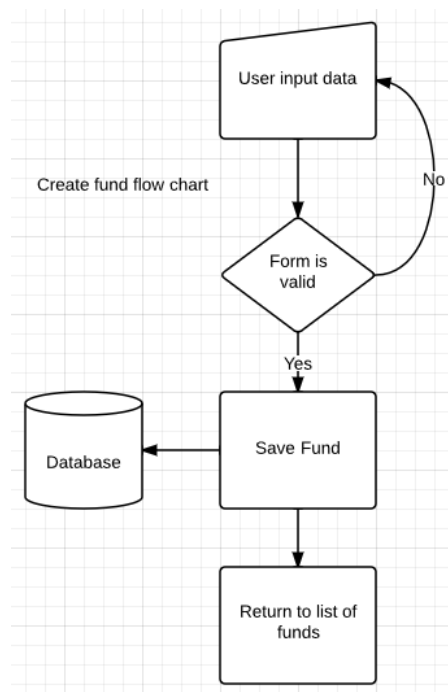
2.1.1 Functionalities diagram



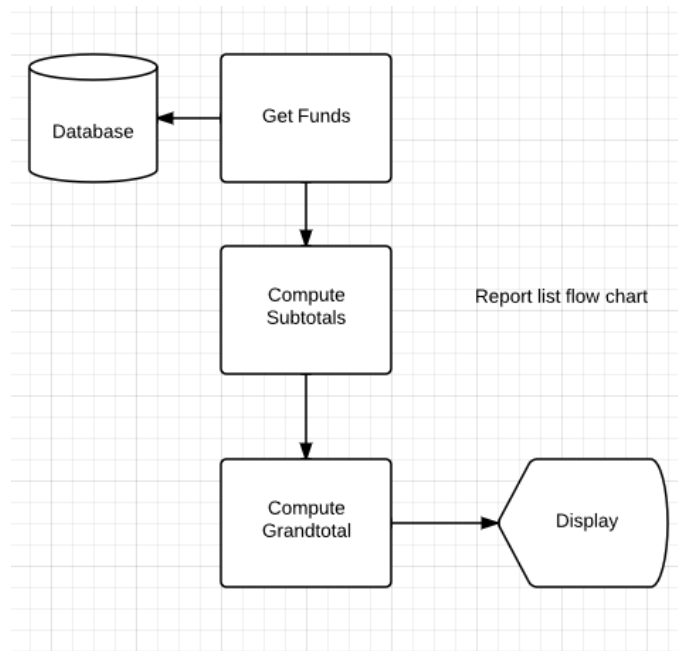
2.1.2 Functionalities flow chart



List funds flow chart



Create Fund Flow chart



Report List flow chart

2.1.3 User input data integrity

The user data integrity is addressed in two generic functionalities of the UI interface: display and input.

Display

On the matter of display information the data has to be reliable from the server side but on the matter of UI interface data has to be well displayed so it maintains integrity. Calculations have rely on the integrity of the data used and the display must ensure to display a correct value.

Input

Input data will have integrity if once introduced is formatted correctly and saved. This means that the updated or new data can be found in the application and is formatted correctly.

Foundation Portal cases

The following are cases pointed on the images are the critic for data integrity in the Foundation Portal in terms of display.

FUNDS								
Create a new fund								
Requesting area								
President								
Fund number	Title	Responsible person	Current fiscal year approved budget	Current fiscal year projected expenditures	Requested budget	Variance	Status	Attach
21333	New Found A	Person A	\$24,576	\$23,867	\$51,365	(\$26,789)	Draft	

Fund List case

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**

Fund create & edit calculations case

881923	Automobile Allowances	Shelton	\$32,850	\$32,550	\$32,325	\$525
temporary-20ad7629-5be4-49f9-a53f-fb6a2ae49299	Test #5	Greer	\$0	\$0	\$500	(\$500)
temporary-5ea40a6f-7886-4604-8b6d-6fbfbff65ba6	Test #4	Greer	\$0	\$0	\$0	\$0
Total for Vice President for Finance & CFO			\$2,648,463	\$2,410,069	\$2,718,838	(\$70,375)
Grand totals			\$1,009,008,275	\$7,777,299	\$1,838,142,834	(\$829,134,559)

Report list case

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

Edit & Create input fields case

2.3 Client Infrastructure interaction with the portal

The infrastructure of the client is important in terms of User Interface, since the infrastructure will be in charge of loading the website and interacting with it. This is a complex topic since each infrastructure will implement different software that will handle the UI on a different way. The documentation is intended to explain most common client infrastructure the portal will have to respond.

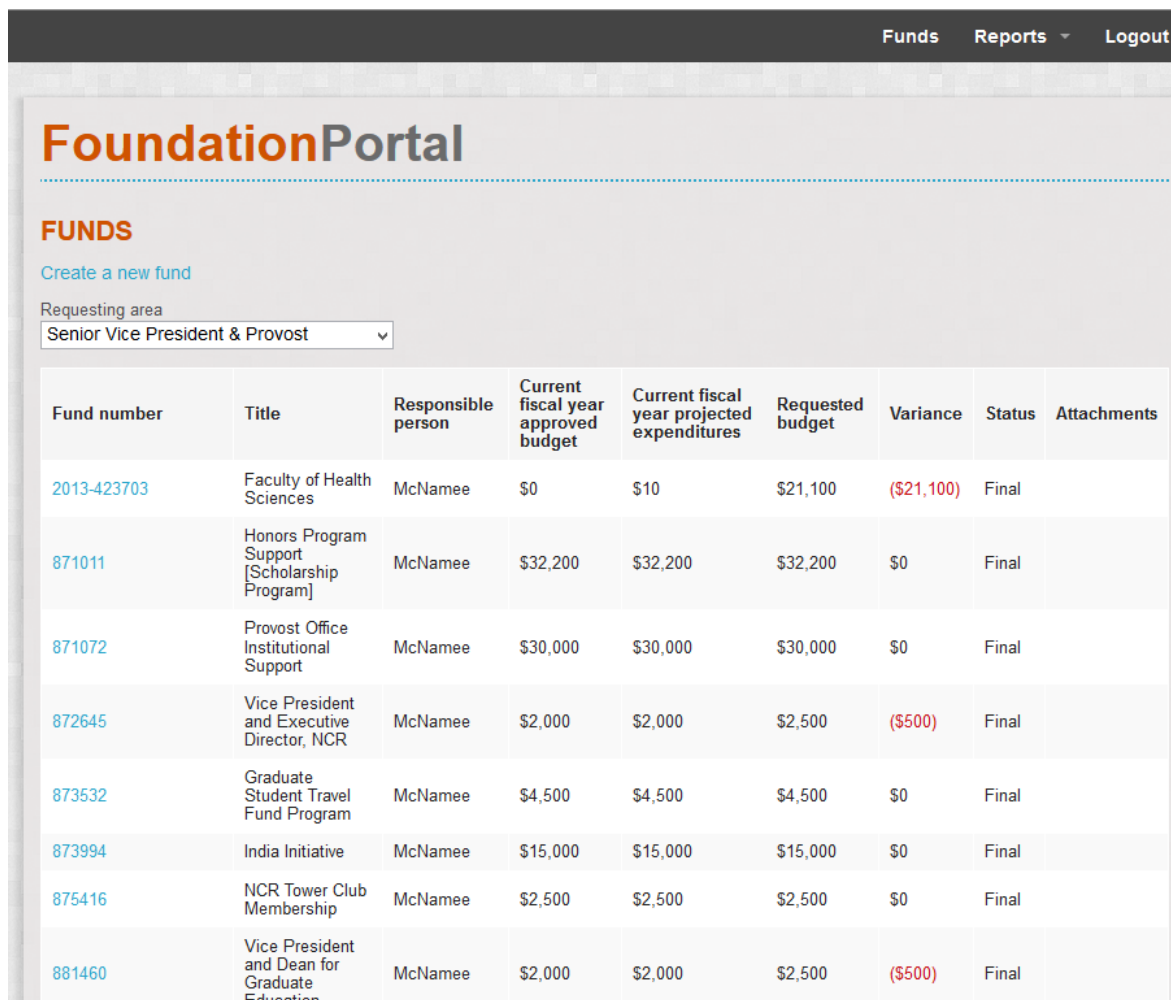
The portal has implemented a responsive CSS framework capable of handling different infrastructure. Frameworks on the user interface are intended to maintain format and adapt to different resolutions without losing the main content. In most of the cases there will be a full site UI and a mobile UI.

2.3.1 Description of different devices and resolution systems

There are two main divisions of devices: computers and mobile computers. They have to main differences besides all the technology that runs on the background: resolution and input geastures.

The resolution varies between non mobile computer but they are characterized to have bigger resolution and most of the times have a mouse peripheral connected to the system. On the mobile side, the resolution are most of the time small and the input peripheral most of the times will be a touchable screen.

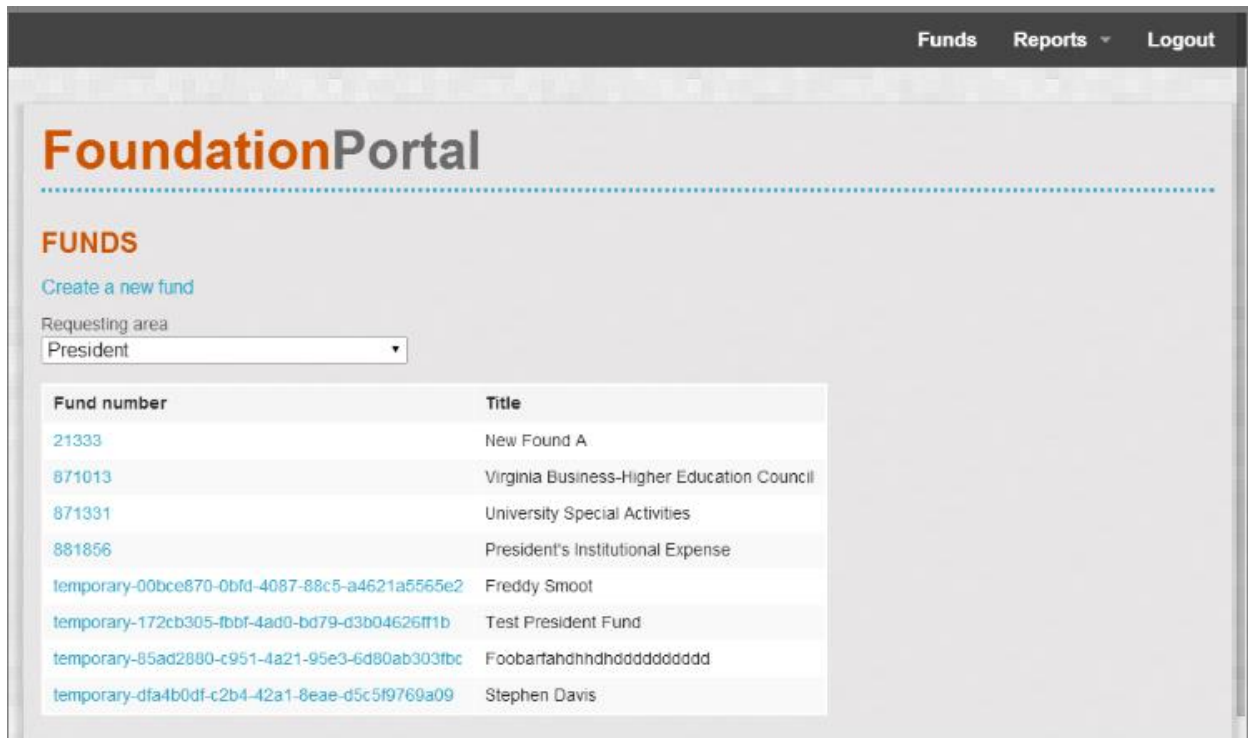
The Foundation portal displayed in the two divisions can be seen in the following pictures:



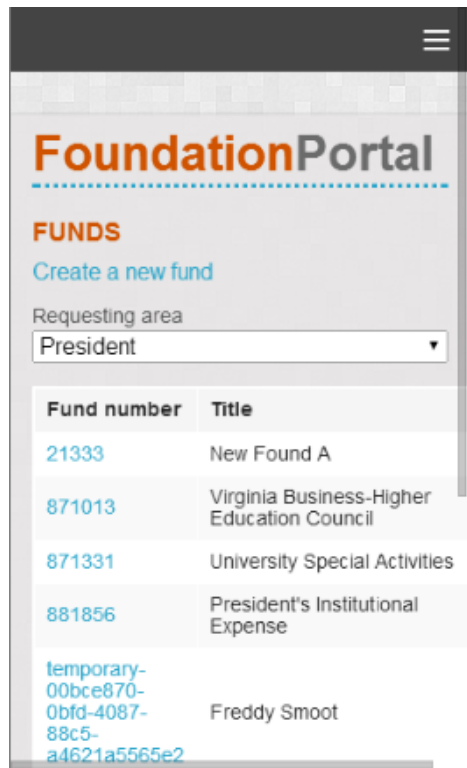
The screenshot displays the 'FoundationPortal' interface. At the top, there is a navigation bar with 'Funds', 'Reports', and 'Logout' links. Below the header, the title 'FoundationPortal' is prominently displayed. Underneath, the section 'FUNDS' is shown, followed by a link 'Create a new fund'. A dropdown menu for 'Requesting area' is set to 'Senior Vice President & Provost'. The main content is a table with the following data:

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	\$10	\$21,100	(\$21,100)	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	

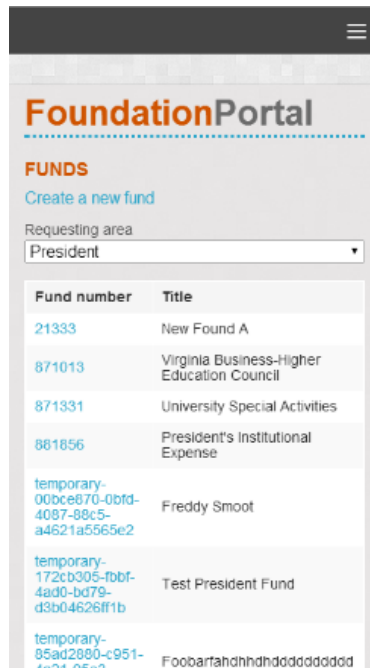
Full site visualization



Tablet. Samsung Galaxy Tab (1024x600)

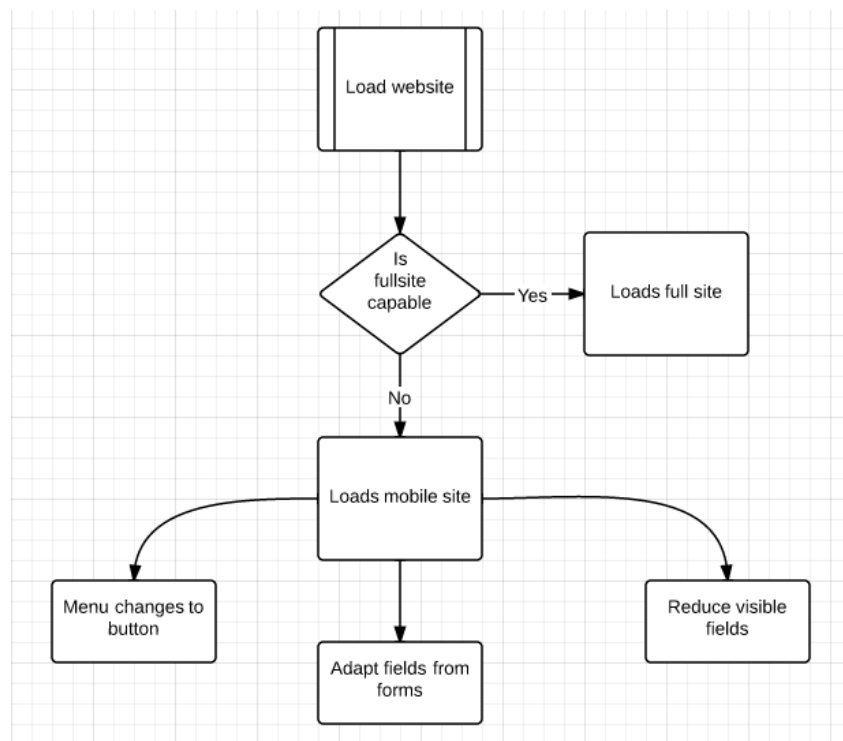


Large Mobile. Samsung Galaxy S,II,W (480x800)



Mobile. Nokia C5, C7, N97, N8, X7 (360 x640)

2.3.2 Response flow chart to different client infrastructure



CSS Framework adaptability