Staff Manual

for

CoE Surface Application

Version 2.1

Prepared by Best Team Ever

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Table of Contents

1.0. Introduction

The College of Engineering (CoE) Surface Application for the University of Idaho allows visitors to view available curriculum within specific departments of the college, as well as other useful tools for incoming students/parents.

The CoE surface application is tailored primarily to incoming students and parents, but can also be used by current students. The application provides staff the tools and content needed to give out information to prospective students on a fun and engaging platform.

The Microsoft Surface machine will be located in the John C. Wahl Think Tank in the Janssen Engineering Building (JEB). Figure 1 shows the Microsoft Surface Computer.

Fig 1. Microsoft Surface Computer

The following is a guide to using the XML Surface Application. The purpose of this application is to edit the XML files used to build the CoESiC application. The XML Surface Application will allow for editing, creating, or deleting of XML files. The application is to be used when new data has become available for updating the CoESiC Surface Application to keep its content current and updated.

This product includes software developed by the SpeedLegal Group foruse in the Xerlin XML Editor www.xerlin.org and software developed by ChannelPoint, Inc. for use in the Merlot XML Editor www.merlotxml.org.

2.0. Starting Up

1. Turn on the surface by pressing the power button. The power button is located on the front of the surface, underneath the Samsung logo as shown in figure 2.

Fig 2. Powering on the Surface

1. The surface is a touch screen, so no mouse, keyboard or other external interface devices are required

3.0. Using the Surface

3.1. Using the Surface

1. After starting up, the Surface application bar appears. To begin the application, simply touch the executable labeled “CoESiC” (College of Engineering Student Information Center) from the application bar thumbnails shown in figure 3 below.

Fig 3. Surface Application Selection

2. After the application has loaded, the CoESiC start screen will appear shown in figure 4.

Fig 4. CoESiC Start Screen

3. Touching the start button will bring up the main gallery frame, which is the linear set up of icons shown in figure 5. The main gallery frame is how you access all of the application's features and menus. Multiple users may touch the "Start" button and launch their own gallery frames simultaneously.

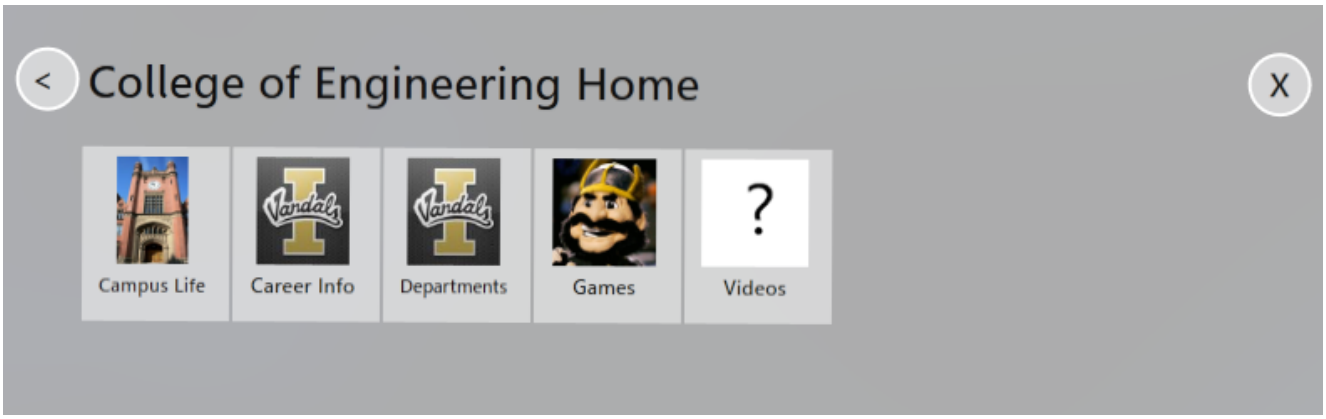

Fig 5. Main Gallery Frame

3.2. Student Usage

The following is an overview of the functions of the Main Gallery Frame. For more information refer to the User Manual.

Campus Life

Contains Campus Maps, and an Interactive Campus Tour

Career Info

Contains Info-graphics about possible careers options from specific degrees offered by the University of Idaho College of Engineering.

Departments

Contains a list of the different engineering departments part of the College of Engineering as well as useful information about each department

Games

Lists games that have been added to the application for entertainment

Videos

Official University of Idaho media elements showing student life,

interactions and recruitment information. If there are available videos for one of the main gallery frame choices above, they will be listed within the that gallery frame, and touching the video icon will launch the video.

4.0. Making Surface Application Content Changes

The College of Engineering(CoE) Surface Application uses XML files to build its frames and link to its content. To allow University of Idaho Staff to edit and add to what appears on the Surface Application, we will provide an XML editor called the XML Surface Application.

4.1.0 XML Surface Application

- The XML Surface Application can be downloaded from www.github.com/pina3608/XMLSurface
- To start the application simply unzip the document and double click on the XMLSurface-1.0.jar file.
- The XML Surface Application will then start at the following screen (Fig. 1).
- The toolbar that is shown in the top left is expanded in Figure 2.

Fig. 1 XML Surface Application

4.1.1 Toolbar Usage

a. The following will guide the user of the XML Surface Application through using the Editor Toolbar (Fig. 2) to:
   i. Create a new file.
   ii. Edit an existing file.
   iii. Save a file.

Fig. 2 Editor Toolbar

1. The first button above will prompt the user (Fig. 3) for creation of a new XML file. The user can select from an assortment of frame types to create an XML file from. The type of frame selected will allow for creation of different frame types that can hold different data for example a DataFrame can display documents on the CoESiC application. To learn more about frame types, refer to the SRS. The creation of new XML files allows for the content of the CoESiC application to be added to. Next we will go over updating content with the next button on the toolbar.

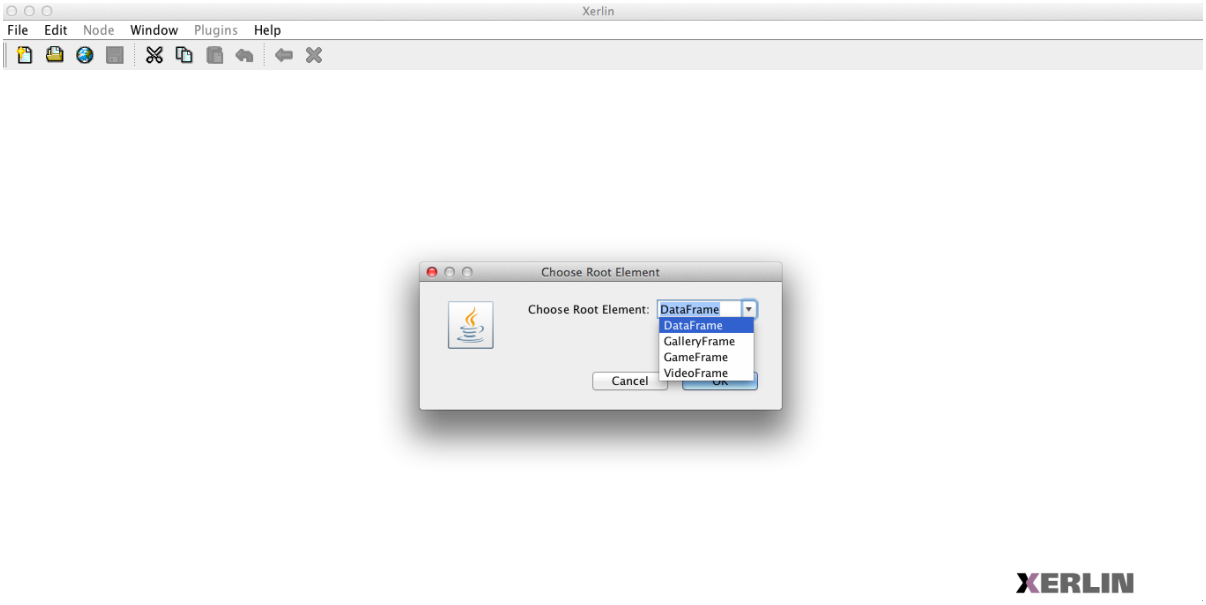

Fig. 3 Creating a New XML File

2. The second button on the Editor Toolbar will allow the user to open an existing XML file for editing. This will allow the user to edit XML files to change for instance the image that is being displayed on the CoESiC application. The file opening operation is handled in the standard for your operating system. This allows the College to perform their own updating to the content being presented on the CoESiC application. With the XML Surface Application then, the University of Idaho is already able to sustain this project long after release

without the need for any team member input.

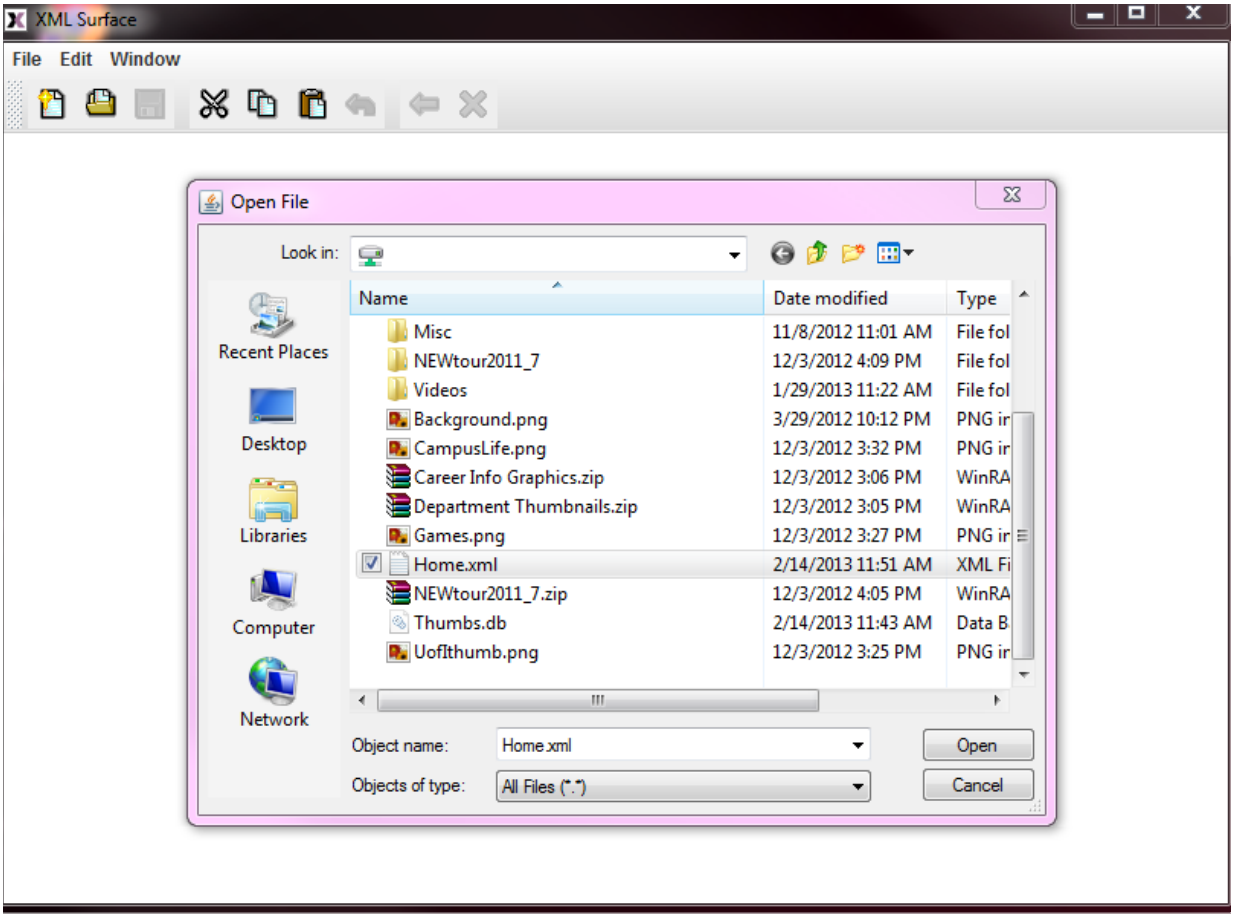

Fig. 4 Editing an Existing XML File

3. The third button on the Editor Toolbar allows the user to save the work they have done to the current XML file (Fig. 5). The file should be named appropriately. For more information on this see section 4.3, Deploying XML Files. As with opening files saving files is done in the standard of your operating system. This is the final part of being able to sustain the project long after completion without any necessary input from team members.

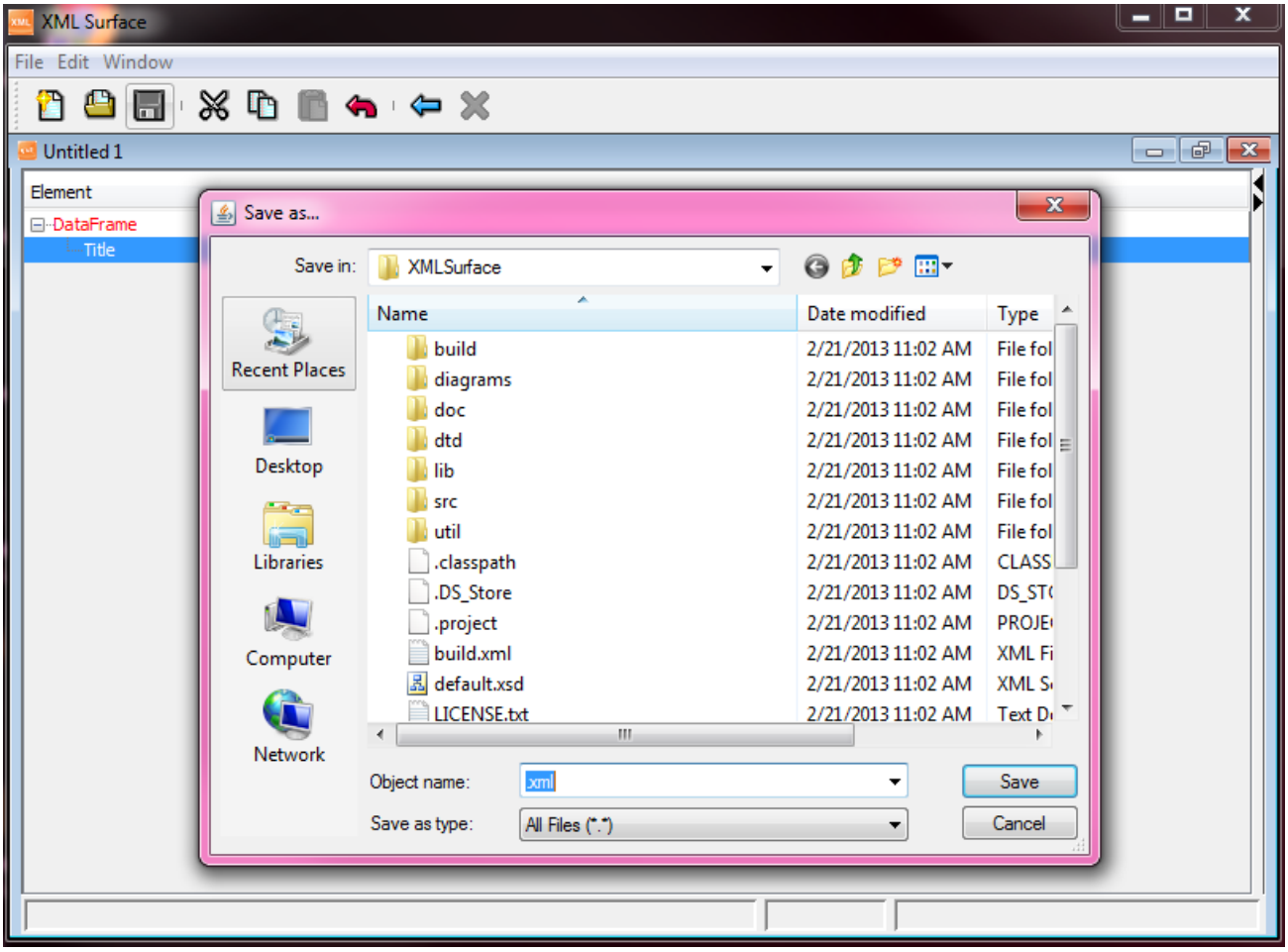

Fig. 5 Saving Changes

4.1.2 Editing the XML Files

The following is a narrative guide to editing the content of the XML files. This will allow the user to actually affect what is being presented on the CoESiC application. As a note, make sure that what you have created, saved, and deployed is actually working on the CoESiC Surface Application! Making sure what you have just created is actually working is up to you. There is no outside tester or easy way to make sure it works so you must go test this on the Surface table itself. Read more in section 4.4.

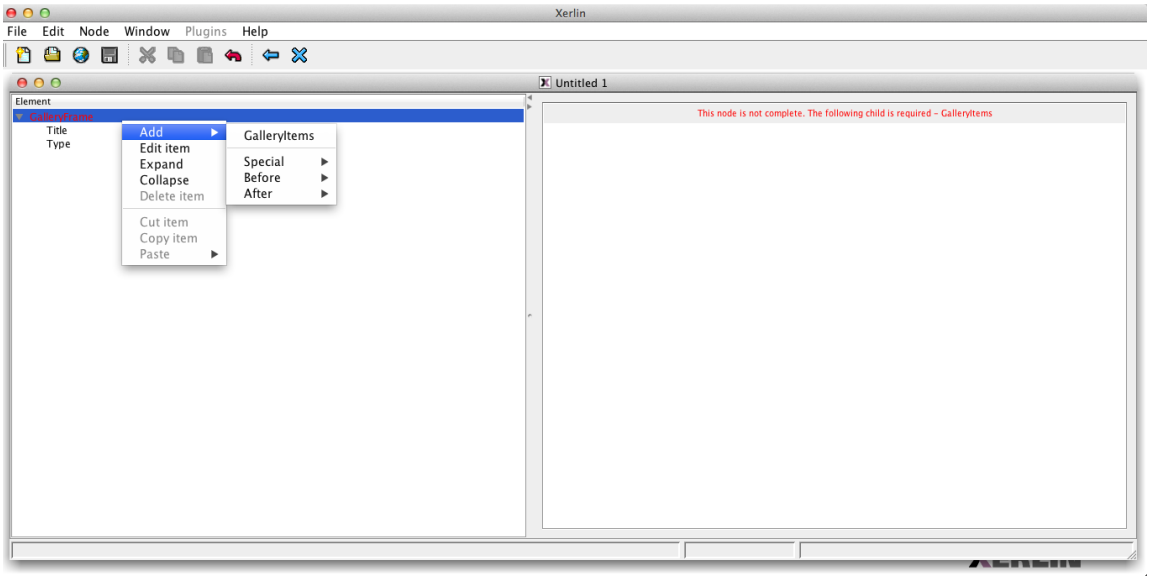

Fig. 6 Adding Content to XML Files

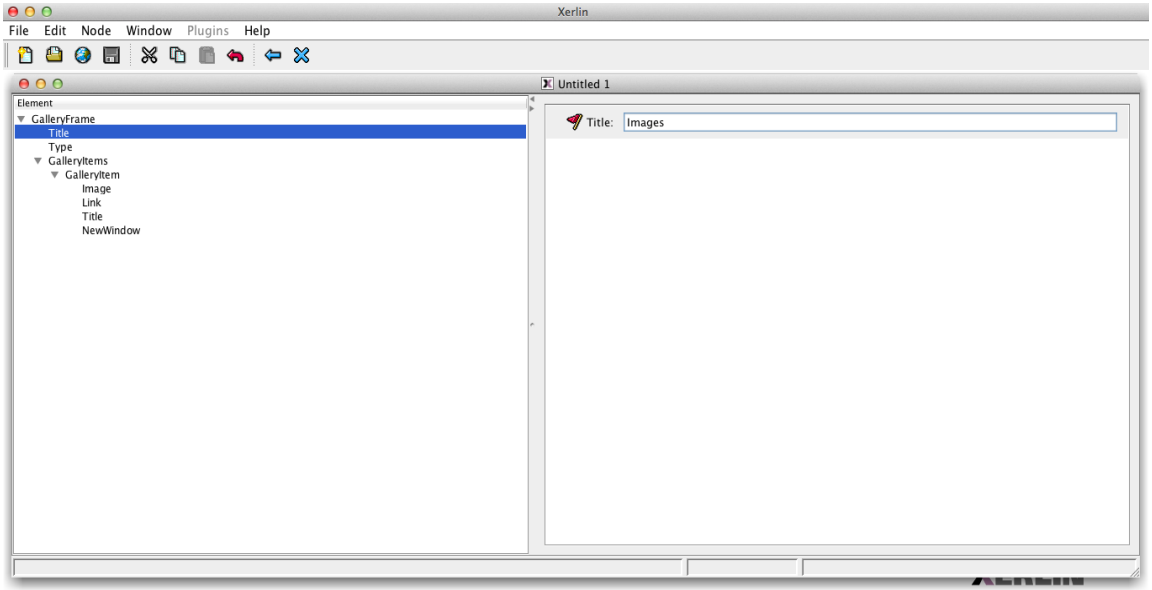

Fig. 7 Editing Content in the XML Files

To edit an XML item, right click on the item and choose the “Add” button in the window that appears. Then edit the item by using the text field that appears to the right. If a browse option is available to perhaps link an image or other XML document, it will appear near the text field. When linking in such images make sure that the images are in their desired location for use after the XML file is saved, otherwise they will not be linked correctly. Above in Figures 6 and 7, adding content to the XML files is shown. Figure 6 shows the aforementioned “Add” button. The window that this is located in is found by right clicking on the item you wish to add content too. In Figure 7 we have added a new item to our Gallery Frame and all of its item possibilities.

To edit the content that these items indicate, look for the text box that appears in the right hand pane of the editor. Rules for the entry fields include: simple text for Title fields, full paths to documents, pictures and videos for Images, Video and Link fields, setting of a flag (true/false) for New Window fields, the Type field should always be the same as the root element for that XML file, and finally all fields for an item are required for the XML file to produce the correct data on the Surface Application. The element will glow red if that element is not complete. This means that the XML file will not work correctly if saved and used.

4.2. Sample CoESiC XML File

The following is a step by step guide to creating a Gallery Frame that has one Data Frame. To begin open the XML Surface Application. Click on the Create New File button and choose Gallery Frame as the Root Element (Figure 3 shows this step). After pressing OK, right click on the element that was created called “GalleryFrame”. A window will appear that will allow you to add items to your “GalleryFrame”. The GalleryFrame is the main navigation window for the CoESiC Surface Application. You should now have a “Title”, “Type”, and “GalleryItem” listed under your “GalleryFrame” element. If not refer to Figures 6 and 7 and read the section 4.1.2, Editing the XML file. Now left click on the “Title” item. Following the guidelines defined in 4.1.2, enter a title here. You can also do the same for the “Type” item following the same guidelines as before. Before we add a Gallery Item however we should make Data Frame that we can link to. To do this Add a new file like before but choose Data Frame as the root element. Add the “Title”, “Type”, and “ImagePaths” items as we did before and fill in their appropriate content. For the Image Paths, in the “Image” text box in the upper right hand side of the screen, enter the complete file location and file name. For example, “C:\My Documents\My Pictures\myimage.png.Note that each time the CoESiC program is executed, the program will retrieve the file from this location. If the file is moved from that location (even to an adjacent folder), that image will not be displayed on program execution. You may save the XML file, as in figure 5, at anytime. You are now ready to go back to the GalleryFrame element we created earlier and edit the GalleryItem. Adding the “Title” and “NewWindow” can be done the same as before as well as the “Image” item which is for thumbnail. The “Link” item should be linked to the DataFrame XML file that we just created. We are now ready to save this XML file. Do so by following section 4.3’s guidelines and what was just built will appear on the CoESiC Surface Application.

4.3. Deploying XML Files

- The head file should always be named Home.xml.
- Put this document in \\files.uidaho.edu\shared\Engineering\Surface.
- Before creating any XML files make sure that all resources like images and videos are located in the above directory and that the XML files you create use this path for the creation of XML files. The CoESiC application can only see into this drive and if the resources are not found the application will act unexpectedly and crash.

- Other then Home.xml all file names are at the disposal of the creator but we suggest using the name of the title used in each XML file as the title of the file itself. For example, a file with a title CampusLife.xml would supposedly have some content relating to Campus Life such as maps and tours. Following this same line of thought, Departments.xml would have content relating to departments, Videos.xml would have video content and the idea continues as such.
- Intuitive names are much clearer and allow users to learn more about the file and its content without spending time looking through each individual file.

4.4. XML Files Note

- After changing any content within the Surface Application mount point, the person making the change **MUST** test whether or not they have broken the application. The CoESiC Surface Application is built one XML file at a time. This means that if you break the Home.xml file nothing will work. If you break one of the XML files under the Home.xml file just that branch of files will break. Other content will still work if they can be navigated too without using the XML file that is broken.
- Following the naming conventions used in section 4.3 will allow multiple users of this application to work together and understand what each file is most likely doing and will cut down on confusion and lost time working on gaining understanding of the what the last person was trying to do with that file.

5.0 University of Idaho Style Guide Annex

5.1. Purpose

This section provides additional material to the **University of Idaho Web Style Guide**. Designers wishing to create graphic content for **CoE Surface Application** are advised to adhere to guidelines in this section to maintain the University of Idaho brand identity. If not explicitly defined in this section, refer to the appropriate Style Guide, as suits your needs. All logos, icons, and other copyrighted material used in conjunction with this document must adhere to the previously defined guidelines.

- Section 1.1 Color Scheme and Suggested Use
- Section 1.2 Navigation Buttons and use
- Section 1.3 Application Window Design Guidelines
- If not explicitly stated in this document, refer to the guidelines of the University of Idaho Web Style Guide.

5.2 Color Scheme and Definitions

Swatch	*Color Info*	*Use Notes*
 *	**“Gold”** #8b7b56 Red: 139 Green: 123 Blue: 86	• Buttons that Navigate to other pages • Large Titles • Sidebar background color
*	**“Light Gold”** #ffe1a5 Red: 225 Green: 225 Blue: 165	• Title text against darl (“grey” or “black”) background • Navigation Button color
*	**“Silver”** #e3e3e3 Red: 227 Green: 227 Blue: 227	• Default text field color • Main User-space color
 *	**“Grey”** #5c5c5c Red: 92 Green: 92 Blue: 92	• Default Background Color • Navigation button color
 *	**“Black”** #262626 Red: 38 Green: 38 Blue: 38	• “Options” field background color • Field text color
 *	**“Teal”** #527375 Red: 82 Green: 115 Blue: 117	• Special button color • Use sparingly

5.3 Navigation Buttons

Image	*Definition*	*Use*
	"Close Button" closeButton.jpg	• close window navigation
 *	**"Navigation Button"** arrow.jpg	• Move left/right style window navigation • Up/down for window expansion or contraction
 *	**"InPicture Button"** inpictureButton.jpg	• New Page navigation located within a picture
 *	**"Button"** button.jpg	• New page navigation located in text or information field
 *	**"Expansion Button"** ExpantionButton.jpg	• Drop-down menu navigation in text or information field
 *	**"Play Button"** playButton.jpg	• Indicates a link to video media

5.4 Application Window Design

5.4.1 ScatterViewItem

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Rounded

- 10 points of rounding
- No more than 2 points of border piping
- Acceptable Effects:
    - Drop Shadow (Gaussian Blur, radius no more than 4 px)
    - Vertical Gradient (-10% - 10% saturation only)

Sharp

- No piping or rounding
- Acceptable effects:
    - Transparency

5.4.2 Internal Window Layout

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Image Thumbnails

- Flush, no piping
- May serve as navigation to new window buttons
- Suggested ratio
    - 1:3 for small thumbnails
    - 1:2 for Larger images

 *

Text Spacing Lines

- Should be an embossed “grey” line.
- 0.5 of line line distance between text fields