# Software Design & Engineering Artifact Enhancement Danielle Hoopes

Southern New Hampshire University

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## **Author Note**

This details the enhancement process for Software Design/Engineering artifact justifying its inclusion in the ePortfolio as outlined by the course objectives for CS-499 Computer Science Capstone course.

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## Abstract

Following the enhancements outlined in ePortfolio selection and Milestone One assignments, I will demonstrate my ability to implement design solutions using innovative skills and techniques, solve logic problems, address design flaws related to security, and articulate ideas as demonstrated by the working artifact.

### Software Design & Engineering Artifact Enhancement

## **Artifact Description**

I have chosen to improve efficiency, and functionality of my code for the SNHU Travel site built using Java GUI packages CS 320. I have improved the software and transferred the project a Bootstrap web application high-fidelity prototype.

## **SNHU Travel**

Business Case	Create a valuable solution for SNHU Travel that will grow their customer base with new tool and assets.		
User Acceptance Criteria	<ul> <li>Ability to click link that takes user to page listing top destinations</li> <li>Each destination will have the following attributes: <ol> <li>Destination Name</li> <li>Short Description</li> <li>High-Resolution Photograph</li> <li>Text with embedded link</li> </ol> </li> </ul>		

#### **Artifact Inclusion Justification**

I selected this artifact because it is conducive to the higher standards of web development today. Skills that include building mobile-first applications are very important in today's job market. Bootstrap enables me to use responsive and interactive JavaScript providing consistent styling across all browsers.

#### **Planned Enhancements Review**

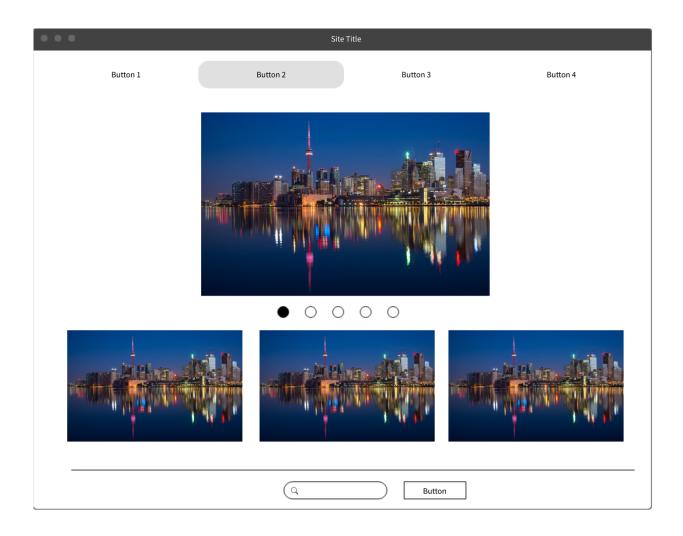
Designing for a web application requires reflection concerning simplicity and making individual pages into an experience within themselves. A web application must be responsive and simple to compete with the plethora of mobile applications today.

#### Steps:

- 1. Develop page less experience Pageless sites give the user a responsive experience with clear features that accustomed mobile users can appreciate this design.
- 2. Create interactive features that create a visceral response within the user creating a feedback loop that encourage repetitive action.
- 3. It is hard to share an entire website with someone, but with a pageless design we create something that can be shared with friends, coworkers, or the world to organically bring visitors to the application.

#### Potential User Path (1):

- **1.Login** –A returning user might login and then being searching
- **2.Registration**-A new user could choose registration before beginning
- **3.Use predictive search-**A user who is already logged in, or does not want to login or register can go straight into searching
- **3.** Choose from list of vacations: first screen of the application defaults to featured destinations and the user could just be in a hurry and choose one of these.



### **Enhancement Process Reflection**

During the enhancement process it did take time to review the previous requirements for the travel site and convert Java .awt classes into corresponding bootstrap components. Each component such as Frame and Panel used to hold components had to be broken down into containers and BS layout controls. The AWT Component classes such as Button, TextField, and Label now have responsive JavaScript components instead such as .active, .alert., etc. All of this

of course is backed by both Boostrap's grid utility and custom CSS. I will continue to work to enhance the site in the next 3 weeks.