

Company Consult Debrief

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IT-331-R4448 Human Factors in Info Tech

Southern New Hampshire University

April 18, 2019

### **Application Overview**

A comprehensive assessment will be conducted on the Southern New Hampshire University's (SNHU) student portal. The student portal is where online students have access to a wide range of information and resources provided by the college. Students can access their online classes, bookstores, college library, SNHU webmail, view course offerings, search and manage registration for classes, and connect with their student advisor via phone or email contacts. The student portal is a centralized hub for all materials and resources an online student will need. In selecting this application, I wanted to gain a deeper understanding of the student portal features and to make recommendations that would improve site design and functionality. The application's intended audience are online students of SNHU.

### **Visual/Graphic Design**

The overall layout of the Student Portals webpage displays a consistent look and feel throughout the whole site. The aesthetic qualities of the homepage are comprehensive. An Online Student viewing this page would have no trouble finding resources regarding their studies. SNHU's color scheme purple and gold is blended within the site. Several basic fonts are integrated into the student portal's interface. The fonts featured are Verdana, Arial, Trebuchet MS, Times New Roman, Times, serif.

The content section of the student portal homepage displays a three-column grid layout. The side panel (column-grid one) appearing to the left of the screen, this content is focused on student services such as Help Needed, Tech Support, Social Media, and Self-Services. The main content (column-grid two) is situated towards the middle of the web page which displays any highlighted Student Notifications, Student Advisor information, News @ SNHU, and several

proportional clickable visual images which will navigate you to different parts of the site. Right side panel (column-grid three) content is geared towards accessing courses, student resources (bookstores, library, webmail, and other resources), and this section features an interactive calendar for students to view possible future events or save activities. Upon initial assessment the student portal is in line with the Eight Golden Rules of Interface Design. It maintains consistency, seeks universal visibility, offers formative feedback, design dialogues to yield closure, prevent errors, permit easy reversal of actions, keeps users in control, and reduces short-term memory load. (Shneiderman, 2016)

### **Ease-of-Use**

SNHU's student portal is easy to navigate. The top right-hand corner of the site displays a search bar where users can search content throughout the site. The site features a menu navigation bar with easy to read text. The menu bar displays a tabular format which highlights the top section in gold, so users know where they are within the website. The site grabs user attention by displaying clickable call to action icons for Need Help, Tech Support, and Social Media.

The portal's left and right panels on the homepage has understandable readable text links. All links are active and point to the correct page. Each page's top menu guides the user back to the homepage via clicking the my SNHU icon featuring on the top left. The facilitation of data entry on several of the portal pages provides comprehensive feedback and explains potential errors to the user. For example, if the user clicks the [view my grades](#) link on the left side panel on self-service, there taken to a page titled Academics Summary with a drop-down. The drop-down is pre-populated with several student transcription types. A user then selects a specific type

then hits the submit button. Waiting for a few seconds while the page loads a full academic summary becomes visible displaying full transcription report to the user.

### **Functionality**

The Southern New Hampshire University (SNHU) student portal maintains clear and concise functionality throughout the whole website. The student portal conforms to the general interaction principles outlined in The Interface Design Guidelines. General interaction principles according to Tutorials point include: “Be consistent; Offer significant feedback; Ask for authentication of any non-trivial critical action; Authorize easy reversal of most actions; Lessen the amount of information that must be remembered in between actions; Seek competence in dialogue, motion and thought; Excuse mistakes; Classify activities by function and establish screen geography accordingly; Deliver help services that are context sensitive; Use simple action verbs or short verb phrases to name commands.”( Tutorialspoint, 2019)

The student portal utilizes a variety of informative links and user-friendly call to action images or icons. Online students can click anywhere within the site and be taken to the appropriate webpage. SNHU online students can also search the site via search terms in the upper right corner of the site. Navigational links appear at the top of all pages within the student portal guiding students to a webpage or an online application.

### **Environmental Factors**

SNHU online students can access the student portal from any location provided there is an Internet connection. A potential factor in the intended audience environment that would impact the use of the application would be Internet functionality. Internet functionality would include speed, bandwidth, connectivity, and Internet service providers. For example, an online

student tries to access the student portal from the public library. The public library has limited bandwidth on its public network, so the student portal speed is affected causing the site to experience longer load times. This is an example of how Internet bandwidth can affect connectivity slowing down application load, interfering with users' interactions with the student portal.

### **Cognitive Load**

Cognitive load refers to the amount of information a human working memory can handle. Halarewich noted "Cognitive overload happens when your working memory receives more information than it can handle comfortably, leading to frustration and comprised decision-making." (Halarewich, 2016) The SNHU Students Portal pays close attention to the cognitive load of online students. The portal initial interface provides online students with an organized content layout. The layout maintains a three-column grid system. Each section displays understandable text links and call to action buttons, which will give students direct access to resources and information they are seeking. For example, as an online student if I wanted to have an overview of my grades so far, I would select the [view my grades](#) link on the left panel under **Academics**. I would then be taken to an academic summary page where I would select a transcription type, hit submit then view a summary of my grades. The steps I performed to view my grades happen within seconds of each other. This is an example of lessening the cognitive load for an online student to complete a specific task within the portal system.

### **Human Factors**

The SNHU Students Portal was designed from the perspective of an online student. The ease of which students can access resources and information shows designers of the portal may

have conducted usability testing or may have gathered feedback from students before the site was designed. In gathering feedback and conducting usability testing the student portal is geared towards how an online student would navigate through a non-physical college system. Online students do not have access to the physical campus, so a web developer would have to design a system that simulates a student's experience as if they were on a physical college campus.

### **Accessibility**

Southern New Hampshire University is a non-profit, regionally accredited college, that provides accessible degree programs to over 90,000 students online. (Southern New Hampshire University, 2019) The college is federally funded through Pell grants, Research grants, and loans and other federal financial aid grants. SNHU's nonprofit status and accepting of federal funds subject the college to maintain Section 508 compliance. According to Formstack "Section 508 of the Rehabilitation Act of 1973 requires all federal agencies and institutions that receive federal funding to have Section 508 compliant websites." (Formstack, 2014) Section 508 compliance are mandatory guidelines which refer to the accessibility of websites, meaning that anyone who visits a federally funded nonprofit institution regardless of disability status should be able to access technology. Section 508 sites should also be compatible with assistive technology such as screen readers, site magnification, and transcription for audio files. (Formstack, 2014)

Southern New Hampshire University (SNHU) student portal is consistent with Section 508 compliance best practices. The visual layout of the site is clear and organized with all images including alt texts within the HTML code. The student portal site can be navigated by the tab and enter keyboard strokes this feature is helpful for users with gross motor impairment. The portal site also includes accessible supplement audio, video, forms, and files. The content on

each page of the site is conducive for screen readers to scan and read back information about the webpage. Information on the webpages can be magnified without disrupting the layout.

SNHU along with maintaining Section 508 compliance has an Online Accessibility Center (OAC) that will work with students with documented disabilities in accordance with section 504 of the rehabilitation act of 1973, Title II of the Americans with Disabilities Act, (ADA) of 1990, and Americans with Disabilities Act Amendment of 2008. It is the student's choice to disclose their disability. The benefit of self-disclosing a disability to the OAC in the center will work with the student and their instructor to identify possible accommodations and to address any concerns regarding their disability. For example, if a student has a hearing impairment audio files would be reformatted into transcriptions documents.

### **Recommendations:**

Although the SNHU student portal is well organized, user-friendly, and is in line with the Eight Golden Rules of Interface Design there are several improvement recommendations that should be considered to heighten the HCI for better user interaction. Below are some recommendations that will focus on changes (mostly aesthetic), Accessibility, Methodologies, and User's Environment. The goal is to provide a user centric application for online students enrolled at SNHU.

### **Changes**

1. The student portal should maintain a consistent readable font throughout the whole site. This would include all H tags, paragraph fonts and links. Currently the site is mixing several different fonts on the same webpage.

2. The student portal should consider an accordion effect on the side panels, with an accordion effect user could show or hide information. Currently users must scroll down almost to the end of the page to view content.
3. The main content area the message from your advisor should be made larger.
4. Icons located at the bottom of news section in the main content area should have better grid alignment versus a middle alignment within a table column.

These recommendations are more aesthetic changes than more ease-of-use. The Student portal's navigation structure is well thought out. Online students have the option of searching through the site via the search bar, the menu bar, the side panels links, or the call to action icons. A recommendation would be to keep links text short and have links point to the correct webpage.

### **Accessibility**

**Accessibility** - maintain Section 508 compliance using best practices. The student portal should have a blurb or several sentences possibly in the footer noting that their website is compliant with Section 508 guidelines.

### **Methodologies**

#### **User-Centric recommendations:**

**Human Factors** - the college may want to conduct a survey of the current student portal to elicit feedback. Upon the feedback have web developers create a prototype version of the student portal and do some usability testing before implementation.



**Functionality** - on the left-side panel under *Self-Service* and the right-side panel under *Applications* an information caption should display when users hover over the links in this section. When clicking on a newsfeed item the pop out content should not be scroll to the right. The news content should be aligned properly containing the proper padding to fit within the pop-up box.

**Cognitive load** - for a more visual aesthetic look and feel the site should consider a CSS framework such as Bootstrap 4 to better format and align content within the webpage. The site should also consider enlarging the Academic Advisors picture and increasing the font size of the advisors Contact Information.

User centric design methodologies are design aspects from the user point of view. Design methodologies are based on several phases or processes each building upon another until a comprehensive application is completed. Suggested User-Centric recommendation will enhance the Student Portal User Interface and should be integrated into the design phases.

General user centric design phases are:

- **Specify content of use** - identifies people that will be using the product and what they will be using it for. The human factor recommendation suggests the college should conduct a survey to elicit feedback for site redesign and functionality improvement. The survey will help identify users need and provide feedback on what possibly could be a better design.
- **Specify requirements** - identifies in a business requirement the user goals that must be met for the application to be successful. The recommendation for functionality and cognitive load helps in the requirement process to incorporate functionality such as

hovering over the link will display information captions, newsfeed will display properly in pop-up boxes, the site will implement CSS framework such as bootstrap 4 to properly align content in a grid format, and to enlarge academic advisors contact font size and picture.

- **Create design solutions** - builds the application from a rough concept to a completed design. All Recommendation if approved will assist in the application development process. The student portal redesign will be developed according to the Human Factors, Functionality, and Cognitive Load recommendations.
- **Evaluate design** - happens through usability testing with actual users providing feedback on current application. Provided all the recommendations were integrated into the build of the redesign application users should have a much more fluent comprehensive SNHU student portal.

### **User's Environment**

To maintain better alignment with the user's environment the college may want to offer an off-line solution to online students that may experience Internet connectivity issues. Internet connectivity can become an issue causing anxiety and stress especially when assignments are due. Student should have an alternative way to access and turn in assignments off-line. The student portal should also refine its screen layouts to accommodate different screen sizes. The portal site should have a more responsive nature since students can access it via mobile or tablet devices. Larger screen size layout should be taken into consideration for students with visual impairments.

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