

## I. Problem

### *Problem Statement:*

*With the recent changes in the housing market it is getting harder to identify and secure housing for people in the tri cities area. It would benefit students and faculty to have a network available to post housing leads or request roommates.*

## II. Target Users

*Provide a brief description of the target users that the UI/UX project will help and then a list of the potential users associated with the project. The list does not have to be comprehensive, but does need to address as many of the main users as possible.*

*The target users include incoming and current ETSU students and faculty.*

1. *Incoming student*
  1. Explore off campus housing or apartments close to campus
  2. Find roommates with similar interests or majors.
2. *Current Student*
  1. Post a need for roommate
  2. Find a new roommate
  3. Post that you're leaving/moving and your apartment/house will be available soon
3. *Professor/Instructor*
  1. Find housing that suits the needs of someone with different needs than college students.

## III. Solution

### **Example Solution Statement:**

*Our solution for this issue involves a repository containing general topics covered in each class offered by the department. These sections could then contain practice problems (and solutions) to assist the users' understanding of the concepts. The repository could also contain sample project proposals and lab ideas to expand the student's understanding of the material.*

## IV. Platform

*A brief description of the platform technology along with why this technology will be the best solution in developing the application.*

*The web application is the best accessible platform for everyone. Users can view the website though PC and smartphone. We will use Visual Studio and develop the application by C# in ASP.NET. We will also run webserver on Azure since it is easier to use all Microsoft services. For prototyping, we will use either Framer or Figma.*

## V. Roles

*The roles section will detail the roles that each team member will take on for the duration of the project. The roles can vary by team, but the most common set of roles within a design team are as follows:*

- *Project Manager – Jacob Johnson*
- *UX Designer – Nick Inoue*
- *Front-End Developers – Brendan Jones*
- *Documentation Manager – Raj Patel*
- *Visual Designer – John Milhorn*
- *UX Lead*

*The project for this course can be limited to team roles of: Project Manager, Front-End Developers, Documentation Manager & Visual Designer. At most a team member should have no more than 1 to 2 roles within the group as there are some participants that can do more than one role and the implementation process will require more than one Front-End developer to complete the project.*

## VI. Personas

*The personas developed by teams can be included here or can be attached at the end of the document. Personas are used to assist developers in the process of developing the UI for the system. Personas help reinforce the idea of user-centered design and having sympathy for the user. For examples of how personas can be constructed, please refer to the samples below.*

Jake is a new student coming from Minnesota. He has basic PC literacy and can use websites to gather information. He is a 21-year-old transfer student. He is looking for off-campus housing. His budget is limited and he needs to find shared accommodation due to his budget. However, there are no platforms for ETSU students to check available share housing information.

Dr. Ruth Hornsby has recently finished her doctorate in theology and has gotten hired to an adjunct position at ETSU starting in the summer of 2023. She is 32, married, and has 2 children under the age of 5. Dr. Hornsby does not consider herself tech literate, but was raised on social media sites such as myspace, facebook, and Instagram. She is looking for a house or apartment large enough to accommodate her husband and young children.

## VII. Tasks

- a. User should be able to log in to an account.
- b. User should be able to browse classes offered by the Computing Department at ETSU.
- c. User should be able to learn about concentrations offered by the Computing Department at ETSU.

## VIII. Task Analysis

**\*\*Note:** Every task will be different as it relates to the developed UI. The examples provided below are examples of how the task analysis should be structured.

### **Example:**

*Task Scenario: User should be able to log in to an account.*

#### *Scenario:*

First, the user navigates to the website's login page. If the user has a valid account, they will input their username and password; otherwise, they will need to create an account. After the user inputs their credentials, they will submit the form data. If the information for that account is valid, they will be logged into their account, else, the user will be prompted to reenter their account information.

#### *Goal:*

User should be able to log into their account.

#### *Precondition:*

User has already registered for an account and user is on the website.

#### *Subtasks:*

- User creates an account

#### *Exceptions:*

- Incorrect login information
- User does not have an account
- Too many failed login attempts

#### *Description:*

The user should be able to complete this task rather quickly. Being able to log in to an account will be a frequently used feature that will be an easy task to complete.

*Task Scenario: User should be able to browse classes offered by the Computing Department at ETSU.*

#### *Scenario:*

First, the user has selected to browse classes offered at ETSU. Next, they will have to select what department or college they want to search for classes in. Then, they will have to select the term that they are wanting to browse classes for. The user will then submit form data and the system will return a list of classes during the term and in the department that the user selected.

#### *Goal:*

User should be able to browse classes in a department in a term.

*Precondition:*

- User has already navigated to the page where they can select to browse for classes.

*Exceptions:*

- Department not selected
- Term not selected

*Description:*

The user should be able to complete this task quickly. Being able to look at classes for a department for a given term will be a frequently used feature that will be an easy task to complete.

*Task Scenario: User should be able to learn about concentrations offered by the Computing Department at ETSU.*

*Scenario:*

A user is a potential student at ETSU. They know that they would like to pursue a degree in computing at ETSU, but does not know which of the four concentrations they are most interested in. They navigate to this resource and choose to visit a page to compare concentrations. This shows the classes offered by each, as well as a description of the general topics covered in the concentration. Former students' opinions on the concentration are also shown. The user can then choose to make an informed decision in their concentration choice.

*Goal:*

To provide information about all the concentrations offered in the computing program at ETSU to assist current and prospective students in deciding upon a degree path.

*Precondition:*

The user has navigated to the website and chosen the "Compare Concentrations" page.

*Subtasks:*

- System will load information regarding each of the concentrations.
- System will give user the option to compare concentrations.

*Exceptions:*

- System is unable to load information regarding a concentration.

*Description:*

This should be accomplished quickly. Potential students may not be willing to wait long for a webpage to load about the department. This page will likely have less traffic than course information pages. Activity may also spike at different times (potentially springtime when students are deciding upon colleges and degrees).

## IX. Repository

This will be the repository where all project artifacts will be stored for the semester. The preferred repositories should be either GitHub or Bitbucket. If a team has another repository option, please contact the instructor to verify it is acceptable.


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