**Proposal**

* **Student Name**: Minh Hoang Tran
* **Degree and Major**: Cybersecurity
* **Project Advisor Name**: Prof. Julie Henderson
* **Expected Graduation Date**: May 09, 2025
* **Problem Statement** 💡

My goal is to minimize costs and enhance the security of salon desktop applications. Presently, salon desktop applications tailored for businesses like hair salons, barbershops, and massage places tend to be costly. The high expenses associated with these applications lead some salon owners to forgo their use altogether. Alternatively, they resort to traditional methods using pens and paper instead of utilizing desktop applications on various devices such as computers, iPads, tablets, iPhones, and more. While the pen-and-paper approach is traditional, it is time-consuming and resource-inefficient. Moreover, relying on these traditional methods increases the likelihood of errors when scheduling appointments, calculating service totals, or managing the income of technicians and salons.

To address these challenges, I propose developing a user-friendly and cost-free salon desktop application. This application aims to save salon owners money, alleviate operational challenges, and reduce errors when managing client services. The key advantage lies in providing an accurate and reliable check-in system.

To create a more secure desktop environment, I will create Security policies such as password protection, acceptable use policy, data breach responds, system security plan, and Ethical policies. In addition, there will be password login when an admin or worker wants to access this application. Also, I will give specific access and power for groups of users as well such as what admin, and workers can do and cannot do. For example, an admin can be able to access all of customer data, however this functionality will be limited to workers because we want to protect customers’ information.

In summary, given the current expensive nature of salon applications, my objective is to create a desktop application that is not only cost-free but also user-friendly and more secure for the efficient management of salon operations.

* **Project Description**:

I will create a desktop application for salons such as hair salon, barbershop, massage places, … In this project I will focus on password sign in for applications, some functions such as print service tickets, check-in for customers, data management.

* **Proposed Implementation Language(s)**:
  + - Electron.
    - Node.js.
    - JavaScript.
* **Libraries, Packages, Development Kits**
  + - JavaScript library.
    - Node.js package.
    - VS code.
    - Electron libraries.
* **Additional Software/Equipment** Needed 💻🕹️📱

Will need laptop that has windows or IOS system

* **Personal Motivation** 🍰  
  This project will help me improve my skill on how to create a desktop application and created a better security to protect customers data such as names, day of birth, address, …
* **Outline of Future Research Efforts** 📚🚀🧪  
  I will try my best to create a good desktop application.

I will do more research on how to do desktop applications because this is my first time doing it. My source of code that I do research are YouTube, GitHub, Google, and other free source. Then I will start to practice code my real program.

* **Schedule** 📆 ⌚  
  *A list expected dates various tasks will be completed, and deliverables will be submitted to the faculty advisor for CSCI 498 and 499*
* ***CSCI 497 (SPRING 2024)***

+ Feb 8, 2024: Will decide what the project that I will do for senior project.

+ Feb 15, 2024: Will continue working on the proposal and finish the problem statements.

+ Feb 29, 2024: Will try to complete the rest of the proposal.

+ Mar 14, 2024: Will start to work on Requirement documents.

Including: + Functional

* Will work in functional part in about 2 weeks until Mar 28, 2024.
* Work and finish functional part.

+ Mar 29, 2024: Will continue working on Requirement documents.

Including: + part 2 Look and Feel

+ part 3 Usability

* Will work in functional part in about 1 weeks until April 5, 2024.

+ April 6, 2024: Will work on Part 4,5,6,7

Including: + part 4 Performance

+ part 5 Maintainability and Support

+ part 6. Security

+ part 7. Cultural

* Will work in functional part in about 1 weeks until April 12, 2024.

+ April 13, 2024: Will finish the rest of the Requirement documents.

Include: 1.ID Number 2. Type (see the list above) 3. Description

4. Rationale 5. Fit Criterion 6. Priority

* Will work in functional part in about 1 weeks until April 20, 2024.

+April 20, 2024: Will start coding.

+ Expected some part of code will be done in this semester.

***CSCI 498: (FALL 2024)***

+ 9/23/2024: Working on setup the environment

- Start some coding for the program

-Submit the schedule for CSCI 499 class during fall 2024 semester.

- resubmit the proposal.

+9/30/2024: Continuing working on the coding and construction of the program

* Submitting template for test cases
* Submitting template for surveys

+10/7/2024: Continuing working on the coding and construction of the program

* Start working on functions ID 01, 02

+10/14/2024: Continuing working on the coding and construction of the program

* Start working on functions ID 03, 04

+10/21/2024: Continuing working on the coding and construction of the program

* Start working on functions ID 05, 06, 07
* Test plans first draft.

+10/28/2024: Continuing working on the coding and construction of the program

+11/6/2024: Submit final test plan documents, and surveys.

+11/12/2024: Submit the project construction.