CSE/ISE 312 Spring 2023
Midterm Tasks 6 - 10

"A User Service Website for the SBU Career Center's Career Closet"

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6) Propose a solution to the problem statement
We propose an online system that allows students to privately browse and request professional attire from the Career Closet. This system will have multiple benefits, one of which is that it removes the stigma of visiting the physical closet by allowing them to securely order items and schedule delivery/pickup on campus. For staff, the system consolidates inventory tracking, appointment management, and analytics all in one place. By providing easy online access and by streamlining operations, the system will enable the Career Closet to more efficiently serve students in need and expand its positive impact.

7) Define the use case(s)
Students will use the system to browse the catalog, select items based on upcoming needs, and schedule delivery or pickup on campus. This can be done privately on their own devices. Career Closet staff can manage backend inventory, track donations coming in, monitor student requests, and analyze usage. The system should seamlessly integrate with existing university platforms for authentication, profile data, and analytics.

8) Do a technology assessment
We will be building a web application, so it will need to be compatible with both desktop browsers and mobile browsers. We do not need to worry about specific platforms as it is not native code.
The system will be a responsive web application hosted on Omni CMS. Omni CMS is a service licensed by Stony Brook University used for hosting websites. Since it is provided by the university, there will be support available for getting it online, and it will easily integrate with the other sites and services hosted by the university.
If need be, we may employ other proven technologies; MongoDB and ExpressJS for hosting and accessing the database, in case Omni CMS cannot provide sufficient storage for our catalogs.

9) Task Analysis
Planning will involve deciding on features and provided services, modeling user interface design, and setting up infrastructure architecture. The development process would involve setting up the frontend using Omni CMS, creating the backend, defining APIs and databases, then integrating them into the application. Testing the product involves unit testing components (Jest/Supertest, Cypress), end-to-end integration testing, user acceptance testing, and load testing. Maintenance after the service launches means monitoring performance, fixing bugs, and releasing regular updates for new features and services. Some development milestones include a beta deployment to collect user feedback, followed by a full release after implementing some user recommendations.

10) Summarize your research in a Vision Statement
Motivation/Opportunity:

The Career Closet provides professional attire and career services to economically disadvantaged students, allowing them to compete more fairly for jobs and internships. However, negative stigma prevents students from utilizing the physical closet. An online system would expand access by allowing students to remotely browse and send orders. This removes barriers for students in need, streamlines the process of obtaining proper attire, and provides them equal access to career opportunities. With streamlined inventory and appointment management, the Closet can also increase its capacity to serve students.

Problem Statement

The problem of...	Inaccessibility to the Career Closet
affects...	Students who cannot afford professional attire
the impact of which is...	They do not have a fair chance at obtaining jobs
a successful solution would be...	A website for the Career Closet to provide anonymous appointments and deliver clothes remotely to students in need.

Product Position Statement

For	Students
Who	Cannot afford professional attire
Our System	Provides access to the Career Closet resources remotely
That	Allows students to order clothes, browse what's available, and schedule appointments
Unlike	Career Closet (in-person)
Our Product	Allows students to access the services remotely and without fear of being ostracized.

Users:
The primary users are economically disadvantaged students who need professional clothing and career services. They are qualified but have financial limitations preventing them from acquiring the clothing necessary to leave a good impression at professional events. Career Closet staff are secondary users who handle day-to-day operations and inventory management. They are proficient with standard office computer applications and will use the system for tracking inventory and interacting with students.

Features:
Key features include an online catalog for clothes browsing/ordering, appointment scheduling, integration with SBU accounts, and inventory/metrics tracking. Students can privately request items and services through their accounts. Admins can track inventory, donations, and student usage. The system should integrate with existing university systems for authentication and analytics.

Constraints:
The system must work within the Career Closet's budget constraints. It should leverage affordable open source tools and cloud hosting without expensive licensing (Omni CMS). As students will use mobile devices, responsive design is critical. Tight integration with university systems is needed for single sign-on. On-campus delivery/pickup must be enabled.