University of British Columbia, Vancouver
Department of Computer Science

CPSC 304 Project Cover Page

Milestone #: 3

Date: March 10, 2023

Group Number: 94

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By typing our names and student numbers in the above table, we certify that the work in the attached assignment was performed solely by those whose names and student IDs are included above. (In the case of Project Milestone 0, the main purpose of this page is for you to let us know your e-mail address, and then let us assign you to a TA for your project supervisor.)

In addition, we indicate that we are fully aware of the rules and consequences of plagiarism, as set forth by the Department of Computer Science and the University of British Columbia

Summary

This application is designed as an inventory tracking system that tracks the status of each package and the quantity of the products in stock. Given a package, a user can view the products it contains and the exact location within the company's internal distribution network, including whether it is currently housed at a location or is in transit between two locations.

Timeline & Task Breakdown

Architecture

Tentatively, we have decided to use HTML, CSS, and Javascript for the front-end, and create the back-end server using Java, JDBC, and Oracle, taking advantage of the department-provided servers and support. Users will be able to request queries/data on the front-end web app, which will send a corresponding request to the back-end using an API that we will have specified for front-end/back-end communications. The back-end handles the processing of the request/query and sends the results back to the front-end, which is responsible for displaying the content to the user.

Schedule

API Specification	March 19 - Everyone
● Decide which queries to support ● Specify API for accessing/updating database	
Front-end GUI Design & Implementation	March 29 - Celine
● Create page layouts and organize queries over multiple pages ● Implementation of GUI in HTML & CSS	
Front-end Data Retrieval (AJAX, from back-end)	March 29 - Bhavye
● JS to interact with back-end server using previously specified API ● Render retrieved data on front-end web app ● Design UI for data presentation	
Back-end API Implementation	March 29 - Hansen
● Implement a webserver to serve the previously specified API	
Back-end Database Access	March 29 - Hansen
● Implement data querying and retrieval from database on the back-end ● Connect with API server to provide retrieved data to callers	

Back-end Static Files	March 29 - Celine
● Configure server to provide static files, such as .html, .css files to the user	
Integration & Testing	April 4 - Everyone
● Integration of the front-end and back-end ● Testing full range of queries on the complete system ● Produce report PDF ○ Introduction ○ Description of the Schema ○ Description of the GUI ○ Description of the back-end	

Challenges/Things Left to Do

- Several group members will be learning new technologies
- Integrating different parts of the project requires effective communications
- Time pressure on implementation, due to midterms and other coursework

We are still exploring our current project architecture. Should we detect any deficiencies or issues, we have left the possibility open of switching our technology stack. We are aiming to finalize our architecture by March 19th.