

COMP-206

Software Systems

Assignment #5

Due: April 14, 2009 at 23:55 on Web CT

C, Perl and Python

This assignment tries to do something different. The first part of the assignment is connected to your web site and asks you to write a Perl program. The second part of this assignment asks you to work on an existing Python application the the School of Computer Science's System Staff use to turn off computers that have idled too long. Both these problems are real life situations. You are still working in the same teams you had for assignment #4. You need special permission to change teams.

PART ONE: Web Development

Expand the functionality of your website in the following two way:

- The Catalogue Page
 - Let users checkmark and provide quantities for the items they want to purchase.
 - When they press the submit button the program will call a C program called buy.c that will calculate and display a bill. We will assume two taxes: GST at 5% and PST at 7.5%. We will also assume a CSV file named inventory.csv. It will be a space separated file with the following format: name, quantity, and price. The bill will display only items with sufficient quantity. The quantity will be removed from the inventory. The bill will display the name of your web site, the item name, quantity purchased, unit priced and quantity*unit price. The bill will then sum all the values displaying a subtotal. The taxes will then be applied followed by a grand total. A link will also be provided so the user can return to the home page. (we assume they paid)
- The Login Page
 - The login page takes the system operator to a web page that displays a system operator management page. The page permits the following activities: list inventory, add one inventory item, and delete one inventory item. This web page invokes a Perl program called manage.pl. You can build this management web page page in any way you like. But it must call the Perl program to process these three requests. To delete an inventory items the system operator needs to only input the inventory item name. To add an item the system operator must input the name, quantity and unit price.
 - +2 bonus points for creative and/or professional designs

PART TWO: Python Development – Hacking on an Open Source project

There is an additional document and lecture that describes this part of the assignment. You are working in your teams for this part as well.

WHAT TO HAND IN

- For Part 1: Each team member submits an HTML file with a link linking to the operational web site to WEB CT. This will help the TAs.
 - Also include the buy.c and manage.pl files.
 - Include the inventory.csv file.
 - Include your web site's login password so that the TAs can login.
- For Part 2: Submit the ZIPPED Python project to WEB CT.
- E-mail me, through WEB CT, the names of your team members so I can use this to organize the TA-s for grading.

HOW YOU WILL BE GRADED

- This assignment is worth a total of 20 points plus 5 additional bonus points
- +10 for Part 1
 - > +5 buy.c
 - > +3 manage.pl and +2 for the manage web page
 - > +2 bonus points
- +10 for Part 2
 - > with +3 bonus points