

ASSIGNMENT I : Integrated Software Development Workshop 2022/2023

Objectives

- Construct a software using WEB programming language with user-friendly graphical user interface in a team.

Specification

Download and/or setup a Linux Apache webserver inside a Docker container. You can download preconfigured container image such as Ubuntu docker image (https://hub.docker.com/_/ubuntu). Create a web application to allow users to convert an Excel file to .csv file using Apache POI library (<https://poi.apache.org/download.html>). The web pages/forms should not be created using WYSIWYG text editor or from ready-made template.

Mark distribution:

Web server setup in a Docker container: 20%

GUI (HTML+CSS): 40%

Sending file to server and retrieval of CSV through a link: 20%

Convert Excel to CSV in server: 20%

Due Date: 4 December 2022

Submission format

All codes (HTML, CSS, PHP, Java and scripts) + 5 mins (max) video recording of running the web application.

Video recording: Demonstrate that the webpage is running from docker. Show the directory containing the Excel file after being uploaded. Show the directory containing the csv file before and after being converted. Demonstrate the conversion twice.

Notes

This assignment is to be done by 3-4 students in a group. Any part of the program submitted by a student/group for the evaluation must not be shared with another student/group. Anyone caught copying or let his/her program to be copied will automatically get zero mark for the assignment. References taken from any sources must be quoted and declared. Group members that do not contribute will get zero.

Assignment Assessment Rubric

| | Excellent (80-100%) | Good (65-79%) | Moderate (40-64%) | Poor (0-39%) | Total |
|-----------------------------|--|---|---|--|-------|
| Part 1: Docker (20%) | Docker is installed. Webserver is installed in the docker and run correctly. Website can run in docker. | Docker is installed. Webserver is installed. Website cannot run in docker. | Webserver can be run in OS. | No webserver. | |
| Part 2: GUI (40%) | GUI is user friendly and attractive. | GUI is user friendly but not attractive. | GUI is not user friendly and attractive. | GUI is incomplete. | |
| Part 3: Post (20%) | Can send one or more csv files to server from website and store in the local directory. | Can send one csv file to server from website and store in the local directory. | It has the function to send file, but does not work properly. | No function to send Excel file to server from website. | |
| Part 4: Convert (20%) | Use the given library to convert Excel file to csv file, and provide a link to user to download file. | Use the given library to convert Excel file to csv file, but no link for user to download the file. | Occasionally does not convert Excel file to csv file. | Cannot convert Excel file to csv file. | |
| | Total | | | | |