INFO 16206 - Final Exam - Practical

Practical Section - Rules

During the practical section of the exam all students are expected to follow the rules outlined below:

1. The practical part consists of writing a program in the Visual Studio IDE.
2. Time Allocated: 80 minutes
3. All questions must be solved **individually**
4. **Students are not allowed to use multiple monitors**.
5. The exam will be recorded using Teams Breakout Rooms. The students **are required to share their Video, Mic and Screen throughout the exam**.
6. All means of information and data sharing (except MS-Teams) must be **EXITED**: IM, e-mail, chat programs, ftp, virtual machines, **DropBox, SkyDrive, GoogleDrive** etc. *Do not just sign off*.
7. Students are *not allowed to post any information on the internet or send any information to anyone for any reason through any means*.
8. If you need any clarification, you must ask your professor.
9. Use of laptops and other materials:
    a. In the practical section, you are allowed to use any materials including slides, books, assignments/programs created by you, or the solutions provided by the professor, Python Documentation, online resources.
    b. Code will be submitted in SLATE.
    c. Students are not allowed to share solution / ideas
10. **Keep committing the changes to git repository after every 15 minutes.**
11. Besides implementing the required functionality submissions, you are required to use the correct coding conventions used in class, professional organization of the code, alignment, clarity of names, are all going to be part of the evaluation. *Comments are recommended but not required*.

I have read, understood, and agreed to follow these rules as well as Sheridan's policies and procedures on academic honesty as per https://policy.sheridanc.on.ca/dotNet/documents/?docid=917&mode=view

Student Name: _____ Student Number: _____

_____ _____

(Signature) (Date)

Detailed Requirements: Practical Section 45 Points 50% of Total – 80 minutes

Part I (5): Project Setup. In this exam, you are required to use AJAX to render the courses information contained in a JSON file provided to you. The file contains information about the courses taught in the first three semesters of Mobile Computing Degree. You need to create the project from scratch using the instructions given below:

1. Create the project folder, open it in VS Code and initialize a git repository in the folder.
2. Add a page courses.html and set the title of the page to Final Exam INFO16206 – Your Name
3. Create a JavaScript file and add a reference to the file in the page.
4. Create a PRIVATE repository on BitBucket/Github and provide read access to shalinisingh.jaspal@sheridancollege.ca. **Creating a public repo will be a breach of Academic Integrity.**
5. Ensure the page loads properly and **commit** the changes done so far with the message "*Project Setup Complete.*" **and push** the commit to the remote repo.

Part II (15): Design the page content. Add a textbox and a button to the page as shown in Appendix 1. Also, create a blank table that would be populated using the data read from the JSON. You can use your own stylesheet, PureCSS or Bootstrap for formatting the page contents.

Commit and push the changes with a message "UI Design complete"

Part III (25): AJAX Request. When user clicks on the button,

1. If the category textbox is blank, use AJAX to get the details of all the courses contained in *courses.json* and render the information (in the table crated in Part II) as shown in Figure 1. Make sure the JS code is modular and does not use global variables. [20 Points]
2. If the textbox contains some text, the page should filter and display only those courses whose course codes match with the entered category (e.g. PROG, SYST, etc.) [5 Points]

Commit and push the changes done so far, with a message "Data fetch complete."

Part IV (5): Bonus: Demonstrate the use of JQuery to highlight the details of course **INFO 16206** in green background, white color and bold font.

Commit and push the changes done so far, with a message "Bonus completed."

NOTE: In order to be eligible for the bonus you must earn at least **85%** on the practical section without the bonus. **If without the bonus your grade is less than 85% your bonus marks will not be taken in consideration**.

Appendix 1: Page Layout

Category [ ] Get Courses

Semester	Code	Title	Credit
1	PROG 10004	Programming Principles	6
1	SYST 10082	Operating Systems Fundamentals	3
1	MATH 10025	Mathematics for Computing	3
1	TELE 10025	Edge to Core: Network Foundations	3
1	ENGL 17889GD	Composition and Rhetoric	3
2	INFO 10229	Mobile Computing	3
2	PROG 10065	Interactive Application Development	4
2	DBAS 20146	Database Modeling	3
2	MATH 11044	Linear Algebra	3
3	PROG 20082	Mobile Device Application Principles	4
3	PROG 24310	Programming Languages	3
3	INFO 16206	Scripting and Web Languages	3
3	SYST 19207	Computer Architecture	3
3	TELE 21895	Network Engineering	3

Figure 1: Page Layout for courses.html