ICS 104 Lab project Guidelines

The lab project should include the following items:

-Dealing with diverse data type like strings, floats and int

- Involving operations dealing with files (reading from and writing to files)

-Using Lists/Dictionaries/Sets/Tuples (any of these data structures or combination)

-Adding, removing, and modifying records

- Soring data based on a certain criteria

- Saving data at the end of the session to a file

Students will not be forced to use object oriented paradigm.

To avoid outsourcing and copying code from the internet blindly, students should be limited to the material covered in the course lectures and labs.

The lab project will be done by teams of 2 students

The students should be informed about the following items: **(All the part below should be posted to your students)**

* Comments are important they are worth. (worth 5%)
* The code must use meaningful variable names and modular programming (worth 10%)
* Global variables are not allowed. Students should learn how to pass parameters to functions and receive results.
* Students must submit a working program. Non-working parts can be submitted separately. If a team submits a non-working program, it loses 20% of the grade.
* User input must be validated by the program i.e. valid range and valid type
* Lab project is limited to the material covered in the labs and lectures.

The deadline for submitting the lab project is **Saturday May 11 before midnight**.

Submitting Sunday before midnight will lead to 5% penalty

Submitting Monday before midnight 15% penalty

Deliverable:

Each team has to submit:

* The code as a Jupyter notebook
* The report as part of the Jupyter notebook or as a separate word file. The report will describe how they solved the problem. In addition, they need to describe the different functions with their task and screen shots of their running code. (worth 5%)

Lab demo/presentation:

* **The week of May 12-16** will be used for lab project presentations. You need to arrange for your students presentations via MS Teams or physically.
* A slot of 15 minutes will be allocated to each team for their presentation and questions
* Students who do not appear for lab demo/presentation will get 0.

20% of the grade are highlighted above. The remaining 80% will be on the code itself and presentation.