**ICS 104 Lab project Guidelines**

**The lab project will be done by teams of 2 students**

Fill the Excel sheet on Microsoft Teams in in Files folder to choose your teammate. If you will fail to choose your teammate then I will assign you one randomly.

**Please note the following items:**

* 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

Students are limited to the material covered in the course lectures and labs.

The deadline for submitting the lab project is Friday April 23 before midnight.

Submitting Saturday before midnight will lead to 5% penalty

Submitting Sunday before midnight 15% penalty

**Deliverables:**

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 April 25 to 29 will be used for lab project presentations.
* 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.

**Important Notes:**

* The project must be your own work.
* You must not share code with any other project group.
* The project will be submitted on blackboard. The deadline is indicated above.
* Cheating in any form will result in a grade of F in the course.

Good Luck!

Muhammad Waheed Aslam