CSCI 577a – Fall 2019
Independent Cost Estimation V&V: (20 points)

Due date: Friday October 11, 2019 (11:59pm)
Submission instructions: Upload **2** documents to team website under Valuation Phase
1 from LCP and 1 from V&V
File naming convention: TeamXX_CostEstimation_VER.doc(x) or .pdf
XX = team number, VER = LCP or V&V

Independent verification is an important part of the software development process. One very costly but common issue that occurs is underestimation of schedule and cost for projects. This often results in features being cut, a lower quality end-product, and a lot of angry people.

Assignment:

1. Have your life cycle planner and your V&V independently perform a cost estimation (driver ratings should be assessed separately).

   Follow the instructions from the LCP template on the next page by using the COCOMO II tool available on the class website: https://greenbay.usc.edu/csci577/fall2019/tools

2. Add a short paragraph describing the reasons for any differences between the driver ratings from your perspective (LCP or V&V). These differences should be discussed and resolved by the time of your next ARB.

Grading Rubric:

10 points for LCP version and 10 points for V&V version

- Preliminary steps/Analysis of Scale Drivers with appropriate rationale (3 points)
- Analysis of Cost Drivers for each module with appropriate rationale (3 points)
- COCOMO II analysis interpretation (2 points)
- Differences rationale (2 points)

Preliminary Steps:
Identify the following information in order to estimate the software cost:

- Estimated CSCI577a Effort : X team members at X hrs/week for 12 weeks
- Estimated CSCI577b Effort : X team members at X hrs/week for 12 weeks (If applicable)
- Total estimated effort
- Budget information
- Project duration
- Component modules in your development project.
- Programming language used

The example of how to rate scale factors and cost drivers can be found at **ICSM EPG> Task: Estimate Project Effort and Schedule using COCOMO II**

For the most common mistakes in cost estimation, please go to **ICSM EPG> Concept: Common Mistakes in COCOMOII Calculation**

From Common Mistakes: Scale factors can be applied to the project as a whole, but cost drivers must be calculated for each individual module. You should have one Scale Driver table for the project and as many Cost Driver tables as the number of modules of your project.

You should provide rationale for every cost driver and scale factor of each module.

Note: You can also refer to Barry W. Boehm, et al, Software Cost Estimation With COCOMO II, Prentice all PTR, New Jersey, 2000 on how to estimate software cost . >>

Table 1: COCOMOII Scale Driver

Scale Driver	Value	Rationale
<Driver name>	<value>	<comments>
…	…	…

Table 2: COCOMOII Cost Driver

Cost Driver	Value	Rationale
<Driver name>	<value>	<comments>
…		…

Provide a screenshot of your COCOMO II analysis result and interpret what it means to your project.
(Will your project finish on time?, What factors are contributing most to cost and is there anything you can do about it?, etc.)

(Reminder to finish question 2)