**Requirements Engineering – Spring 2018**

**Assignment #1**

**Assignment Topics:**

Introduction to the challenges and techniques in requirements elicitation,

representation, evaluation, and communication.

**Background:**

Engineers of all types design and develop products  to address some need. As such, a critical aspect of the engineering lifecycle is managing requirements, which translates into four fundamental activities:

1. Requirements elicitation: gathering information from relevant “stakeholders” (i.e., someone that has a “stake” in the product, such as the customer,developer, tester, etc.) about the need.
2. Requirements representation: capturing the information gathered in some

model, whether that be text, graphics, equations, etc.

1. Requirements evaluation: ensuring the requirements represented are complete, consistent, correct, etc. with respect to what “stakeholders” described.
2. Requirements communication: conveying requirements using the representations chosen to stakeholder, specifically the developers who will help transform the requirements into the end product delivered to the customer.

**Assignment Overview:**

* In your assignment, you will play the role of a requirements engineer, so you will conduct elicitation, represent the requirements you elicited, evaluate the requirements represented, and present your requirements to others.
* You will have the opportunity to interview three stakeholders, each of which has different (and often overlapping) concerns regarding the software system.

1. Student (someone from your group)
2. IT Manager

**Assignment Instructions:**

1. Form groups: You will work in teams of**five**.
2. Prepare questions and interview stakeholders: Interview the two stakeholders identified above. Questioning will occur in a round-robin fashion, with each group asking asingle question in each round. Your complete set of group questions should cover all the relevant categories identified above.
3. Represent the requirements gathered: Based on your notes from the interviews, your group should create a report documenting the requirements information gathered for EACH person interviewed.Your three reports will include the following content:

* Requirements Acquisition Report Header: Please use the header posted on Blackboard and discussed in class for your report.
* Transcript Section: This section is a record of the question/answer session to be documented in the NOTES section of the Requirement Acquisition Session Report. While an exact transcript of the requirements acquisition session is not required, it is useful to organize your notes in a question/answer format.
* Requirements Representation Section: This section contains the requirements gathered to be documented in the NOTES section of the Requirement Acquisition Session Report.
  + You can present these collective requirements however you wish-textual descriptions, mathematical models, drawings, pictures, etc.
  + The requirements must be delimited by requirement category.

Note: You should represent all requirements information acquired by all groups, not just those associated with your own group’s questions.

4. Communicate the requirements represented: Each group will give a

presentation on one of the relevant requirements categories (see above), with

the category-to-group assignment made at random, so therefore your group

must have a 5-minute presentation on the requirements you gathered for

each category (probably the best way to handle this is to distribute category

responsibilities among group members). For example, one group may be asked to present the functional requirements only and will be given 5 minutes to do so.

NOTE1:Be sure to include an accounting of team member responsibilities

on one slide in the presentation.

NOTE2:Reports will be due on March 16th.