**CSE 2102: Introduction to Software Engineering**

**Project: Use Case Diagrams**

**Assigned: Oct. 10, 2018, Due: Oct. 17, 2018.**

Your first assignment for the project “Software for Social Good” is to define a set of use cases for a system that will facilitate an exploration of the Hospital General Information data set. When you write use cases, you can envision various roles who might have completely different perspectives on how the data might be used. For example, a patient or a consumer role may be interested in figuring out an acute care hospital with a 5-star rating within 10 miles of home. A statistical analyst may want to gain an aggregate perspective such as which state has the largest number of 5-star rated acute care hospitals per capita. The analyst may also want to test a hypothesis such as the average rating of acute care hospitals is higher than the average rating of critical access hospitals. Finally, an FDA Regulator may want to identify hospitals below a certain rating for targeted improvements.

In this assignment, you are required to:

1. Identify two roles and three main use cases per role.
2. Extend each of the three main use cases from Q.1, to incorporate at least one *<<includes>>* and *<<extends>>* relationships.
3. Describe the main use cases and the *<<extends>>* and *<<includes>>* relationships in natural language.
4. Draw the use case diagram with the main use cases and the *<<includes>>* and *<<extends>>* relationships.

**Notes:**

You are not limited only to the roles that have been identified above. Use your imagination and creativity!

While the assignment is to be completed as a team, each team member should bear the primary responsibility for developing the use cases for one role. In your submission, please identify the team member responsible for each role.

**Submissions:**

On HuskyCT submit your answers to the Q.1 through Q.4. You can use a simple drawing tool such as Visio or Powerpoint to draw the use case diagrams.