

## **Lab 3 –Software Requirement**

**CSC430**

**Prof. Zhanyang Zhang**

### **Lab Description:**

The purpose of this lab is to gain hands on experience of software requirement processes and to practice the skills of (1) requirement elicitation and analysis, (2) requirement specification, (3) requirement verification and validation. In addition students will experiment the use of a CASE tool, UML, during the process.

### **Part A – Requirement elicitation and analysis**

Students will work in a team (max. 3 people) to do an interview with another student in the team who plays a role of business expert to propose a virtual project, the third student works as a facilitator/recorder. After the interview, each team will analyze the requirements by developing a business analysis report including:

1. A list of user requirements (functional and non-functional),
2. A corresponding system requirement for each user requirement,
3. A set of UML diagrams (use case, class diagram and sequence diagram),

### **Part B – Prototype and requirement validation**

1. Develop a prototype graphical user interface,
2. Review the prototype with team and identify requirement gaps and issues.

Please use the Case Study presented in class as an example and guideline.

### **Lab3 Deliverable:**

Each team must submit a MS Word document includes:

- (1) A transcript of team interview
- (2) List of user requirements and system requirements;
- (3) Requirement Analysis – classification of functional and un-functional requirements;
- (4) UML diagrams (use case, class diagram and sequence diagram) as what we did in the case study.
- (5) GUI Prototype.