

LI Software Engineering and Professional Practice and Building Usable Software (34257, 34208, 34258, 34210, 34206, 36987)

Unit 2: Light Introduction to Requirements Engineering

3rd October, 2022

1 Activity 1. Read the description of the iHandleCustomer's system and answer the following questions.

A new point of sale software-based system to be used in retail stores, called **iHandle-Customer**, supports sales and customer-related services. It includes the following hardware components: a computer, a bar code scanner, a card payment terminal and a card reader. The system provides an interface to enable cashiers to handle sales, issue customer rewards cards (recording name, address, email, contact telephone number and given card number). The system also processes returns of bought items and corresponding refunds, and consults the price of items sold in store. Payments may be done using cash or payment cards (debit or credit). The system must provide adequate mechanisms of authentication; staff to swipe their cards on the reader before doing any operations with the terminal. Card payments should not take longer than 1 minute. Authentications should not take longer than 30 seconds. The system keeps a record of the sessions opened by staff for accountability.

- 1. What is the principal goal of this system?
- 2. Identify the stakeholders of this system.
- 3. Identify the functional requirements (FR).
- 4. Identify the non-functional requirements (NFR).

2 Activity 2. Read the following additional requirements and reflect on the below questions.

- The system should be able to support simultaneous users.
- The system shall be completely operational.

- The mean time to view a web page over a 56Kbps modem connection shall not exceed a few seconds.
- Downtime after a failure shall not exceed a few hours.

Do you think they require some refinements? How can we improve them?

3 Extra Activity. Determine a set of functional and nonfunctional requirements for Facebook.

- 1. Express the functional and non-functional requirements with a unique ID for traceability.
- 2. Group your requirements into sensible sets (e.g., user interface, profile, posting, friends, customizing, etc.).
- 3. Prioritize your requirements.