# Systems Design and Databases (CIS1018-N) Requirement List - Tutorial 1: Requirements List, MOSCOW and User Story

## Before You Start

Make sure you walk through lecture(s) and demonstration exercises before starting the lab and attempt to complete this set of tasks before your following tutorial.

## Team Setup

ICA Element 1 – UML portfolio is a teamwork. You should arrange your own study group or team from the same tutorial group. Optimum number is 5 and acceptable group sizes can be between 4-6. Send the team information to your tutor by email and put module leader in cc ([Yar.Muhammad@tees.ac.uk](mailto:Yar.Muhammad@tees.ac.uk)) and forward the information such as Lab Group, Team’s Name, Team’s Leader Name and Team Members. If you have not done so by week 2 you will be allocated into a team.

## Tutorial Overview

This lab session focuses on the generic E-commerce Platform (ECP) requirements list for developing a system.

* Exercise 1: Identifying the Requirement from the given list
* Exercise 2: Collectively identify and discuss the Requirement list in a group
* Exercise 3: Write a user story on top of the selected requirement each collected

## Exercise 1: Identifying the Requirement from the Given List of Requirement

Identity at least five functional and two non-functional requirements of the system from given list in excel (Requirements List - workbook-v1.xlsx)

You need to define the **Business Functional Area** for the identified requirement, such as Orders, Payment, Registration, User interface, etc.

**Functional requirements** define the basic system behaviour, i.e., what the system should do​. For example, "The ATM system shall provide a facility for authenticating a system user."​

These functional requirements must be expressed as a set of declarative “shall” statements and categorised using **M**o**SC**o**W** criteria as follows:

Graphical user interface, text

Description automatically generated with medium confidence

|  |  |
| --- | --- |
| **M**ust Have | Requirements that are fundamental to the system (mandatory) |
| **S**hould Have | Important requirements that may be omitted. |
| **C**ould Have | Requirements that are truly optional. |
| **W**ant to Have | Requirements that can wait for later releases of the system. |

**Non-functional Requirement** is a constraint on how the functional requirements are implemented​. For example, "The ATM system shall **authenticate a customer in four seconds or less**".

The list of non-functional requirements shall be divided into sections that group related requirements into cohesive sets. Commonly used sections are Capacity, Availability, Performance, Compliance to Standards, and Security.

Note: It’s an individual task – use the second sheet, “Requirements List-Individual”, of Requirement-workbook.xlsx, for this activity

|  |  |  |  |
| --- | --- | --- | --- |
| **Complete the below list of Functional Requirements at least 5** | | | |
| **ID** | **Details** | **Type** | **Priority** |
| R0 | The ECP shall accept all major credit cards. | * Payment * Functional | MustHave |
| R1 | The ECP user interface shall support the insertion of adverts. | * User Interface * Functional | WantToHave |
| R2 |  |  |  |
| R3 |  |  |  |
| R4 |  |  |  |
| R5 |  |  |  |
| R6 |  |  |  |
| … | … | … | … |
| **Complete the below list of No-Functional Requirements at least 2** | | | |
| R0 | The ECP shall be available 24 hours per day, 360 days per year. | * Availability * Non-Functional | MustHave |
| R1 |  |  |  |
| R2 |  |  |  |
| … | … | … | … |

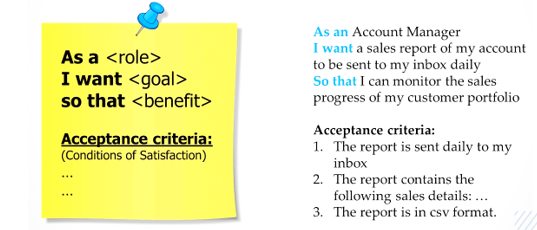
## Exercise 2: Collectively identify and discuss the Requirement list in a group

It’s teamwork where you need to consolidate all identified functional and non-functional requirement lists from each member in the group. A thorough discussion within the group will conclude the finalised Requirement lists for the system.

**Note:** Use the third sheet, “Requirements List-Group”, of Requirement-workbook.xlsx, for this activity

## Exercise 3: Write a User Story

Use the user story template to complete your individual list of requirements (at least five functional and two non-functional) based on your final list of requirements after discussion with members of the group.



Some examples:

* **As a** Customer, **I want** to provide credit card details for payment **So that** I can place an order.
* **As a** User, **I want** the system to support various features **So that** new adverts can be inserted easily in the future.
* **As an** Order confirmation officer, **I want** to notify the dispatch department once the order has been paid **So that** it could be dispatched and delivered on time.

**Note:** You may record this using PowerPoint Slide or Word file