EXPERIMENT 1: Design Elements Extraction

1. AIM:

To extract design elements from a set of user stories.

2. THEORY:

A user story is a tool in Agile software development used to capture a description of a software feature from a user's perspective. The user story describes the type of user, what they want and why.A user story helps to create a simplified description of a requirement.

- Template:
  As a <type of user>, I want <some goal> so that <some reason>.
- Example:
  As a faculty member, I want to mark attendance of students so that I can track their regularity.

The design elements required to be modeled through UML diagrams are contained in these user stories and need to be extracted so as to further put in some UML diagram.
The design elements, this experiment aims to extract are concepts/ classes, attributes, relationships (<subject> <predicate> <object>).

3. PROCEDURE:

Generally, the noun terms are extracted to be the concepts/ classes, verbs are extracted to be relationships (predicates) and adjectives are extracted to be attributes. You are required to apply your intuition and knowledge also before putting an extracted element in to these categories.

4. RESULTS:

Input: The set of user stories provided to you as per the group your roll no. falls into.
Output: Excel file containing design elements **(**concepts/ classes, attributes, relationships (<subject> <predicate> <object>) extracted from the user stories.

Sample Input:

User story 1: *As a faculty member, I want to mark attendance of students so that I can track their regularity.*

Sample Output:

User Story 1: As a faculty member, I want to mark attendance of students so that I can track their regularity.

Classes		
FacultyMember		
Student		
Attributes		
Attribute	**Associated Class**	
Attendance	Student	
Regularity	Student	
Relationships		
Subject	**Predicate**	**Object**
FacultyMember	*mark*	*Attendance*
FacultyMember	*markAttendanceOf*	*Student*
FacultyMember	*track*	*Regularity*
FacultyMember	*trackRegularityOf*	*Student*

Note: The same has to be done for all the user stories in the set.