

Tutorial 3 Requirement analysis

1 Description

In this tutorial, you will learn to apply the UCD to capture the requirements of a software.

2 Tasks

Work **in pairs** to complete the following tasks.

2.1 KEngine

1. Study the KEngine case study requirements about the functions F1 and F3 in Section 12.4 of the text book (also included in the text between the blue markers of the attached scanned images). Write two UCDs to describe these functions.

2.2 Program Trio

2. Write the UCDs for each of the program described in the chapter exercises 11.1,2,3. The three programs are named Xref, SpellChecker, PathFinder (respectively)
Note: these UCDs will be used again in the subsequent tutorials.
3. Determine data requirements for Xref, SpellChecker, PathFinder:
 - a) apart from one obvious core use case of each program, think of at least 2 other use cases that would make the program more useful.
4. Produce a UML class diagram describing the **data model** for Xref, SpellChecker, PathFinder. Ensure to state any constraints (at least in natural language) that are associated with the model
5. Produce a **use case diagram** for Xref, SpellChecker, PathFinder
6. Produce the **requirements specification** for Xref, SpellChecker, PathFinder.

3 Submission

Submit your report to the home work submission box of this tutorial on the FIT portal. Name the file as follows: *student-id_class_hwk3.zip*, where *student-id* is your student id, *class* is the code of the class that you attend.