

LAB # 8

INCLUDE RELATIONSHIP BETWEEN USE CASES

Sometimes one use case includes the functionality of another use case. The include relationship is drawn as an open arrow with a dashed line that points towards the use case that is being included. The word << include >> is written in guillemets (<< . . . >>) alongside the relationship arrow.

An include relationship can also be used when a particular use case is included in other use cases because it encapsulates some functionality that is used at several point in the system.

EXTEND RELATIONSHIP BETWEEN USE CASES

While an Include relationship means that one use case always includes another., there are occasions where one use case may optionally be extended by the functionality in another use case. The relationship is drawn as an open arrow with a dashed line that points towards the use case that is being extended.

The word << extend>> in guillemets the relationship arrow.

The point or the points in the use case at which the extension takes place is called Extension point

HOW TO PRODUCE USE CASES

A System analyst who is producing use case diagrams and description will normally be working from source documents such as notes and transcripts of interviews. The analyst may have carried out the fact finding him or herself or may be working from someone else's notes.

Producing use cases involves 4 steps

- Find actors and use cases
- Prioritize use cases
- Develop each use case
- Structure the use case model

This approach is based on the activities in the unified process.

FIND ACTORS AND USE CASES

The actors represent the roles that people perform in using the system and that other systems fulfill in interacting with the system. It is easier to find people and systems rather than actors to start with. Ask yourself these questions:

- “Who are the people who will use this system to enter information?”
- “Who are the people who will use this system as recipients of information?”
- “What are the other systems that this system will interact with?”

PRIORITIZE USE CASES

The next step is to prioritize the use cases. The purpose of this is to ensure that the important use cases are developed in early iterations of the next activity

DEVELOP EACH USE CASE

The purpose of this activity is to produce the detailed specification of each use case along the lines of the use case description. This activity may also result in new use cases coming to light. In the unified

STRUCTURE THE CASE TOOL MODEL

In this activity structure will be added to the use case diagram through the use of generalization. Include and extend relationships and through the grouping of use cases in Packages.

USE CASES IN UNIFIED PROCESS

Jacobson describe the unified process as use case driven and use cases are central to the way that users requirements are documented in the unified process.

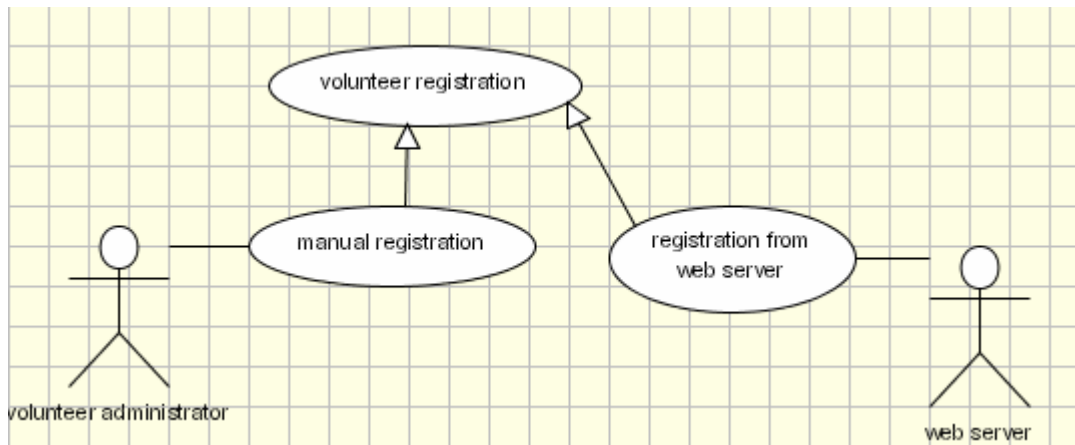
Unified process has 5 workflows. Each workflow consists of a number of related activities that are carried out by different workers. By carrying out the activities in each workflow, the workers produce model, which are elaborated as the development proceeds. In the unified process, the first of these workflows is the Requirements workflow, and the Use case Model is one of its outputs. The only activity that we have not discussed in the current chapter is Prototype User Interface. This activity involves producing a prototype of the user interface for selected use cases.

In the unified process, use cases are realized by collaboration with a trace dependency between the use case and its realization. A trace dependency is a special kind of

dependency between elements of different models that make it possible to trace the requirement through to their final implementation.

Lab Work and Assignment:

Q 3.13: Here is a In the transcript?



Q 3.15: Write the USECASE description for each of the use cases that u found in previous problems?

A:

USECASE DESCRIPTION FOR [VOLUNTEER REGISTRATION]

The volunteer will enter their skills and address for further processing so that they can assign work according to their skills and interest. They will also register the time.

USECASE DESCRIPTION FOR [TRANSFER RECORD]

Details of volunteers will be transferred and time will also come into account.

USECASE DESCRIPTION FOR [RECORD NEEDS OF VOLUNTARY ACTIVITY]

Record for each member of voluntary organization will be maintained. voluntary organizer will enter their needs so further processing can proceed. In the same way volunteers will also registered for their needs.

USECASE DESCRIPTION FOR [DETAILS OF ORGANISATION RECORD]

Organization record will also be managed for future work.

USECASE DESCRIPTION FOR [MATCH VOLUNTEER WITH ACTIVITIES]

In this case each volunteer will be matched with the activity or activities according to the information which the volunteer provides to the organization.

USECASE DESCRIPTION FOR [DETAILS OF MEMBER RECORD]

All information of members will be recorded for future reference and for recognizing their jobs and responsibilities.

USECASE DESCRIPTION FOR [NOTIFY VOLUNTEER]

Volunteers will be notified according to different situations which occurs at different scenarios. Volunteer's organizations will also be notified in the same way.

USECASE DESCRIPTION FOR [PRODUCE VOLUNTEERING AGREEMENT]

For each successful match between a volunteer and activity a volunteering agreement will be maintained.