Exercise – Effort estimation with Use Case Points

Form a team of 2 to 4 students.

Make the following assumptions for the elements in the use case diagram shown in the figure below:
- Actors are of type ‘complex’
- UC3 and UC4 have 5 transactions each
- UC5 has 4 transactions
- UC6 and UC8 have 2 transactions each

Make the following assumptions for the system as a whole:
- Technical and Environmental Complexity Factors both equal ‘1’
- Assume that all eight Environmental Factors equal ‘3’

Figure: ‘Account Management’ sub-system of the ‘Home Access Control’ system

Tasks:
• Calculate the Unadjusted Use Case Points (UUCP) for the use case diagram in the figure below. Show all your calculations and briefly explain each of your steps.
• Calculate the total effort for developing the sub-system ‘Account Management’
• Assume that you have a team composed of 5 persons, each person working 5 days a week. Suppose you have a 4-week iteration, would you be able to develop the sub-system in the next iteration?