

Instructions

- To better benefit from the work in this lab, it is recommended to work in groups of two or three (not more). Your answer document should contain the names of all the group members.
- To receive credit, you have to show you solution to the TA and to submit your work to cuLearn.
- For those who don't finish early, the TA will ask you to show whatever you have completed, starting at about 15 minutes before the end of the lab period.

Problem summary

This lab continues the work you have done in the previous lab for the Real Estate Agency problem. Assume that you are at the point where you have already performed Requirements Elicitation and Analysis, as well as a part of the Analysis phase, including the specification of object interaction for the use case "Respond to offer" as a sequence diagram. Your task now is to build the state machine for the use case controller.

What to do

You are asked to continue the analysis phase for this software system, given that you have the following specifications from the previous lab:

- Use case model
- Updated class diagram indicating the category of each class (i.e., *Entity*, *Boundary* and *Control*)
- Sequence diagram(s) giving the interactions for the realization of the use case "Respond to offer"

Specifically, your task is to build a statechart for the use case controller using the heuristics applied in the COMET methodology. The statechart should be consistent with the sequence diagram(s) showing how the controller interacts with other objects.

Your answer should include:

1. A statechart for the controller of the use case "Respond to offer".
2. A brief explanation of how you have enforced the consistency between the inter-object interactions from the sequence diagram and the statechart elements (states, events, actions).