Exercise 11: State Transition Diagrams

(a) Model the “life cycle” of a single delivered piece of homework as a state transition diagram. To simplify matters you can assume that each piece of homework consists of only one exercise. Give a written explanation of each state!

(b) Model the path of an e-mail from sending on the author’s side to receiving with the addressee’s mail client as a state transition diagram. Give a written explanation of each state!

5 + 5 = 10 Points

Exercise 12: Activity Diagrams

(a) Create an activity diagram for the correction of homework. Start with “Publish online” (i.e. the exercises are released on the website) and conclude with two alternate activities:

“Pick up in one of the exercises” or “Pick up in the consulting hour”. Give a written description for your diagram and explain the meaning of each activity in detail.

(b) Extend the diagram from a), adding the following activities:

- “Check correction” — the tutor checks the correction of an exercise that has been objected to
- “Correct score” — if an exercise has not been corrected accurately the student’s score in the database has to be adjusted accordingly

Add further activities if necessary.

6 + 4 = 10 Points