TU Clausthal

Requirements Engineering

Exercise – 4

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Deadline: 12.01.2026 – 1:59 PM

Submission location: Moodle Course Page

Task(s):

Submission guidelines:

- Please upload a valid PDF file with the list of Roles, Goals and the BIM.
- The maximum page limit for the list of Roles, Goals and the BIM is 4.
- Additionally upload a PDF of your AOM Goal Model (Make sure the diagram is clearly visible).
- You can upload a maximum of 2 files that collectively make up your submission.
- Please review your submission once you have uploaded all files and then click the Submit button.

Scenario: You are tasked with the development of an E-Scooter ride-share system. It allows registered commuters to approach an idle E-Scooter and reserve it, following which they use the E-Scooter to commute a certain distance (that is not known prior to use). Finally, after the commuter reaches their destination, they end the ride, which prompts an automatic computation of the ride fees. which is automatically debited using the commuters registered payment details.

Task(s):

1. Identify and list the relevant Agents, Roles and Goals (Functional and Quality) of the system. Make sure that you encompass commuter registration, E-Scooter reservation/use, and the final payment process.
2. Please use at least one of *time* and *distance* to compute ride cost. The specific computation formula used is up to you.
3. Create an AOM Goal diagram based on your identified Roles and Goals. Please make sure your diagram has at least 3 levels of hierarchy.
4. Create an AOM Behavioral Interface Model that is consistent with your AOM Goal model (For the entire model, not just a subset).

Questions? → etce-re@tu-clausthal.de

We will ignore all emails to our private email accounts!

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