

# Introduction to Embedded Systems Design

## UML – Exercise 4

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- Based on the last exercise (structure model of a reservation system) develop the behavior
  - For the main class (reservation system)
    - Describe a use case diagram
  - For your “system classes” develop the interaction with its environment
    - Use a sequence diagram and collaboration diagram
      - From the perspective of the user (interaction with user)
      - Between at least to system classes
  - Next, specify the behavior of two “system classes”
    - Use UML state machines for describing the event-driven behavior of the classes
      - At least reservation system
    - Use UML Activity diagrams to describe the algorithm of two operation (including object flow)
- Based on your specifications implement your system in Java or C++
  - (if you are familiar with C, please try to implement it in C, too).

## ▶ Individual work

- ▶ Upload till Monday 17 eob to ilias
- ▶ Of course you are allowed to discuss your solution/dev. with other students...