

# Software Engineering Principles

Autumn 2014

## Mandatory Exercise 2

Lecturer: Stefan Hallerstede sha1@eng.au.dk

Instructor: Femina Hassan Aysha Beevi feay@eng.au.dk

12 September 2014

## Requirements

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### Ceiling Projection Travel Alarm Clock

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Refer mandatory exercise1

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## Problems

- (1) Improve the requirements and bring them into a traceable form.
- (2) Model the Ceiling Projection Travel Alarm Clock using problem frames.  
(You have to create a context diagram and problem diagrams for the subproblems.)
- (3) Specify the state and the basic operations in Z.
- (4) Write a state chart specification for the Ceiling Projection Travel Alarm Clock.
- (5) Annotate your models such that the requirements can be traced into them.
- (6) What are the advantages and disadvantages of the three models?  
Would you profit from their combined use?