

*Lab for Software Engineering*

# Cinema Management Application

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# Contents

<b>1</b>	<b>Analysis</b>	<b>iv</b>
1.1	A1 . . . . .	iv
1.1.1	Requirements & Domain-Knowledge . . . . .	iv
1.1.2	Contextdiagram . . . . .	iv
1.2	A2 . . . . .	v
1.3	A3 . . . . .	vi
1.4	A4 . . . . .	vii
1.5	A5 . . . . .	viii
1.6	A6 . . . . .	ix
<b>2</b>	<b>Design</b>	<b>x</b>
2.1	D1 . . . . .	x
2.2	D2 . . . . .	x
2.3	D3 . . . . .	x
2.4	D4 . . . . .	x
<b>3</b>	<b>Implementation &amp; Testing</b>	<b>xi</b>
3.1	I . . . . .	xi
3.2	T1 . . . . .	xi
3.3	T2 . . . . .	xi
3.4	T3 . . . . .	xi
<b>4</b>	<b>Glossary</b>	<b>xii</b>

# List of Figures

1.1	Contextdiagram . . . . .	iv
1.2	Problem diagram for R1 . . . . .	v
2.1	Zustandsdiagramm Person 1 . . . . .	x

# 1 Analysis

## 1.1 A1

### 1.1.1 Requirements & Domain-Knowledge

#### Requirements

R1 First...

R2 Second...

#### Facts

F1 First...

F2 Second...

#### Assumptions

A1 First...

A2 Second...

### 1.1.2 Contextdiagram

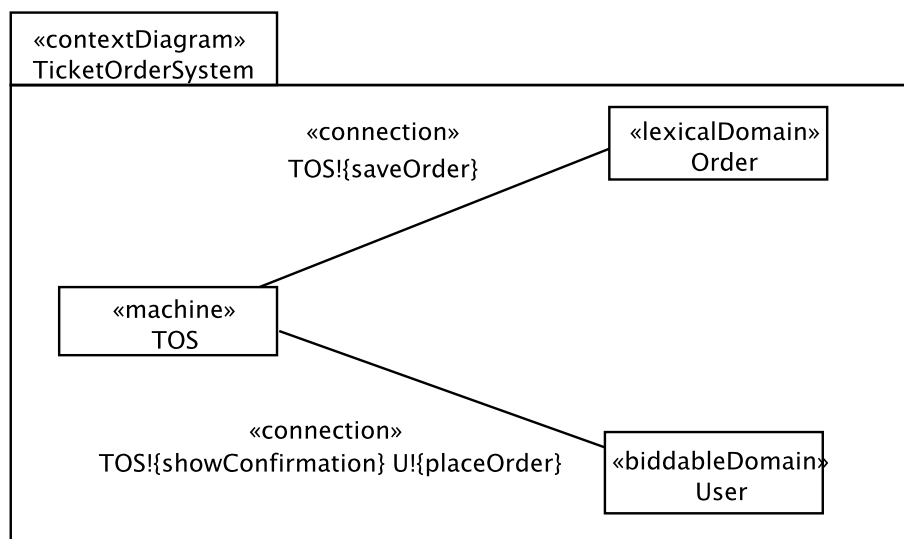


Figure 1.1: Contextdiagram

## 1.2 A2

We can derive the following problem diagrams

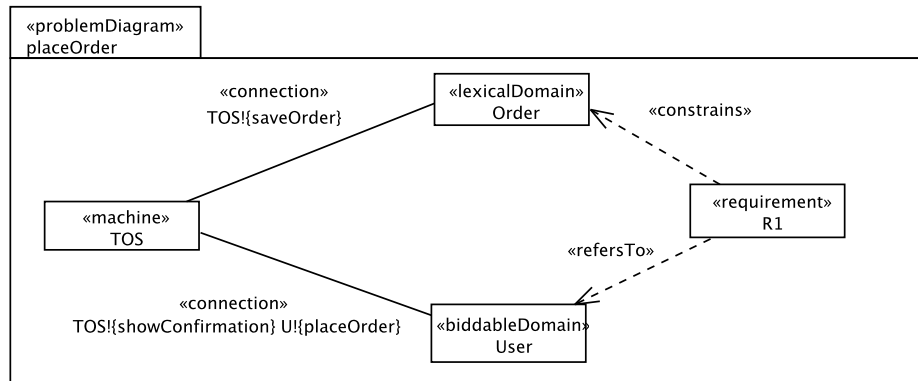


Figure 1.2: Problemdigram for R1

## 1.3 A3

## 1.4 A4

## 1.5 A5

A short OCL example:

```
1 context Person inv: self.alter >=0
2
3 pre alter >30
4 post alter=alter@pre+1
```



## 1.6 A6

Examples of a life-cycle using the math-environment:

$$LC_{guest} = (Browse^+; [Book])^*$$

## 2 Design

### 2.1 D1

### 2.2 D2

### 2.3 D3

### 2.4 D4

State diagrams with tikZ:

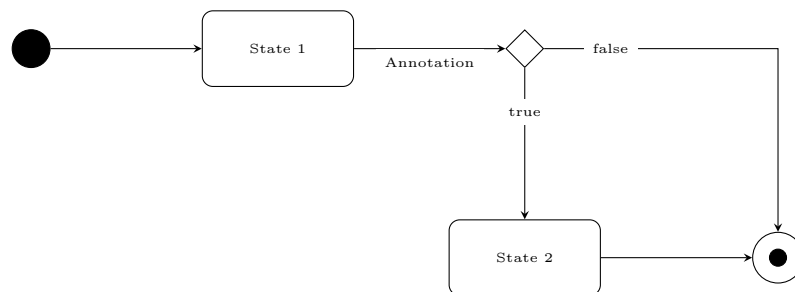


Figure 2.1: Zustandsdiagramm Person 1

## **3 Implementation & Testing**

**3.1 I**

**3.2 T1**

**3.3 T2**

**3.4 T3**

## 4 Glossary

Table 4.1: Glossary

Name	Type	Description	Source
<b>A</b>			
Anton	biddable Domain	User of the system	Contextdiagram
<b>B</b>			
<b>C</b>			
<b>D</b>			
<b>E</b>			
<b>F</b>			
<b>G</b>			
<b>H</b>			
<b>I</b>			
<b>J</b>			
<b>K</b>			
<b>L</b>			
<b>M</b>			
<b>N</b>			
<b>O</b>			
<b>P</b>			
<b>Q</b>			
<b>R</b>			
<b>S</b>			
Stakeholder	biddable Domain	User of the system	contextdiagram
<b>T</b>			
TOS	machine Domain	Software	contextdiagram
<b>U</b>			

Table 4.1: Glossar

Name	Type	Description	Source
User	biddable Domain	User of the system	contextdiagram
<b>V</b>			
<b>W</b>			
<b>X</b>			
<b>Y</b>			
<b>Z</b>			