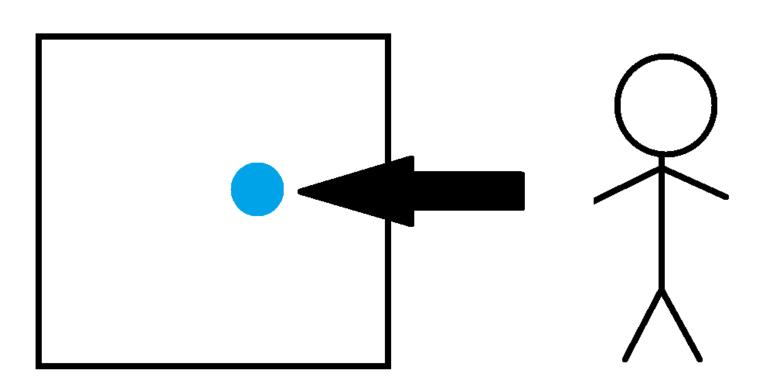
# SWOP – TaskMan iteratie 2

Door Tim Van Den Broecke,
Joran Van de Woestijne,
Vincent Van Gestel en
Eli Vangrieken

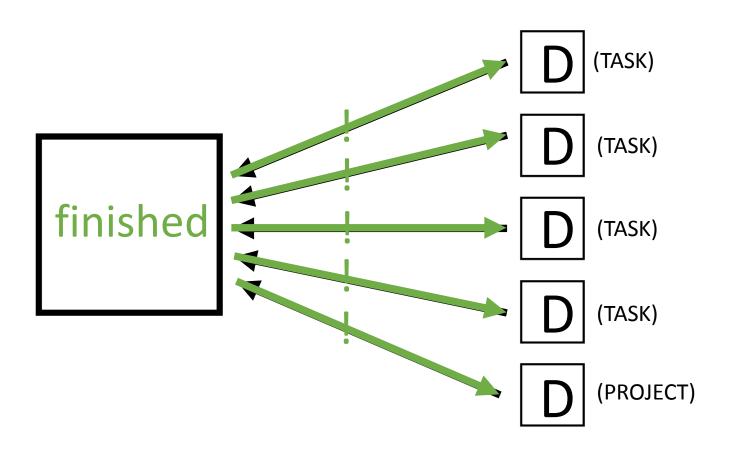
#### Inleiding

- 1. Refactoring iteratie 1
- 2.Design overzicht
- 3.Domain strength
- 4.Testing

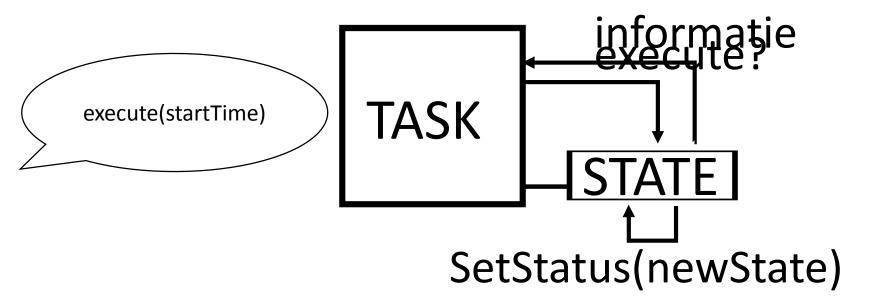
#### Refactoring iteratie 1- Views



#### Refactoring iteratie 1- Observer



#### Refactoring iteratie 1- State



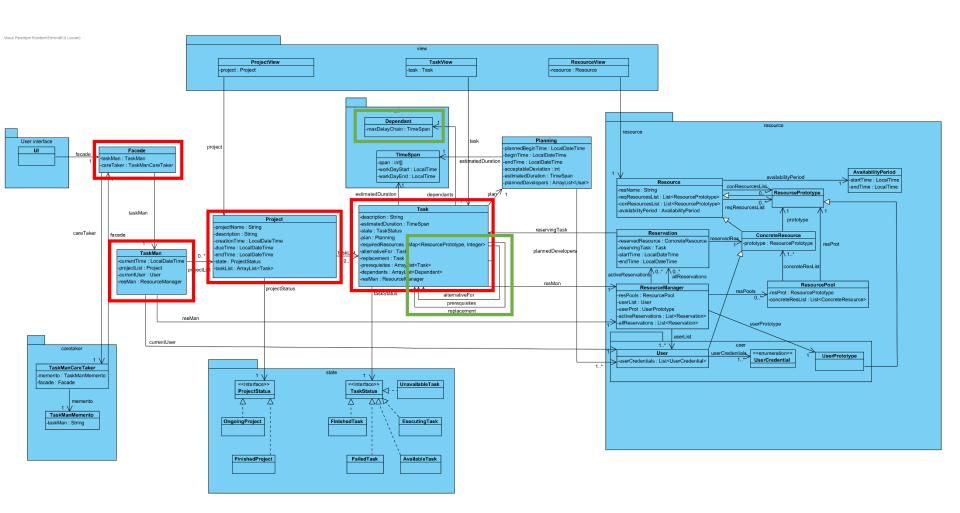
```
### TMAN UPDATE ###
    # A system will have a user logged in at init
    currentUser:
      - name : "admin"
72
73
    projects:
74
     - name
                     : "project x"
75
      description : "a project description"
76
      creationTime : "2014-01-01 09:00" # YYYY-MM-DD HH:MM
77
        dueTime
                    : "2014-02-01 18:00"
78
79
     - name
                  : "project v"
      description : "another project description"
80
81
      creationTime : "2014-01-01 09:00"
82
        dueTime
                   : "2016-01-01 18:00"
83
84
                  : "project z"
85
        description : "yet another project description"
86
      creationTime : "2015-04-25 09:00"
87
        dueTime
                   : "2015-04-30 18:00"
88
89
    plannings:
     - plannedStartTime : "2014-01-01 09:00"
90
91
        developers
                        : [0, 1]
92
      ### TMAN UPDATE ###
93
       # Plannings needn't know about required resources, tasks do
94
     - plannedStartTime : "2014-01-02 17:00"
95
        developers
                       : [1]
     - plannedStartTime : "2014-03-01 09:00"
96
97
      developers
                       : [2]
98
      ### TMAN UPDATE ###
      # Added a new planning for convenience
100
      - plannedStartTime : "2014-01-01 10:00"
101
        developers
                      : [2]
```

```
67
    ### TMAN UPDATE ###
    # A system will have a user logged in at init
    currentUser:
     - name : "admin"
71
72
73
    projects:
74
     - name
                     : "project x"
75
      description : "a project description"
76
      creationTime : "2014-01-01 09:00" # YYYY-MM-DD HH:MM
77
        dueTime
                    : "2014-02-01 18:00"
78
79
                    : "project v"
     - name
      description : "another project description"
80
81
      creationTime : "2014-01-01 09:00"
82
        dueTime
                    : "2016-01-01 18:00"
83
84
                    : "project z"
85
        description : "yet another project description"
86
      creationTime : "2015-04-25 09:00"
87
        dueTime
                   : "2015-04-30 18:00"
88
    plannings:
90
     - plannedStartTime : "2014-01-01 09:00"
        developers
                       : [0, 1]
91
        ### TMAN UPDATE ###
92
        # Plannings needn't know about required resources, tasks do
94
      - plannedStartTime : "2014-01-02 17:00"
        developers : [1]
      - plannedStartTime : "2014-03-01 09:00"
97
       developers
                       : [2]
98
        ### TMAN UPDATE ###
        # Added a new planning for convenience
      - plannedStartTime : "2014-01-01 10:00"
100
101
        developers
                       : [2]
```

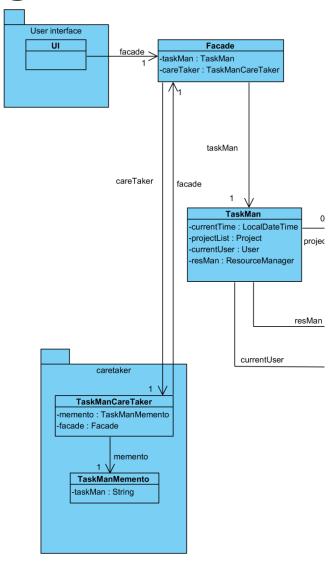
```
100
       - plannedStartTime : "2014-01-01 10:00"
101
         developers
                       : [2]
102
103
    tasks:
104
         # projects and tasks are incrementally numbered starting with the number 0
105
       - project
                            : 0
106
         description
                           : "task description"
107
         estimatedDuration : 500
108
         acceptableDeviation: 50
109
         alternativeFor :
110
         prerequisiteTasks :
111
         ### TMAN UPDATE ###
112
         # during task creation, required resources and their quantity should be specified
113
         requiredResources : [{type: 0, quantity: 2}, {type: 2, quantity: 1}]
         planning : 0
115
         # a task can be finished, failed, executing or unspecified (i.e. ongoing)
116
                            : finished
         status
117
         # These time stamps are only required if a task is finished of failed
118
         startTime
                            : "2014-01-01 10:00"
119
         endTime
                           : "2014-01-02 17:00"
120
121
       - project
                           : 1
122
                           : "another task description"
         description
123
         estimatedDuration : 50000
124
         acceptableDeviation: 50
125
         alternativeFor :
126
         prerequisiteTasks :
127
         requiredResources :
128
         planning
129
         ### TMAN UPDATE ###
130
         # Original status was available, but no executing in system yet, so for completion
131
         status
                            : executing
         # An executing task requires an actual start time
132
133
         startTime
                           : "2014-01-02 17:00"
134
```

```
139
         alternativeFor
140
         prerequisiteTasks :
141
         requiredResources :
142
         planning
143
         status
144
145
       - project
146
                            : "task 3's description"
         description
147
         estimatedDuration : 5000
148
         acceptableDeviation: 0
149
         alternativeFor
         prerequisiteTasks : [ 1, 2 ]
150
151
         requiredResources :
152
         planning
153
         ### TMAN UPDATE ###
154
         # original status was failed, impossible to fail unavailable tasks
155
         status
156
157
       - project
                            : 1
                            : "task 4's description"
158
         description
159
         estimatedDuration : 50000
160
         acceptableDeviation: 0
161
         ### TMAN UPDATE ###
162
         # Task 3 is no longer failed, so 3 as alternative is impossible
163
         alternativeFor
164
         prerequisiteTasks : [ 1, 2 ]
165
         requiredResources : [{type: 5, quantity: 1}]
166
                            : 2
         planning
167
         ### TMAN UPDATE ###
168
         # Original status was executing, yet an unavailable task can execute
169
         status
170
171
       - project
172
         description
                            : "task 5's description"
173
         estimatedDuration : 500
```

### Het Design – overzicht

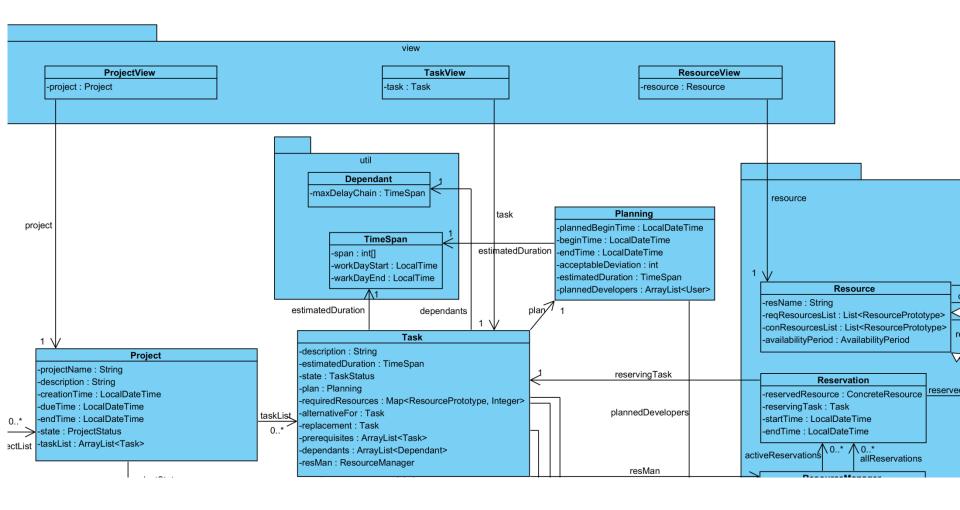


#### Het Design – Memento CareTaker

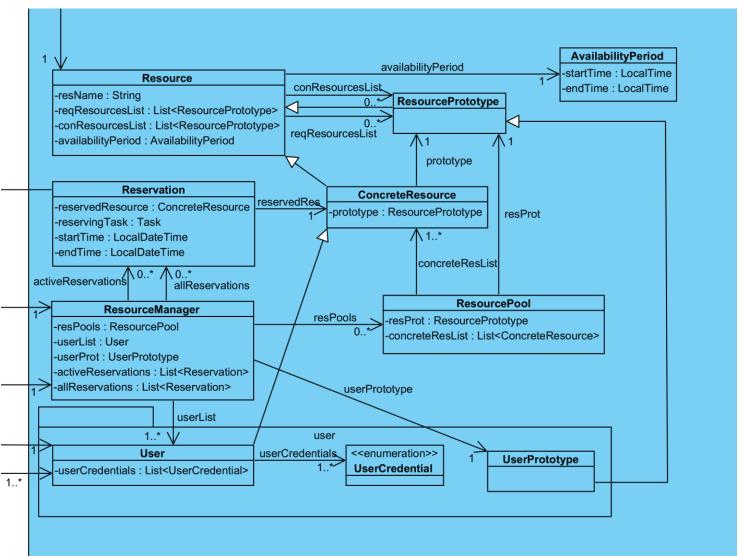


Het Design - State Task taskMan -description : String **Project** -estimatedDuration : TimeSpan -projectName : String -state : TaskStatus -description : String ide -plan : Planning -creationTime : LocalDateTime -requiredResources: Map<ResourcePrototype, Integer> -dueTime : LocalDateTime -alternativeFor : Task TaskMan taskList -endTime : LocalDateTime -replacement : Task currentTime: LocalDateTime -state : ProjectStatus -prerequisites : ArrayList<Task> projectList : Project -taskList : ArrayList<Task> projectList -dependants : ArrayList<Dependant> currentUser: User -resMan: ResourceManager resMan: ResourceManager projectStatus taskStatus alternativeFor prerequisites replacement resMan currentUser state 1 \ 1 \/ <<Interface>> <<Interface>> UnavailableTask **TaskStatus ProjectStatus OngoingProject** FinishedTask ExecutingTask **FinishedProject** FailedTask AvailableTask

### Het Design – Views & Planning

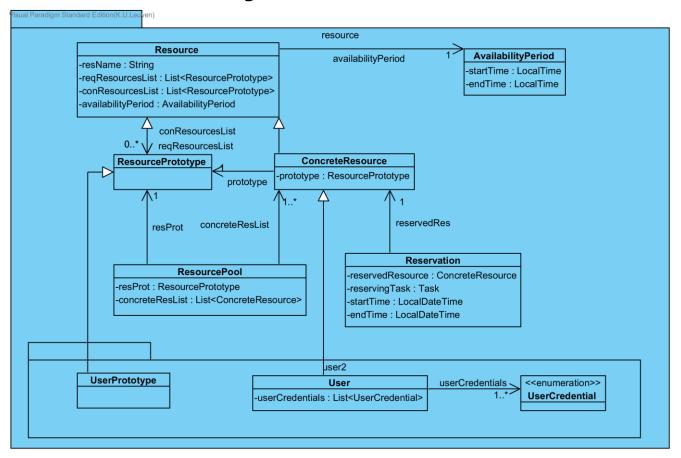


### Het Design - Resources



#### Het Domein – Uitbreidbaarheid

#### Resources zijn zeer Generiek



#### Het Domein – Robuustheid

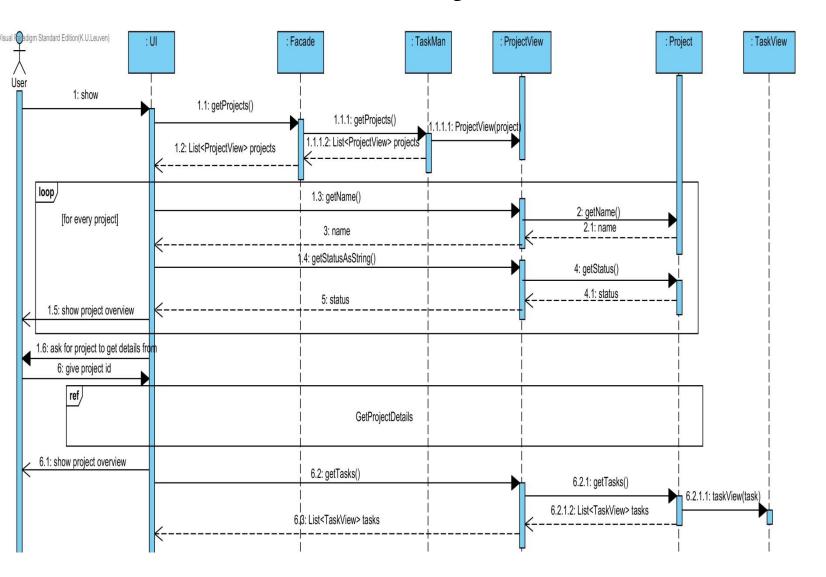
#### Low coupling

Systeem afscherming door views

#### Plan task use-case

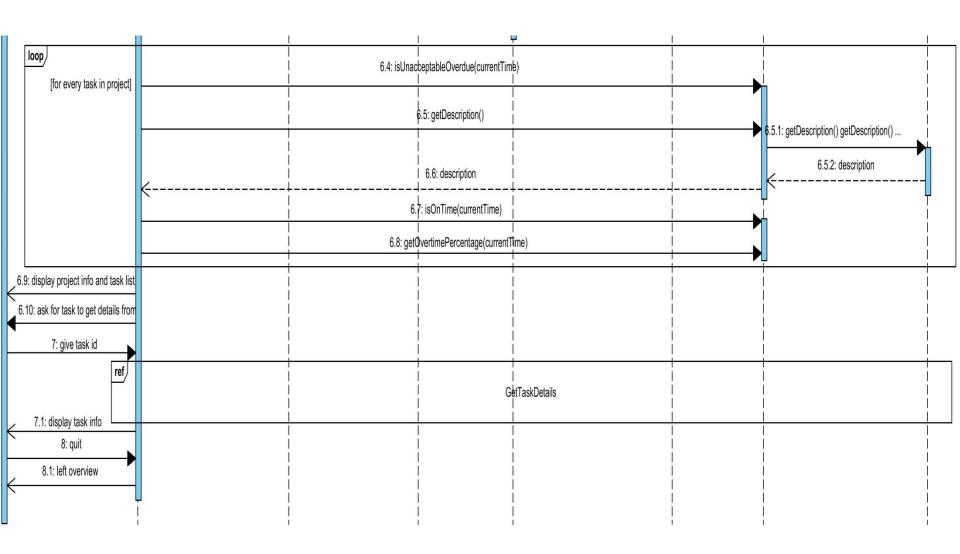
Systeem suggesties altijd veilig

# UC1: Show Projects

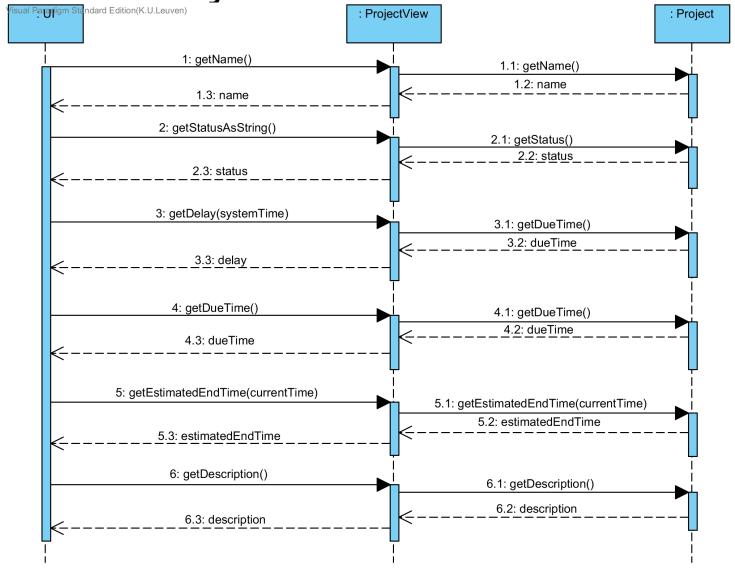


: Task

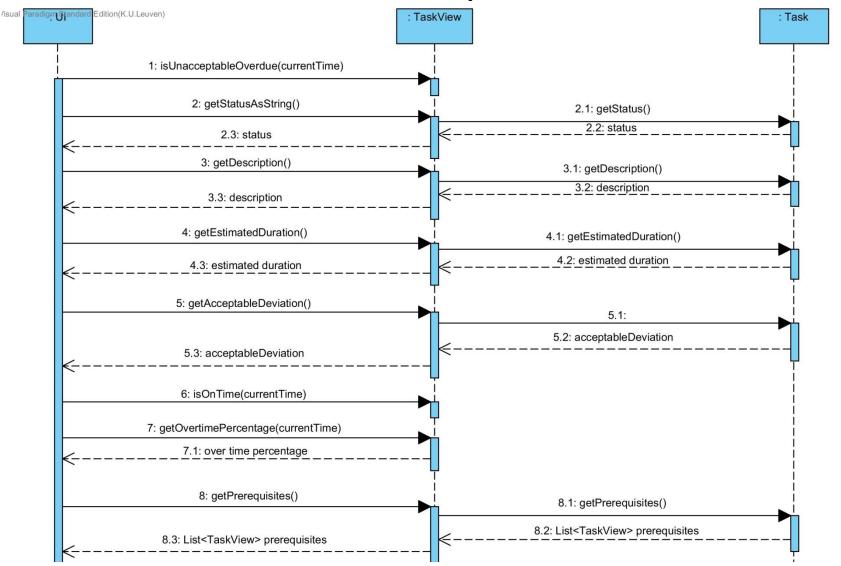
# UC1: Show Projects part 2



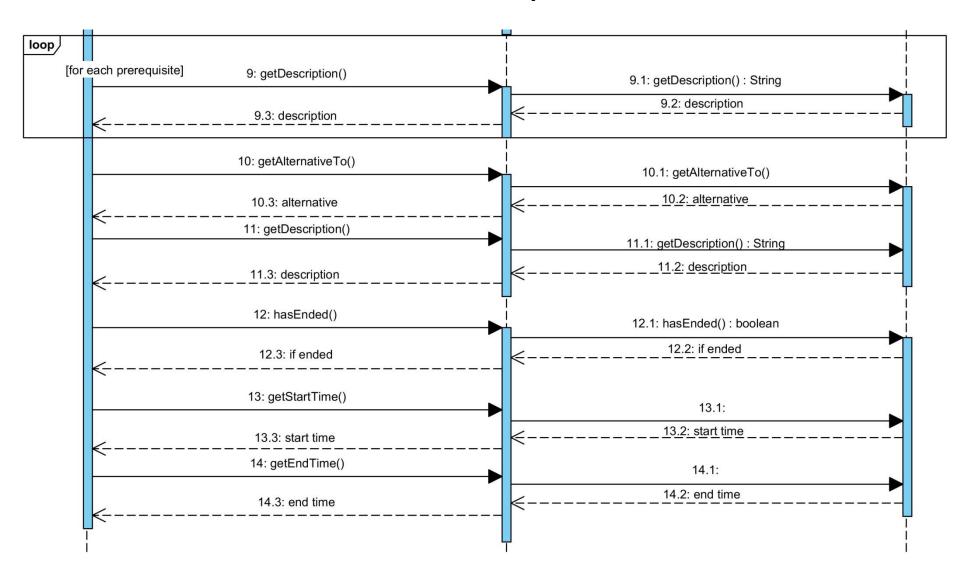
UC1: Project Details



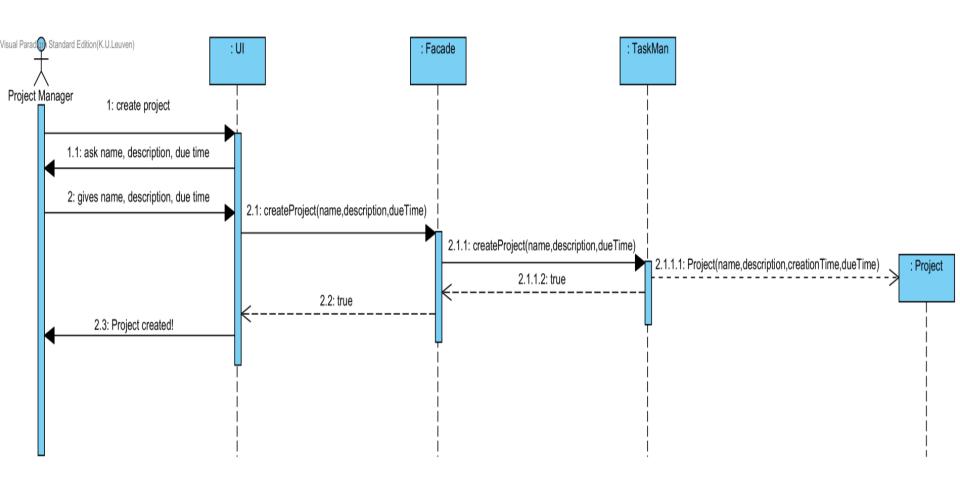
# UC1: Task Details part 1



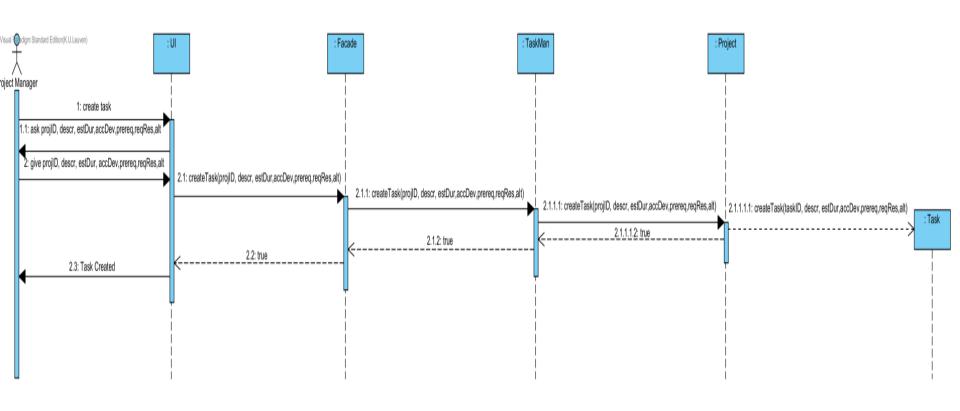
# UC1: Task Details part 2



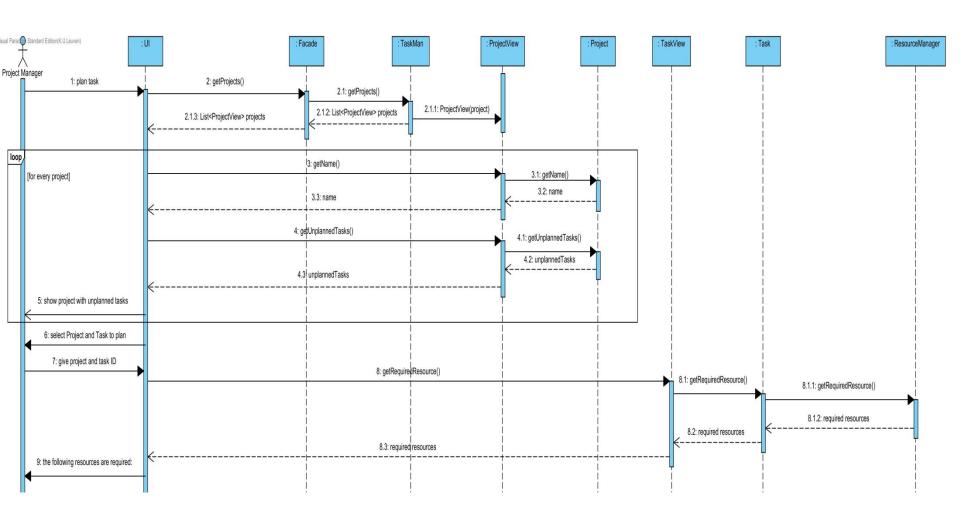
# UC2: Create Project



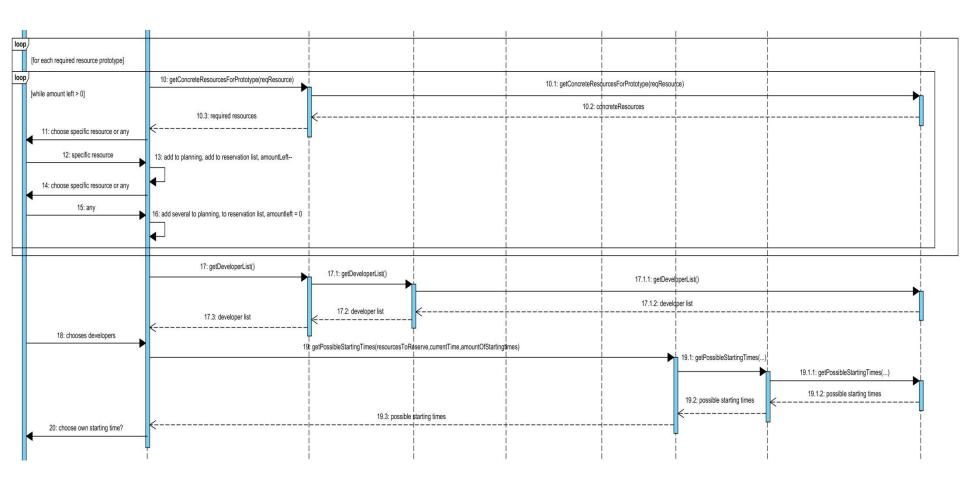
#### UC3: Create Task



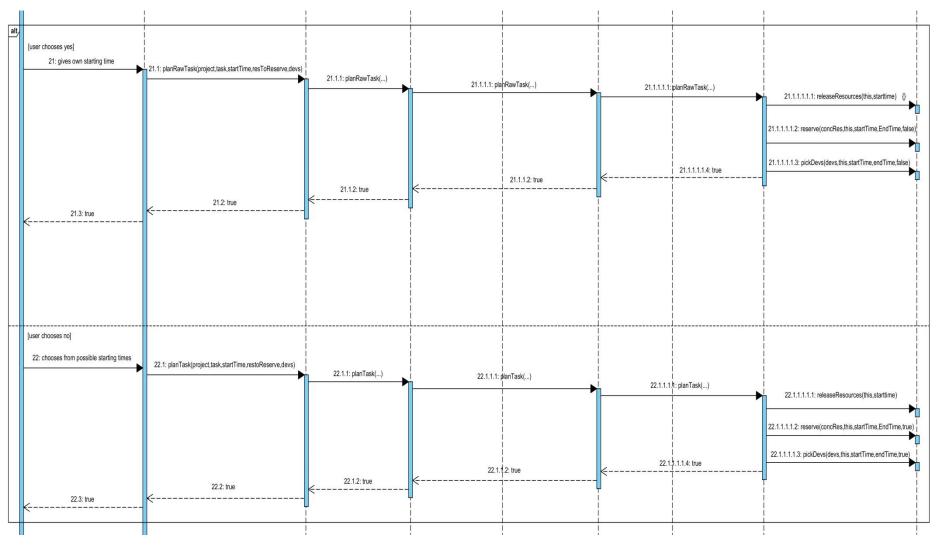
#### UC4: Plan Task



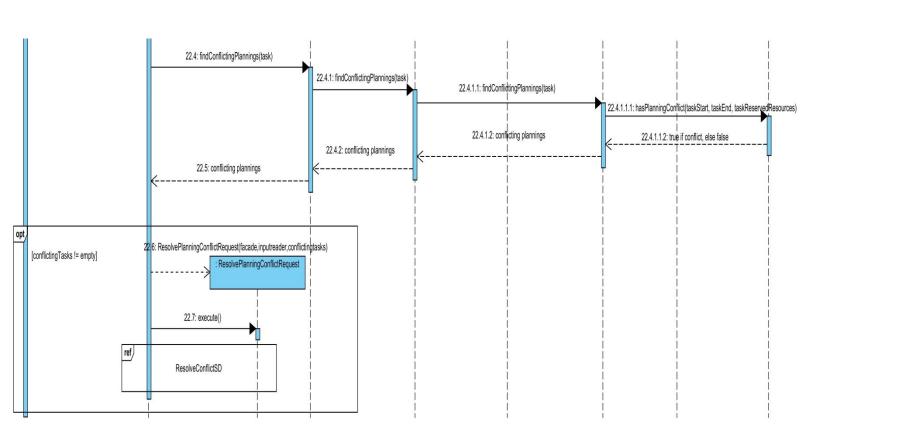
# UC4: Plan Task part 2



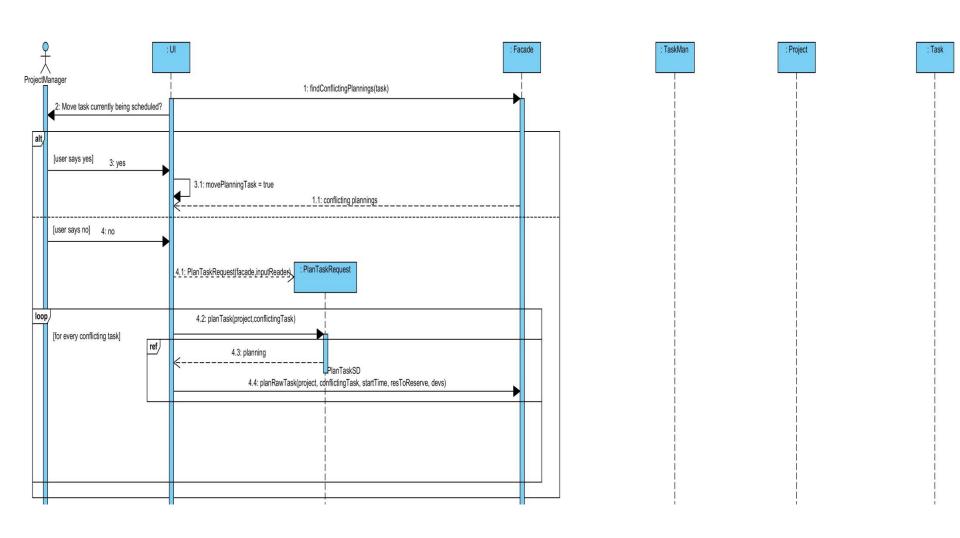
# UC4: Plan Task part 3



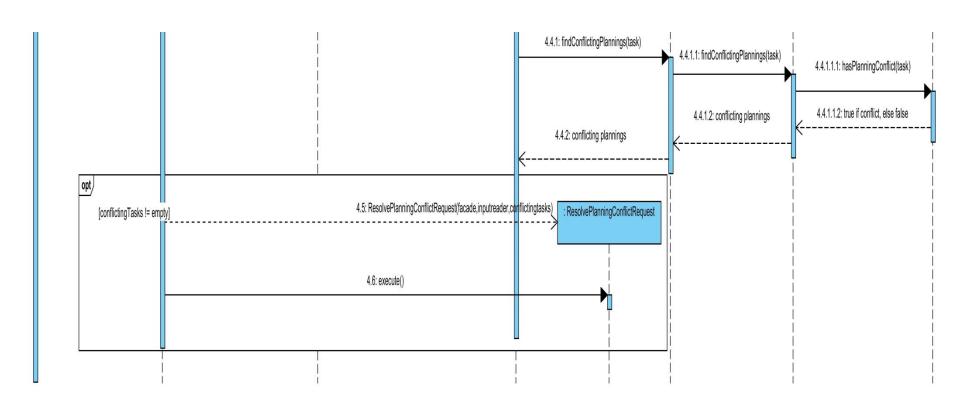
# UC4: Plan Task part 4



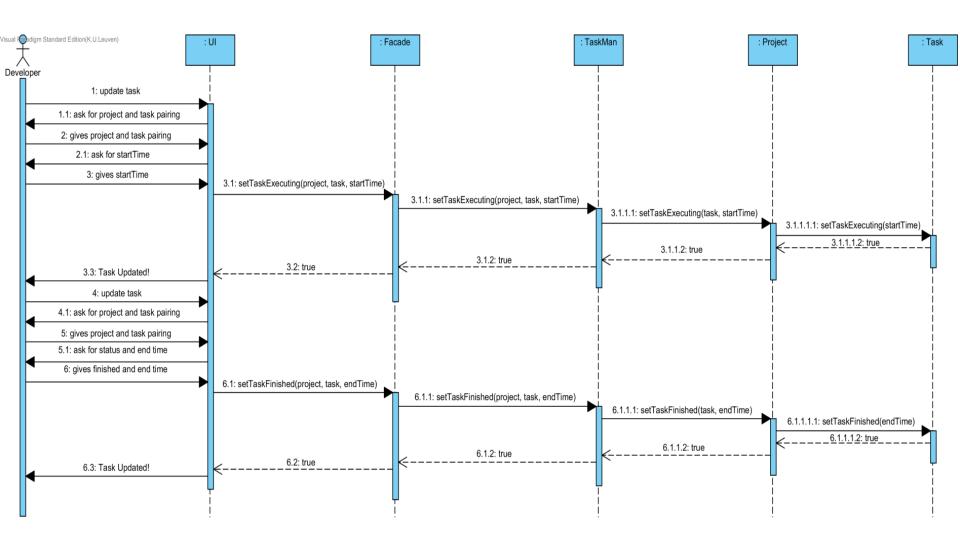
#### UC5: Resolve Conflict



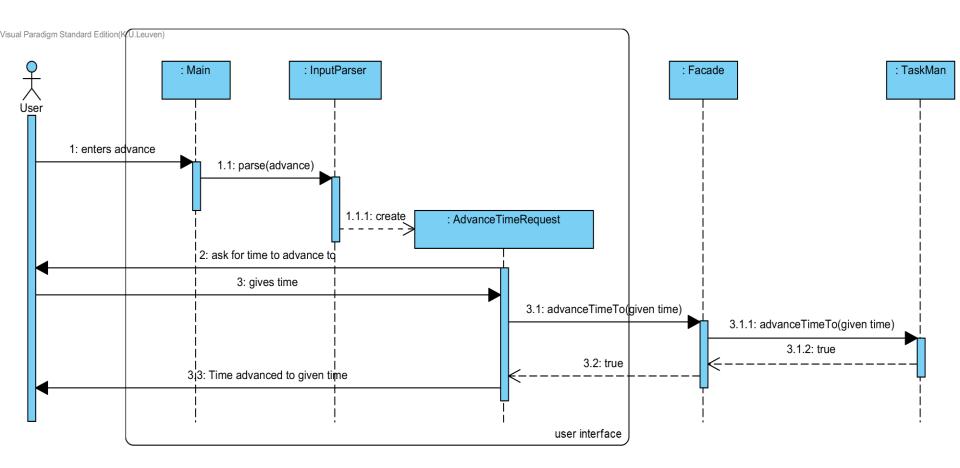
# UC5: Resolve Conflict part2



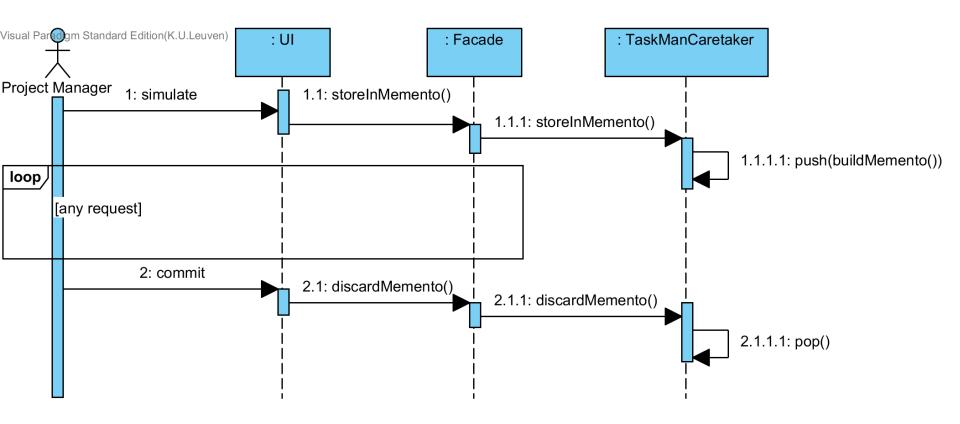
# UC6: Update Task Status



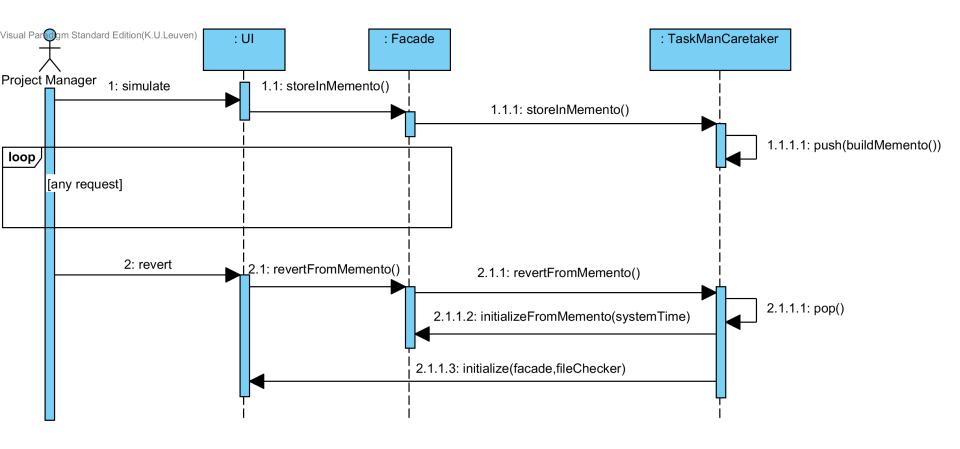
#### UC7: Advance Time



#### UC8: Simulation Commit



#### UC8: Simulation Revert



# Testing

# Testing - Testsuite

#### Demonstratie

# Werkverdeling

#### Format: (Estimated) group / individual / study

- Vincent Van Gestel: <u>Wildcard</u> now, Design coordinator Next 70/40/12
- Joran Van de Woestijne: <u>Domain</u> coordinator now, Testing coordinator Next
   70/10/10
- Tim Van Den Broecke: <u>Design</u> coordinator now, Wildcard Next
   70/30/10
- Eli Vangrieken: <u>Testing</u> coordinator now, Domain coordinator Next 70/30/10