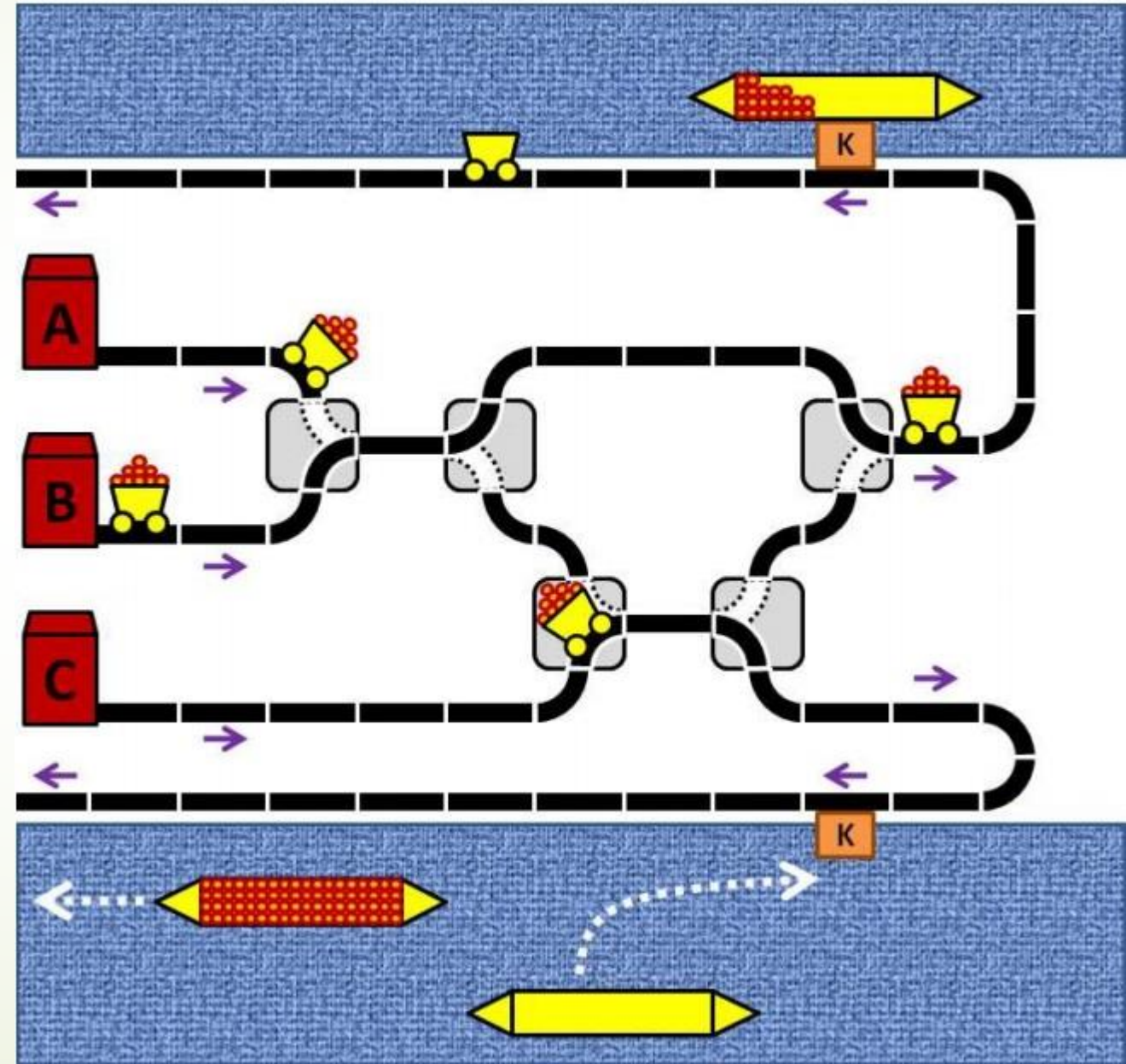# Goudkoorts Toelichting
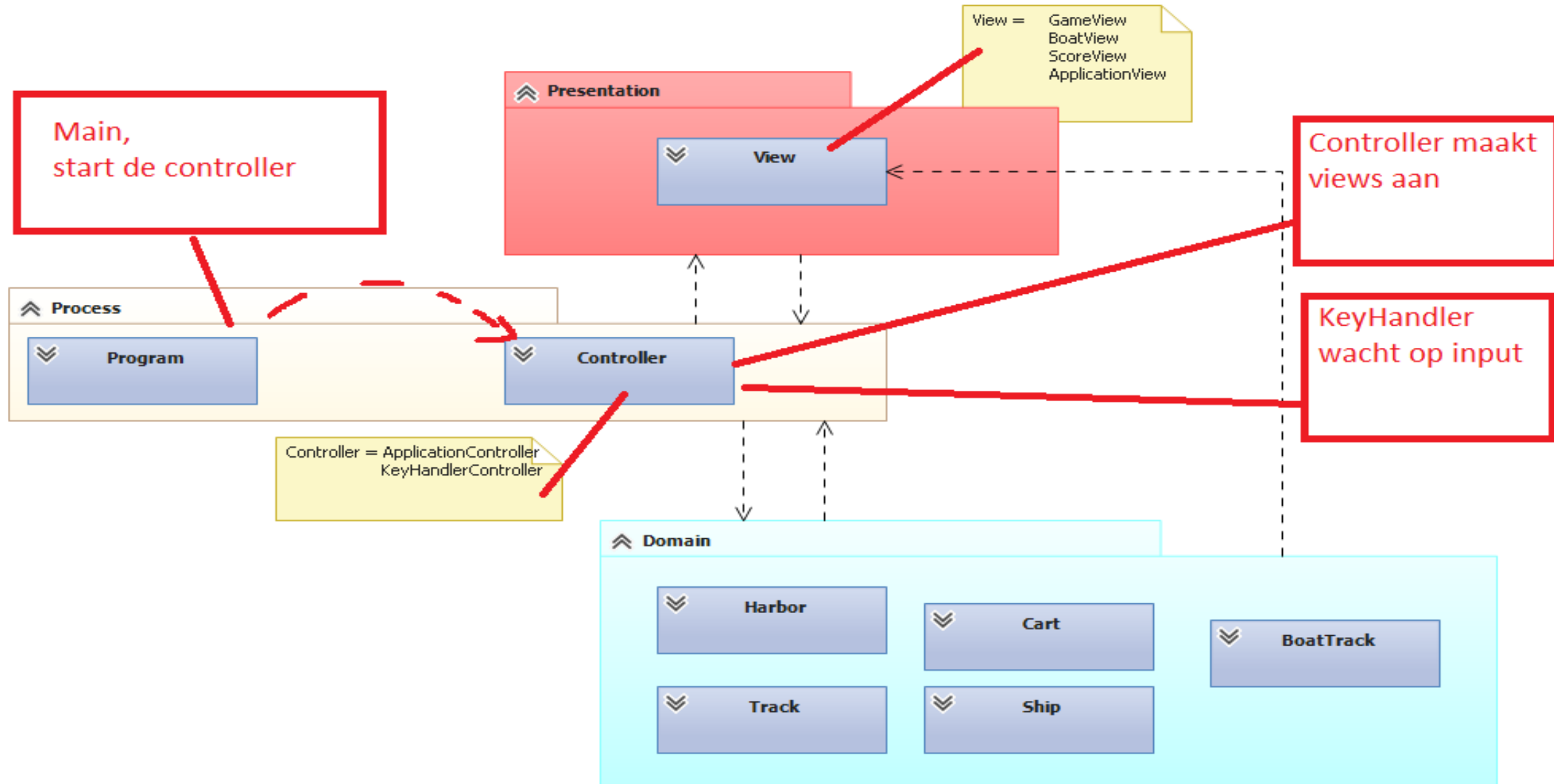
42INSO5k
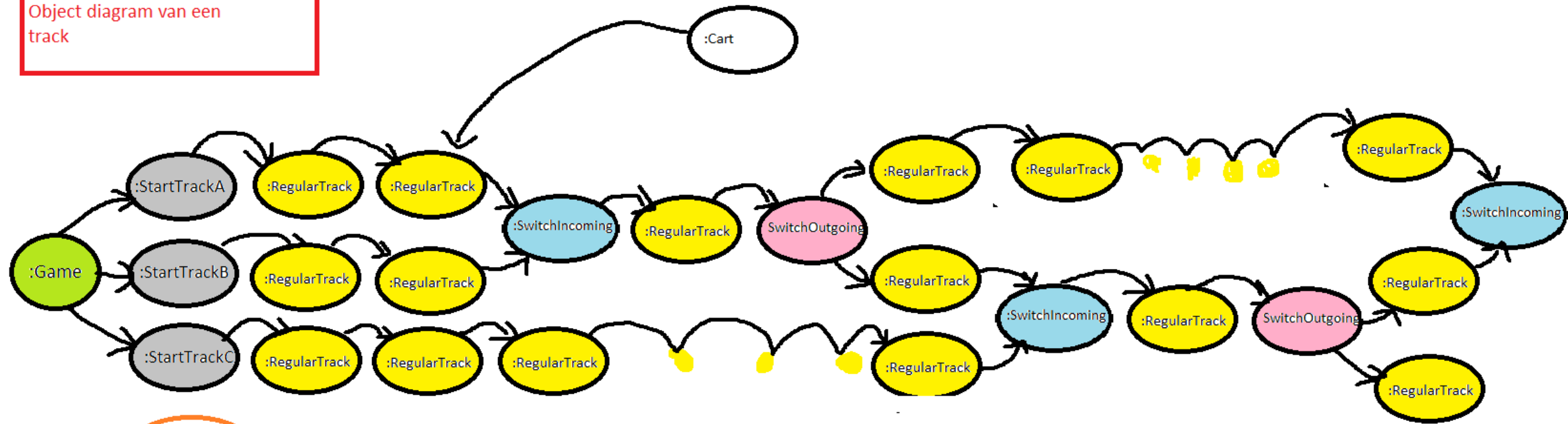
Raymond Phua
&
Dion Thiers

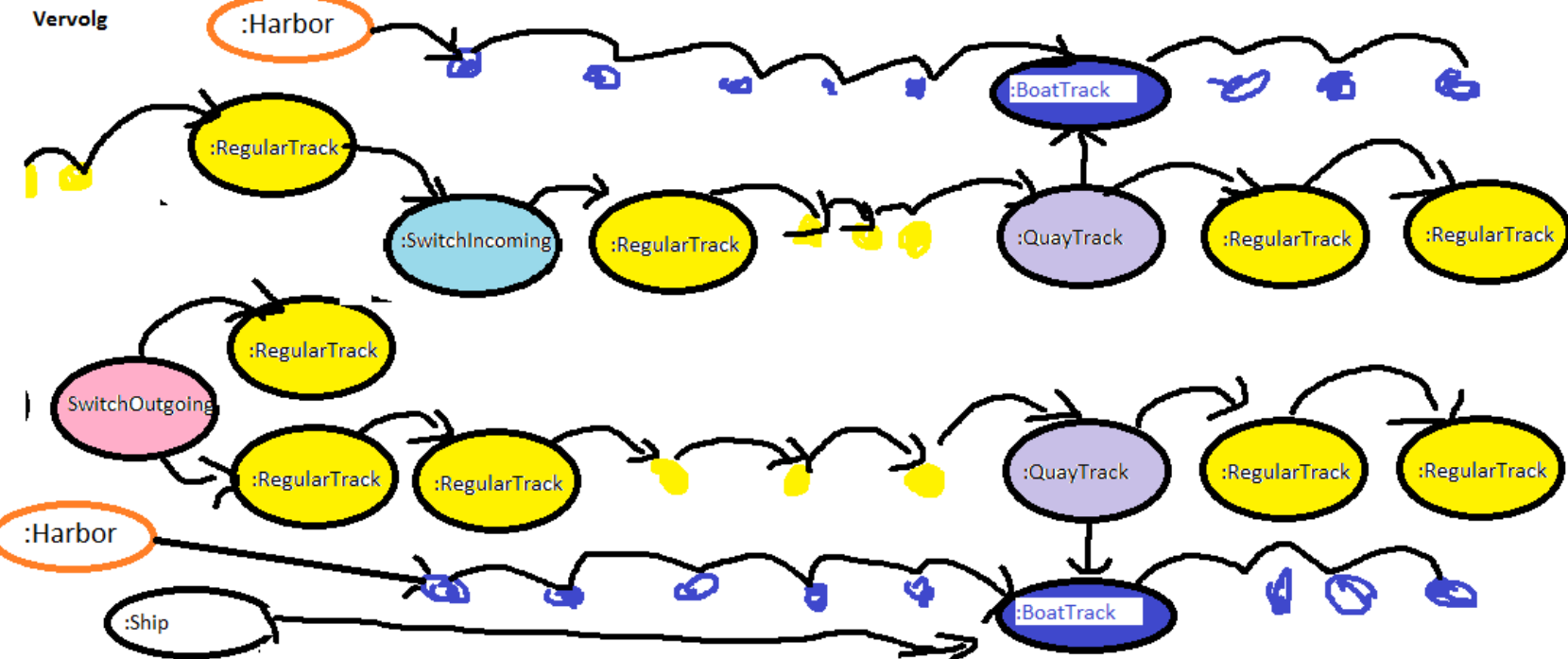cd UMLClassDiagram1

Main,
start de controller

Presentation

View = GameView
BoatView
ScoreView
ApplicationView

View

Controller maakt
views aan

Process

Program

Controller

KeyHandler
wacht op input

Controller = ApplicationController
KeyHandlerController

Domain

Harbor

Cart

BoatTrack

Track

Ship
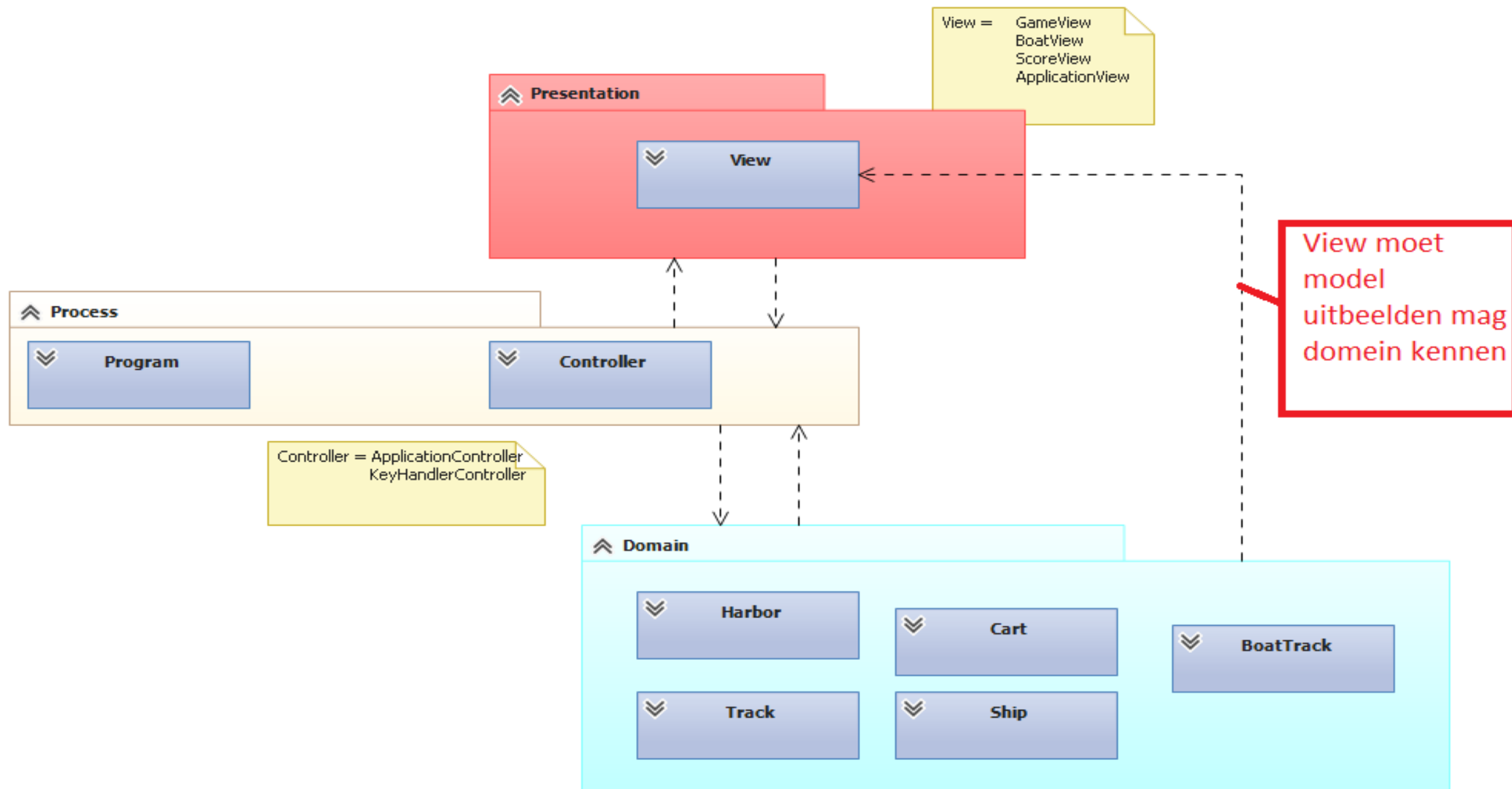
Object diagram van een track

:Cart

:Game

:StartTrackA

:StartTrackB

:StartTrackC

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:SwitchIncoming

:RegularTrack

SwitchOutgoing

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:RegularTrack

:SwitchIncoming

:RegularTrack

SwitchOutgoing

:SwitchIncoming

:RegularTrack

:RegularTrack

:RegularTrack

Vervolg

:Harbor

:RegularTrack

:SwitchIncoming

:RegularTrack

:BoatTrack

:QuayTrack

:RegularTrack

:RegularTrack

SwitchOutgoing

:RegularTrack

:RegularTrack

:RegularTrack

:QuayTrack

:RegularTrack

:RegularTrack

:Harbor

:BoatTrack

:Ship

```
<__)wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww
¦A¦=_____     _____             ¦ ¦ ¦
          ¦1¦___¦2¦                          ¦5¦_____(NN)_____
¦B¦=_____/ /        \ \___\ \              ___/ /
                     ¦3¦___¦4¦
¦C¦=[^^]_____    \ _____{SS}_____
                                ¦ ¦ ¦
<__)wwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwwww
```

cd Tracks

Previous

Next

Track

0..1   0..1

Next of Previous
kan null zijn
(einde)

PreviousTop

NextTop

1

SwitchTrack

1

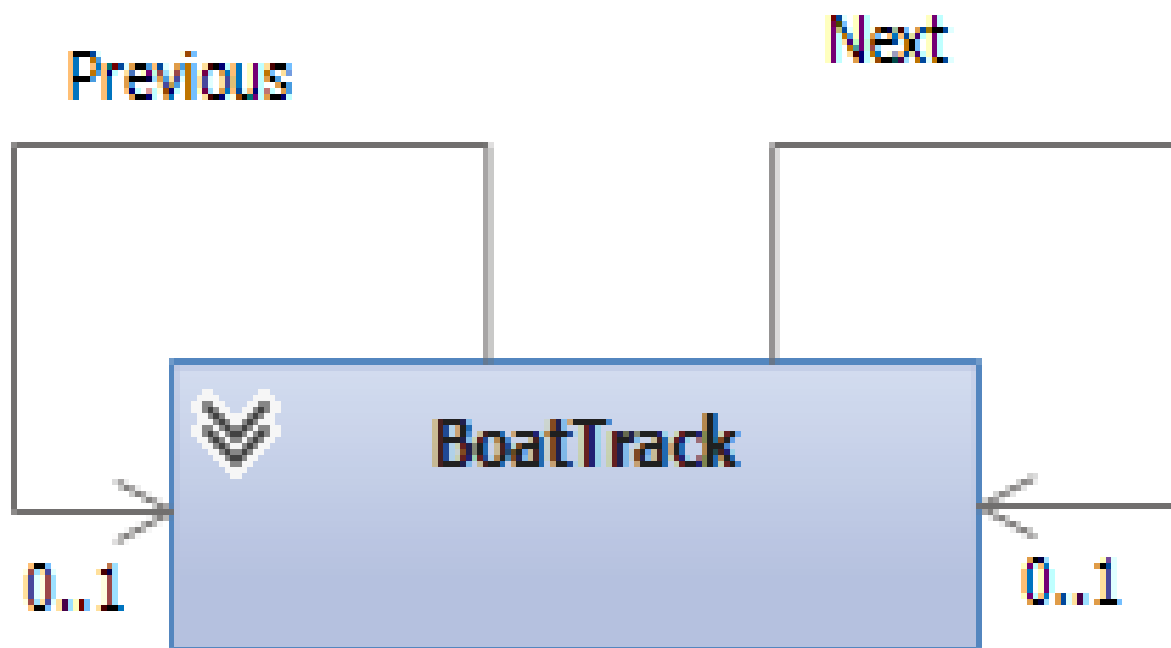1   1
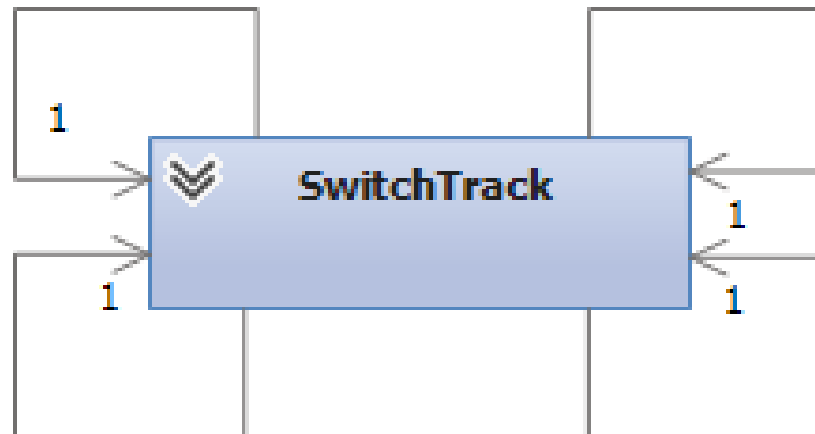
PreviousBottom

NextBottom

De next top/bot
En previous
top/bot is NOOIT
null!

Previous

Next

BoatTrack

0..1

0..1

Next of Previous kan null zijn (einde)

Polymorphisme?

Track

SwitchTrack

StartTrack
SetCartOnThisTrack()

RegularTrack
SetCartOnThisTrack()

QuayTrack
SetCartOnThisTrack()

SwitchTrackInc...
SetCartOnThisTrack()
SetTopAvailable()
SetBottomAvailable()
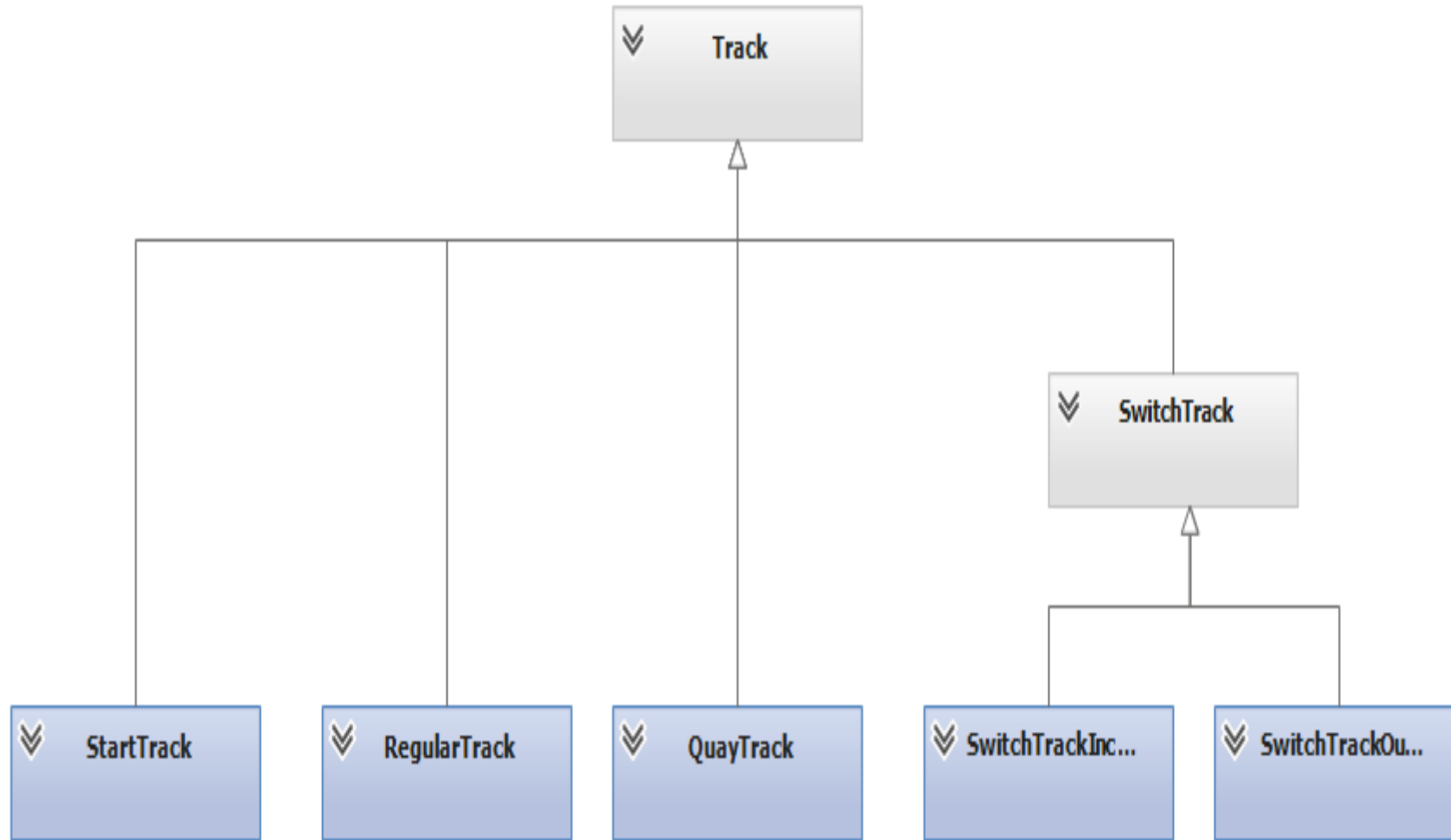
SwitchTrackOu...
SetCartOnThisTrack()
SetTopAvailable()
SetBottomAvailable()
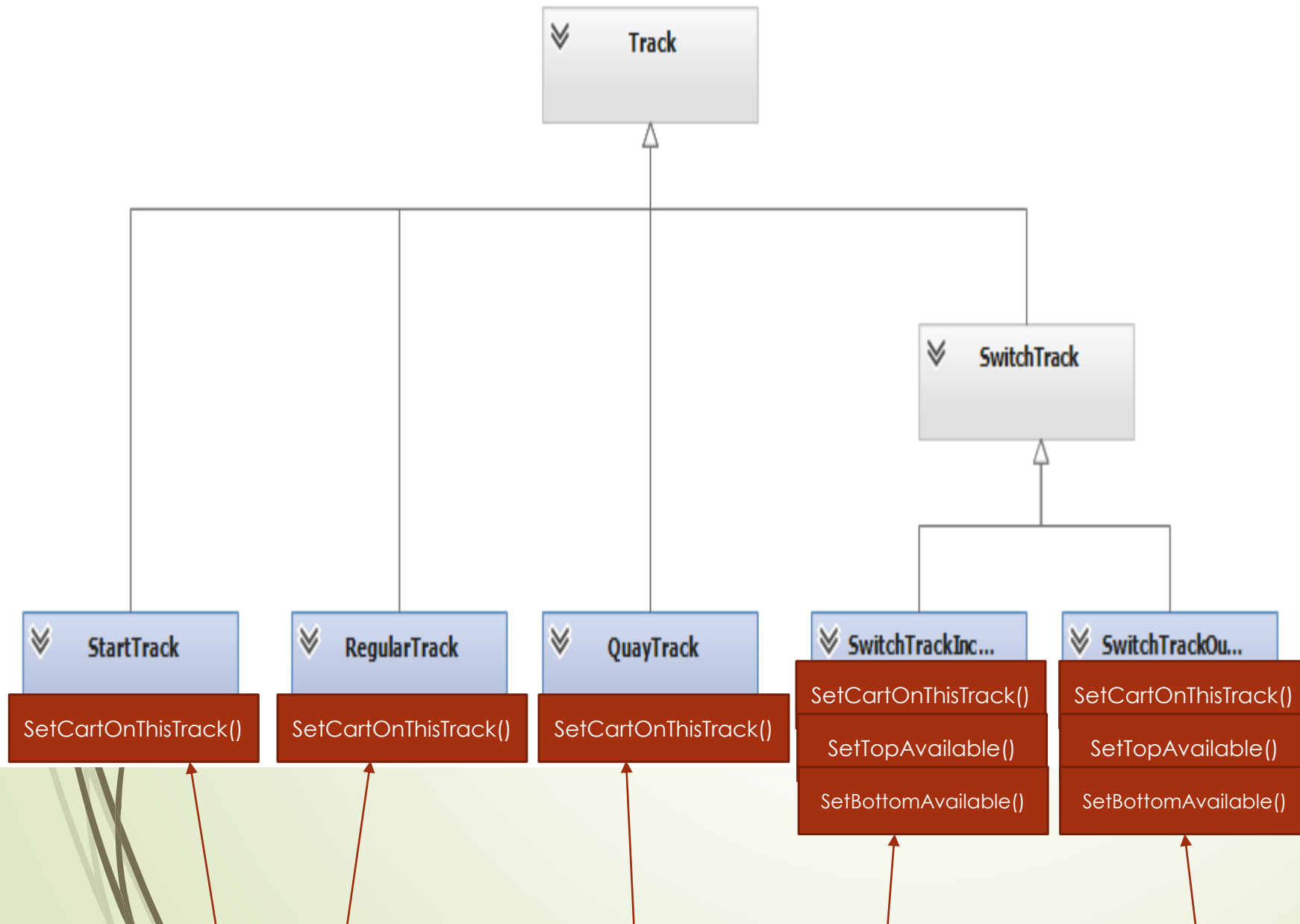
Polymorphisme?
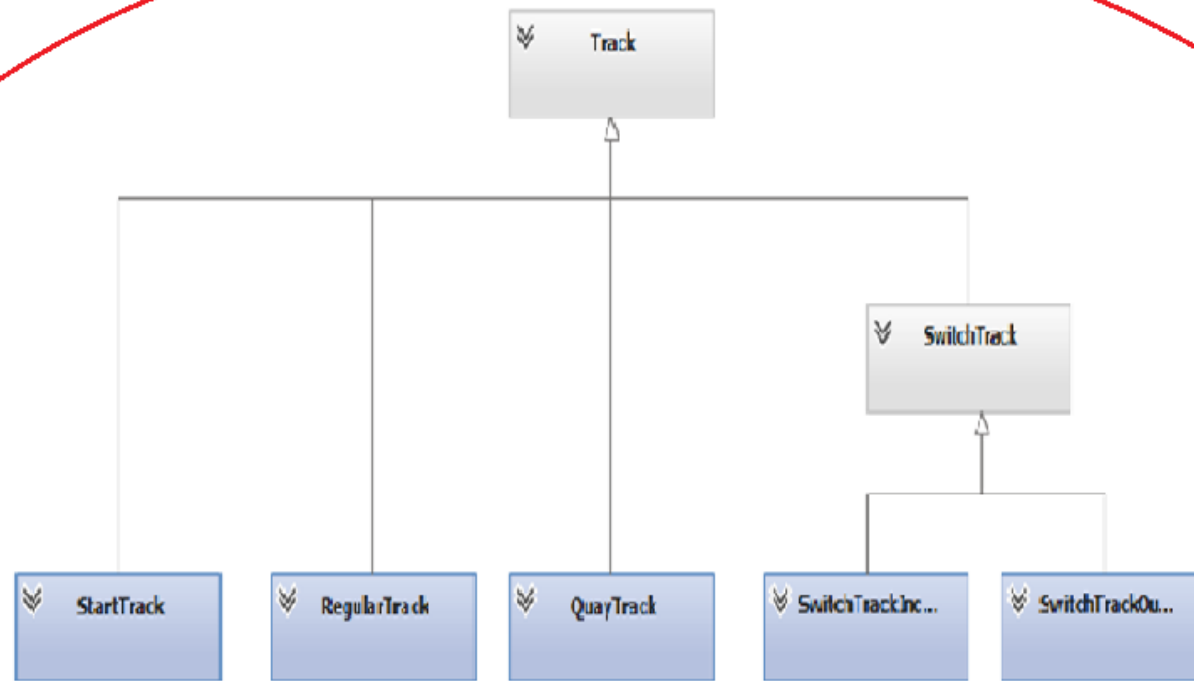
Verder heeft elke track dus een Next en Previous

En een switchtrack dus een previous/next top
En previous/next bottom

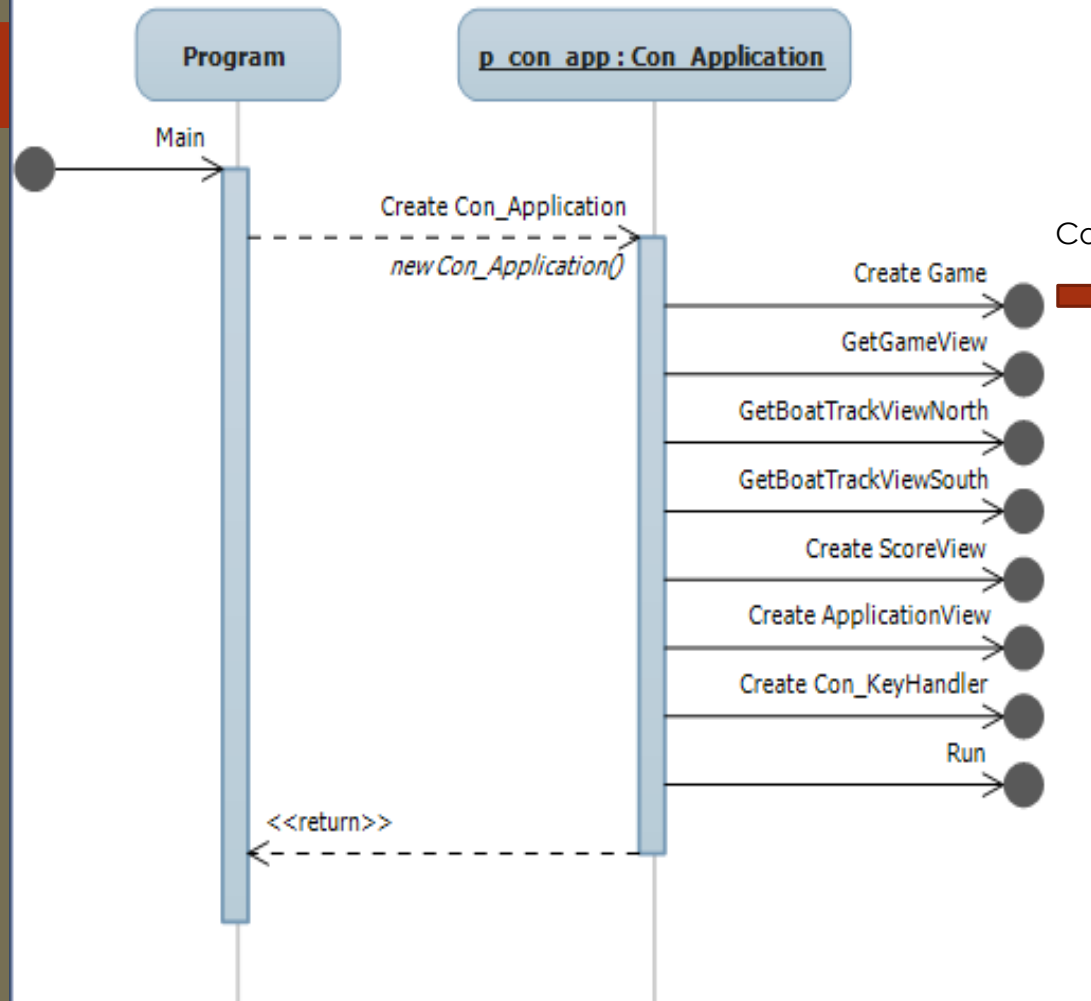sd Program_Main

Program

p_con_app : Con_Application

Main

Create Con_Application

new Con_Application()

Create Game

GetGameView

GetBoatTrackViewNorth

GetBoatTrackViewSouth

Create ScoreView

Create ApplicationView

Create Con_KeyHandler

Run

<<return>>

Constructor Game

Create Game

new Game()

Create StartTrack

Create StartTrack

Create StartTrack

Create SwitchTrackIncoming

Create SwitchTrackOutgoing

Create SwitchTrackIncoming

Create SwitchTrackOutgoing

Create SwitchTrackIncoming

Create Harbor

Create Harbor

Create QuayTrack

Create QuayTrack

InitBoatTrack

InitBoatTrack

InitTrack

this : Game

quayN : SwitchTrack

MoveCarts

Loop

[while (current.GetType() != typeof(SwitchTrackIncoming))]

If

[if (current.Previous.GetType() == typeof(QuayTrack))]

If

[if (quayN.HasDockedBoat && quayN.HasCart)]

UnloadCart

quayN.UnloadCart()

<<return>>

AddTenPoints

AddTenPoints(quayN)

If

[if (quay.CurrentBoatTrack.Ship != null)]

If

[if (quay.CurrentBoatTrack.Ship.Ca...

Return

return true

---

file:///C:/Users/Dion/Documents/GitHub/Modelleren_Raymond_Dion/Goudkoo...

```
                                    Raymond Phua & Dion Thiers
                                         42IN05SOk - Version 1.0

            [^^] = Cart            [   ] = Empty cart

            |A-C| = Start          |1-5| = Switch

                         GOUDKOORTS
         _____
         p = pauze   r = restart   q = quit   1-5 = switch

            Score: 0    -    Seconds till next move: 4
            Two carts collided. You are game over!
         _____

                                                          <___>
|A|=_____\ \        / /____[^^]_____[^^]\ \      | |
             |1|____|2|                              |5|____[^^]____{NN}_____
|B|=____[^^][^^]                      ____              ____
                              |3|____|4|
|C|=_____/ /  \ _____{SS}_____
                                                          <___>
```
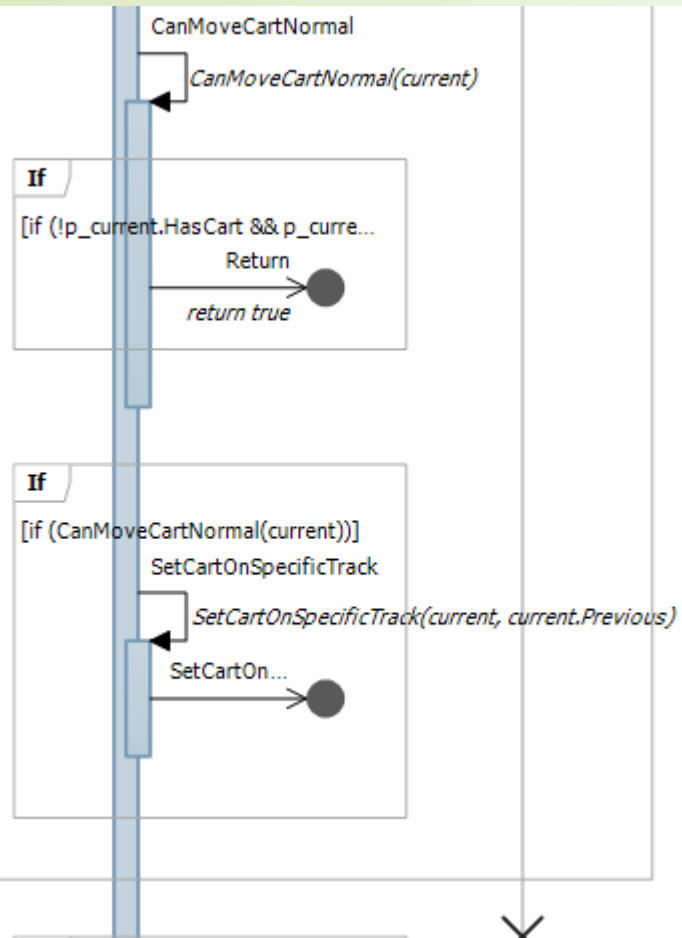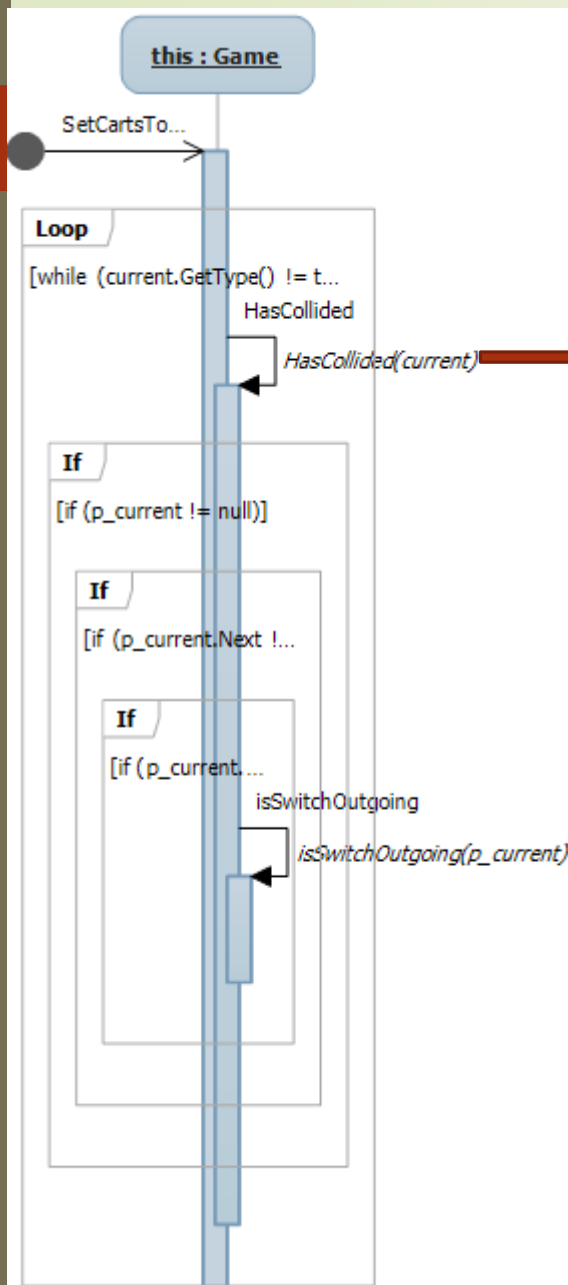
CanMoveCartNormal

CanMoveCartNormal(current)

If

[if (!p_current.HasCart && p_curre...

Return

return true

If

[if (CanMoveCartNormal(current))]

SetCartOnSpecificTrack

SetCartOnSpecificTrack(current, current.Previous)

SetCartOn...

```
~~~~~~~~<___>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
\  \                                    ¦  ¦
 |5 |_____[^^]_____{NN}_____
```