# Software-Ontwerp Iteratie 2

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KU Leuven

March 18, 2013

#### Inhoud

- Inleiding
  - Rolverdeling
  - Werkverdeling
- 2 Het ontwerp
  - MVC
  - Grid
  - Obstacles

- States and Penalty
- System State Diagrams
  - Start New Game
  - Move
  - Pick Up Item
  - Use Item
  - End Turn
- 4 Slot

#### Thema's die aan bod komen:

- High-Level bespreking van het ontwerp.
- Onderdelen in detail bekeken.
- GRASP en design patterns.
- Uitbreidbaarheid van het ontwerp.
- Test cases.

# Rolverdeling

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  - Werkverdeling
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- 4 Slo

Rolverdeling

# Rolverdeling

#### Iteratie 2:

Lead Designer: Dieter Castel

Lead Tester: Vincent Reniers

#### Iteratie 3:

Lead Designer: Jonas Devlieghere

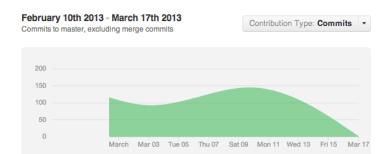
• Lead Tester: Stefan Pante

Domain Modeler: Vincent Reniers

Inleiding

# Werkverdeling

Iteratie 2: 1 maart - 15 maart

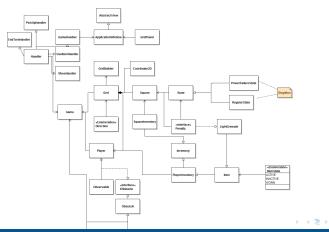


Uren gepresteerd: 45 uur per persoon.

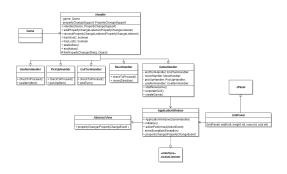


MVC

## **MVC**



## Handlers and view



MVC

## Handlers and view

#### MVA (Model-View-Adapter)

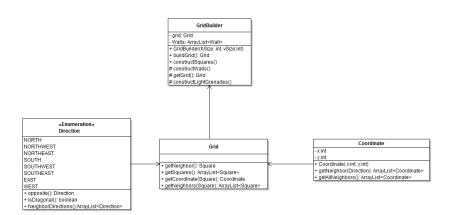
- Model en View communiceren niet rechtstreeks
- Handlers zijn mediating controllers
- ApplicationWindow implementeert PropertyChangeListener

#### Handlers

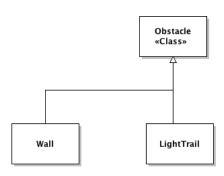
- Handler voor elke Use-Case
- Geen GUI controller meer

Grid

### Grid



## Obstacle interface

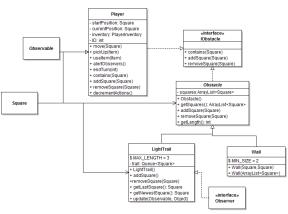


Obstacles

#### Obstacle

- Interface IObstacle
- Abstracte klasse *Obstacle* implementeert *IObstacle* 
  - LightTrail implementeert Obstacle
  - Wall implementeert Obstacle
- Player implementeert IObstacle
- Square kan Obstacle bevatten
   LightTrail implementeert de Observer interface.

## Obstacle



States and Penalty

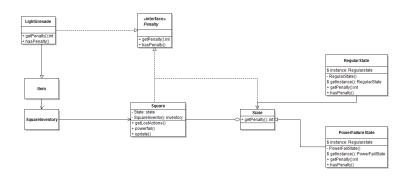
# States and Penalty

- State Pattern
  - Square heeft meerdere toestanden: RegularState, PowerFailureState
  - Square zorgt voor overgang van staat
- Chain of Responsibility (Command)
  - State bepaalt eigen penalty
  - LightGrenade bepaalt eigen penalty
  - Square is eigenaar van concept penalty

States and Penalty

# States and Penalty

Het ontwerp



System State Diagrams

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# Start New Game

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System State Diagrams

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System State Diagrams

Pick Up Item

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System State Diagrams

Use Item

Use Item

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System State Diagrams

End Turn

End Turn

Bedankt voor uw aandacht.