



Software-ontwerp

Finale Presentatie

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1 Werkverdeling

2 Testen

3 Domain Model

4 Implementatie

5 Slot



270 u per persoon gewerkt doorheen het semester.

Iteratie 5: 60 u per persoon

Lead designer	Stefan Pante	Dieter Castel	Jonas Devlieghere
Lead Tester	Dieter Castel	Vincent Reniers	Stefan Pante
Domain modeler	•	•	Vincent Reniers
Lead designer	Vincent Reniers	Stefan Pante	
Lead Tester	Jonas Devlieghere	Dieter Castel	
Domain modeler	Dieter Castel	Jonas Devlieghere	

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Element	Coverage
Objectron	42,4 %
src	35,6 %
gui	0,0 %
controller	0,0 %
gui.button	0,0 %
util	68,5 %
square.field	23,8 %
effect.imp	24,1 %
manager	9,3 %
game	64,1 %
gui.message	0,0 %
command.action	0,0 %
grid	84,7 %
item	55,9 %
game.mode	23,5 %
grid.itemplacer	82,1 %
square	84,0 %
square.multi	74,7 %
game.gamebuilder	78,1 %
command	0,0 %
effect	88,7 %
effect.filter	59,4 %

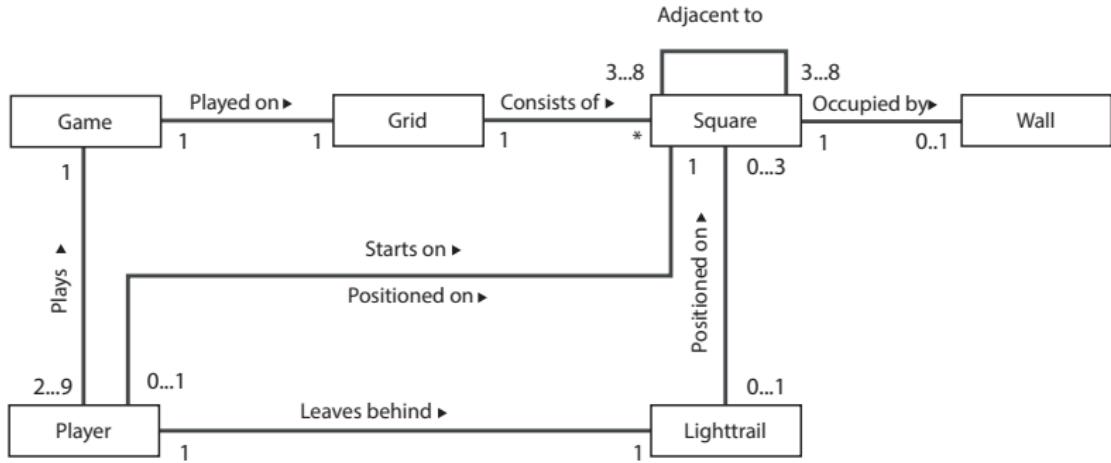
1 Werkverdeling

2 Testen

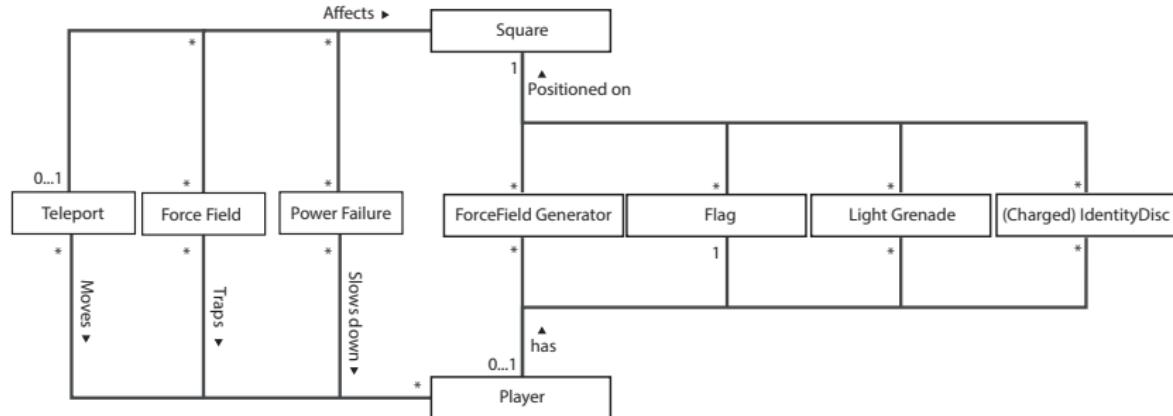
3 Domain Model

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- 2..9 players
- 1..8 adjacent squares, mogelijk bij grids gebouwd van file



- Toevoeging van concept voor Flag, Teleport, Forcefield, IdentityDisc.
- Player kan maximum 1 vlag dragen!



- Een Flag is initieel op een square geplaatst
- Flag is eigendom van één speler

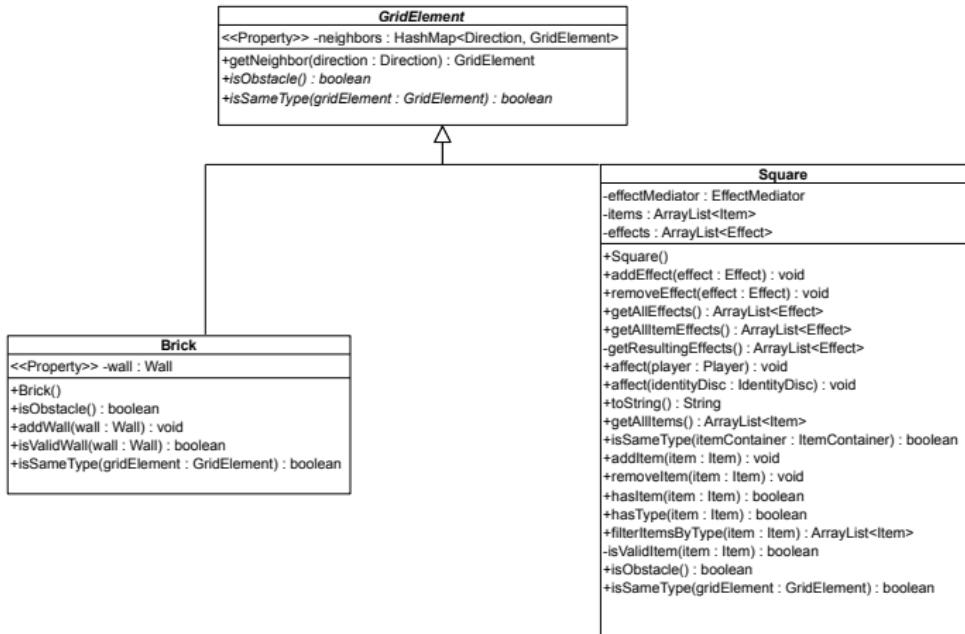
1 Werkverdeling

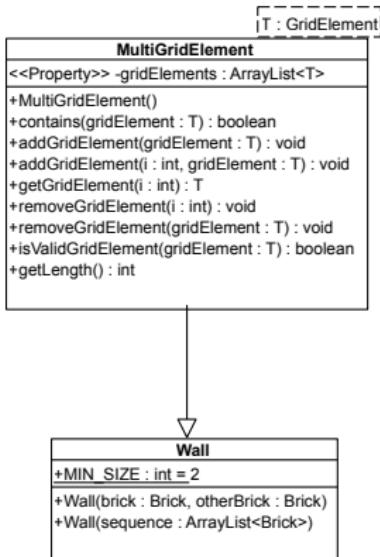
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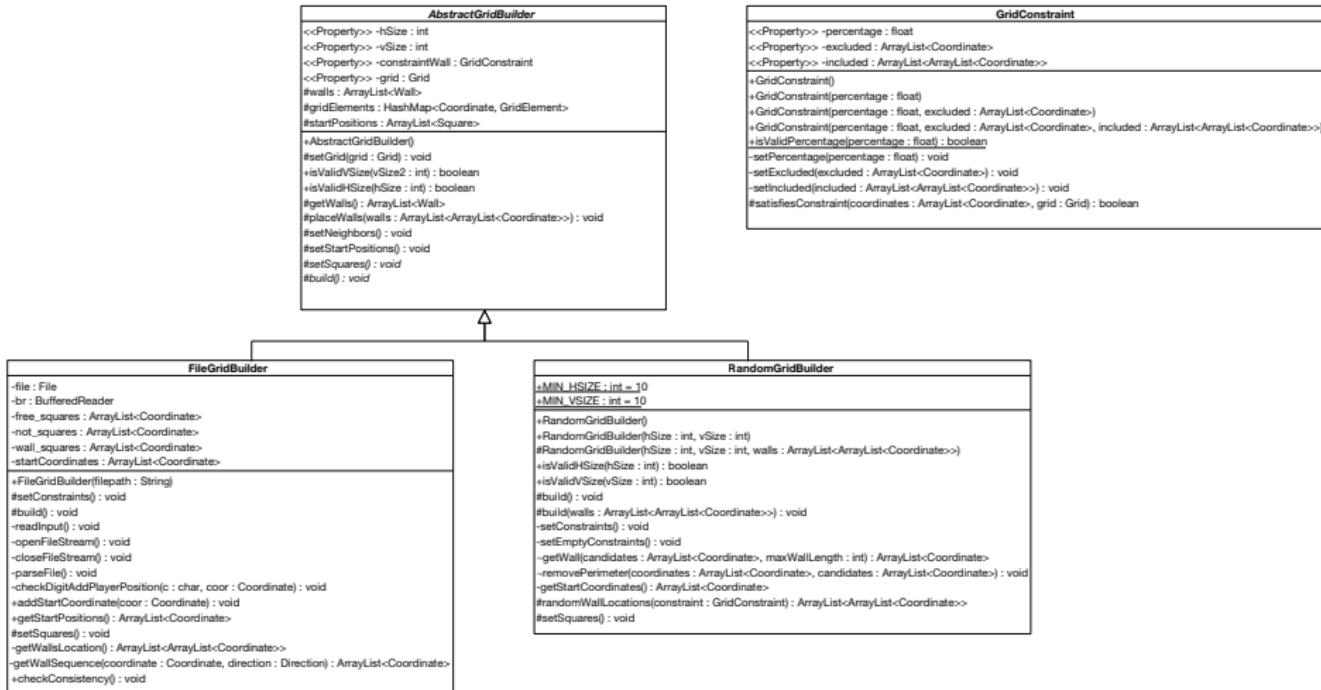


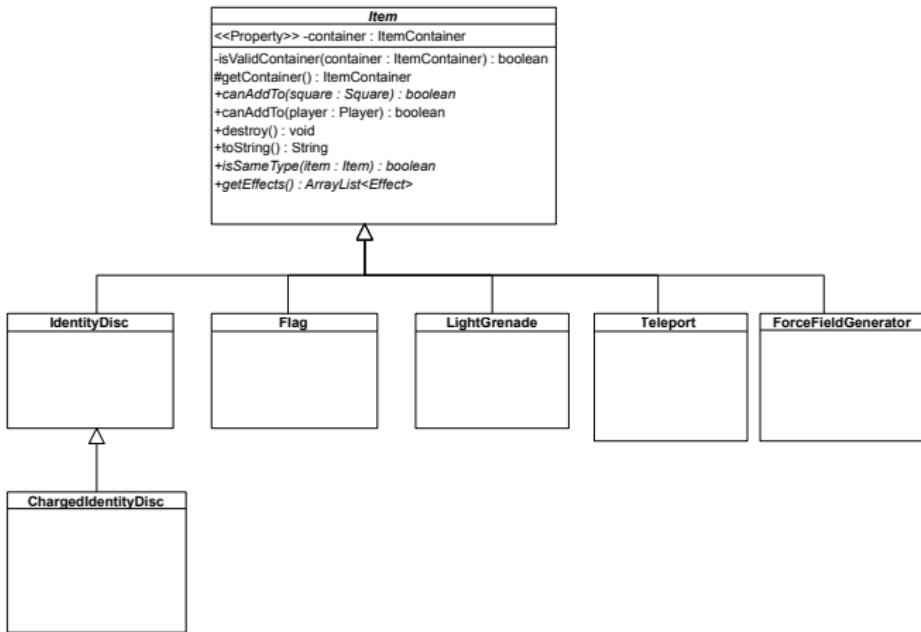


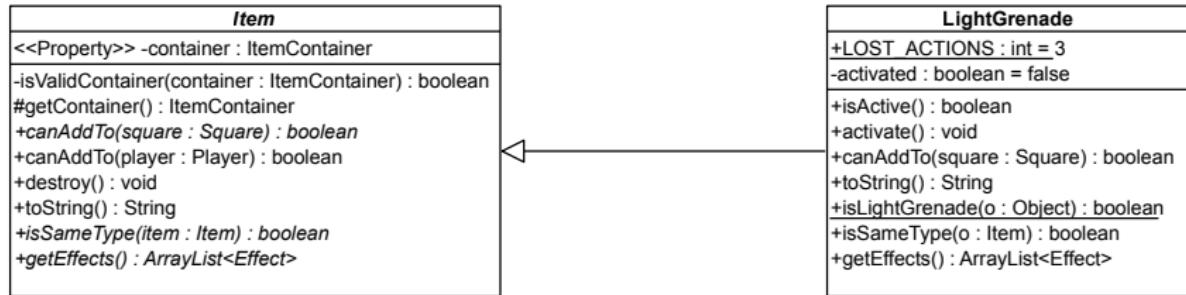
Coordinate
<<Property>> -x : int
<<Property>> -y : int
+Coordinate(x : int, y : int)
+setX(x : int) : void
+setY(y : int) : void
+isValidX(x : int) : boolean
+isValidY(y : int) : boolean
+toString() : String
+getNeighbor(direction : Direction) : Coordinate
+getAllNeighbors() : HashMap<Direction, Coordinate>
+hashCode() : int
+equals(obj) : boolean
+getCoordinate(direction : Direction, distance : int) : Coordinate
+getCoordinatesTo(coordinate : Coordinate) : ArrayList<Coordinate>
+directionTo(coordinate : Coordinate) : Direction

4.1 Grid: GridBuilder

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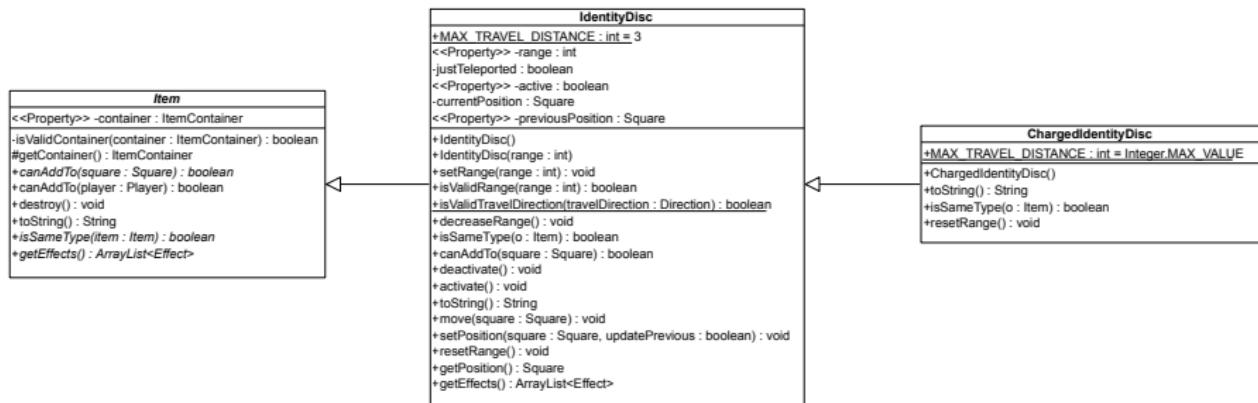


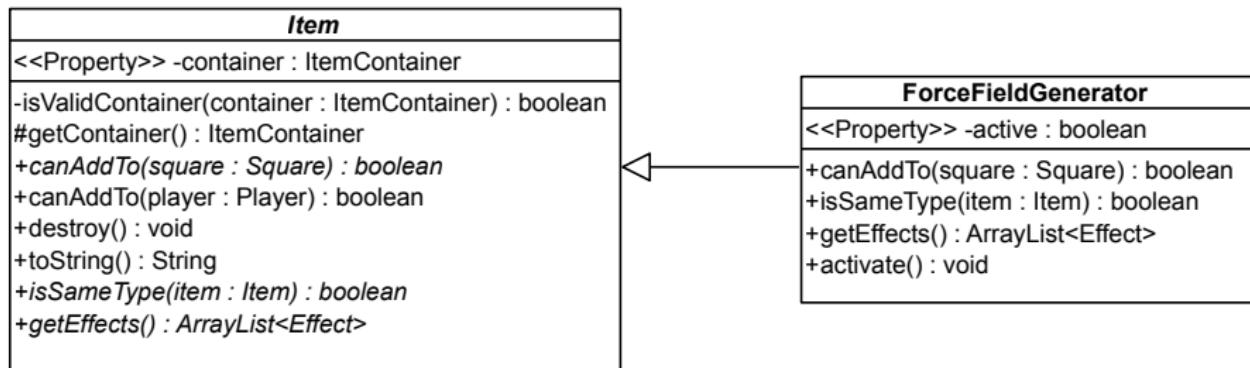


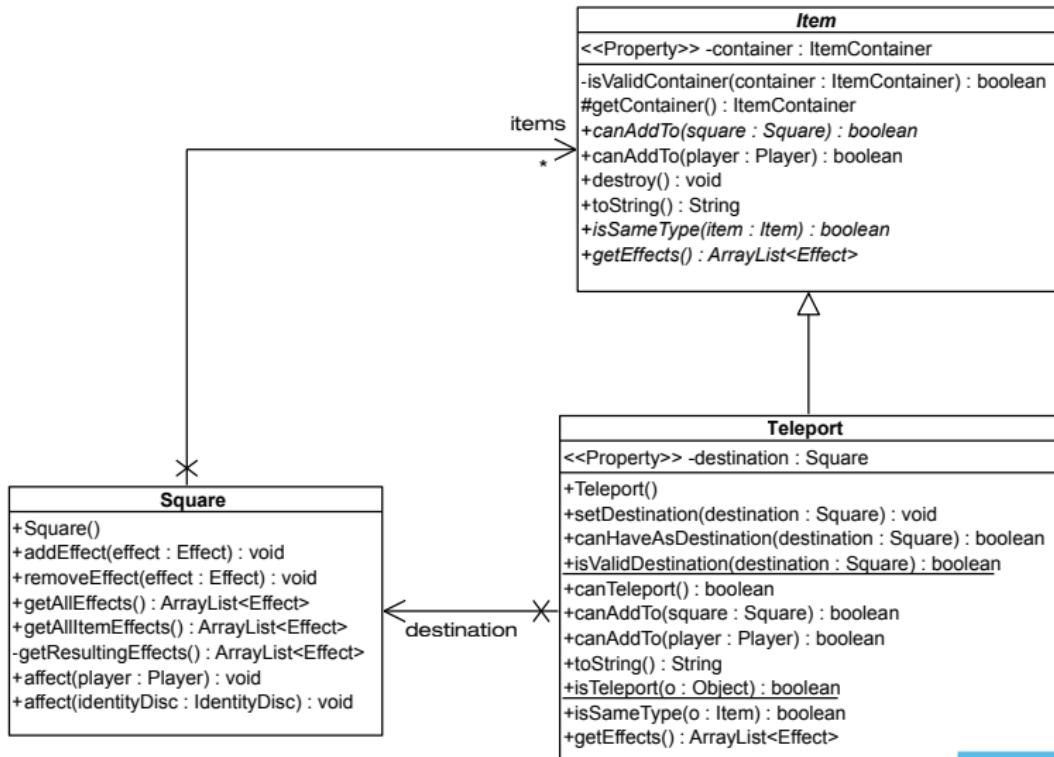


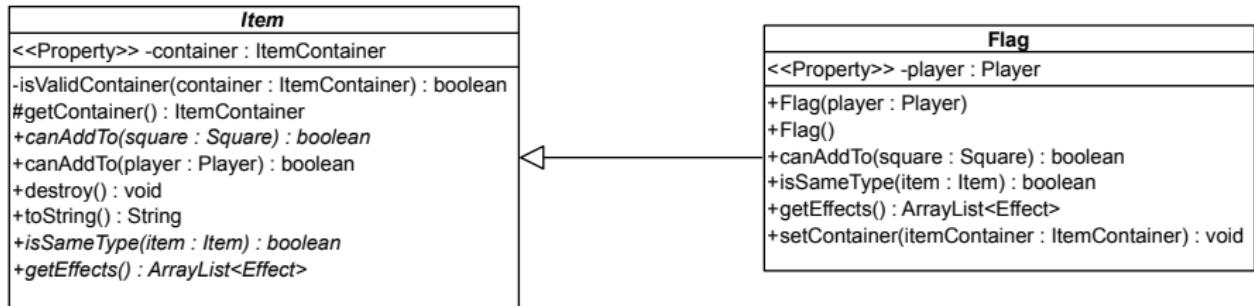
4.2 Items: IdentityDisc en ChargedIdentityDisc

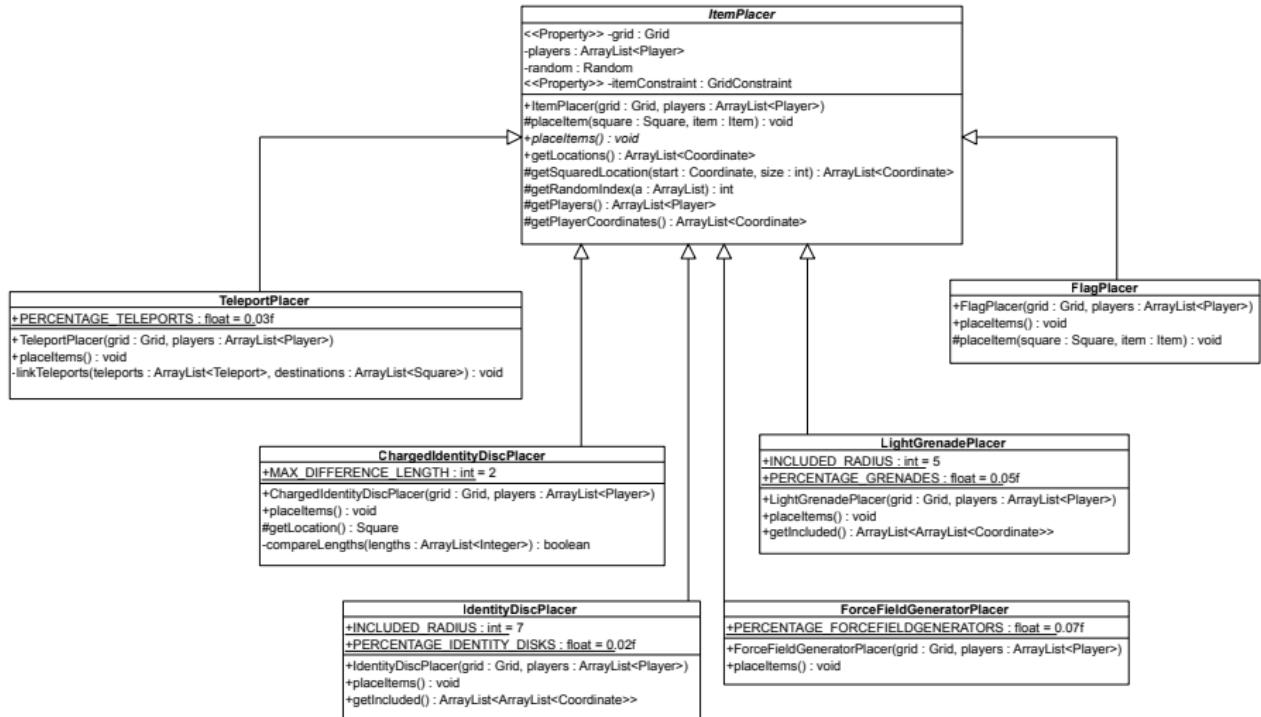
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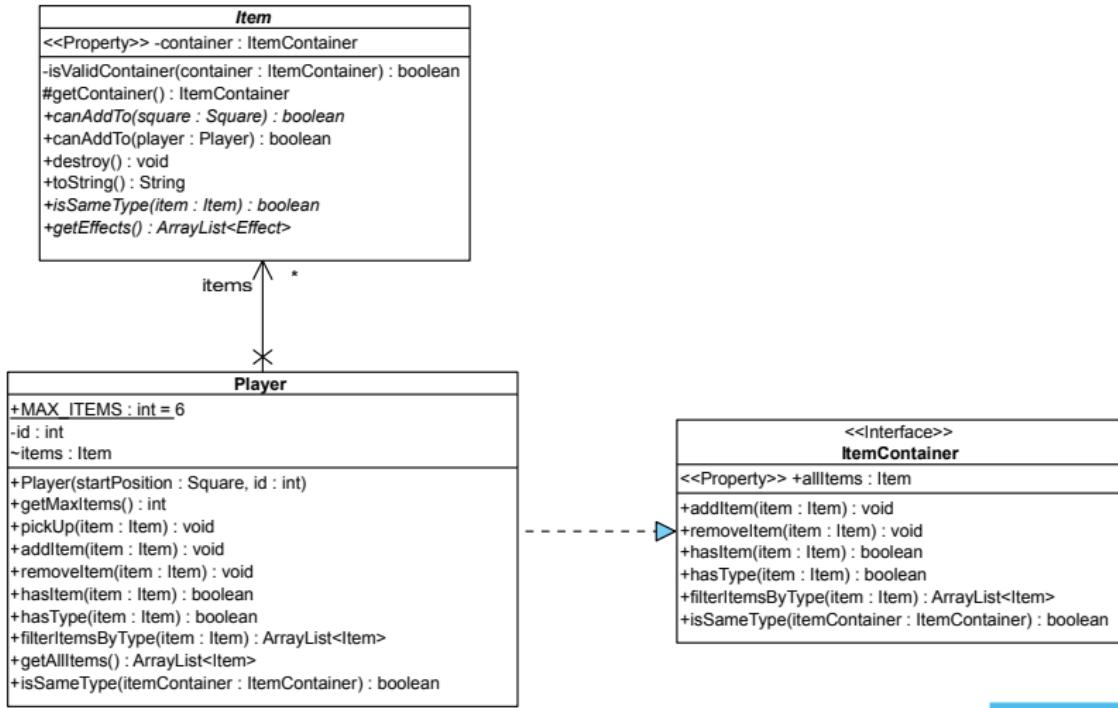




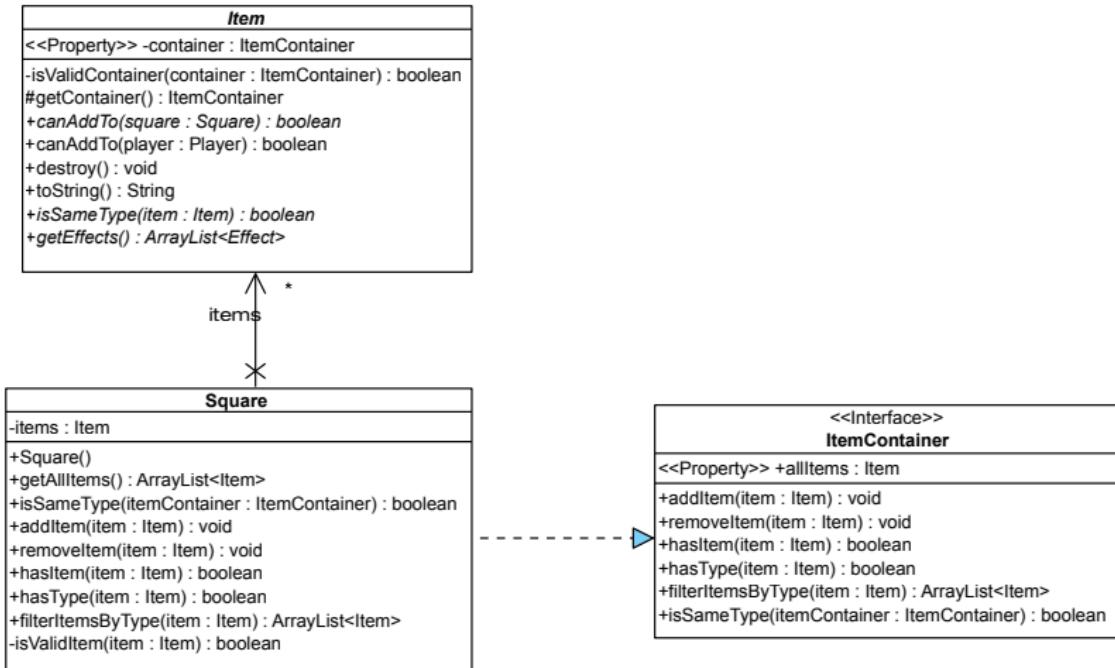


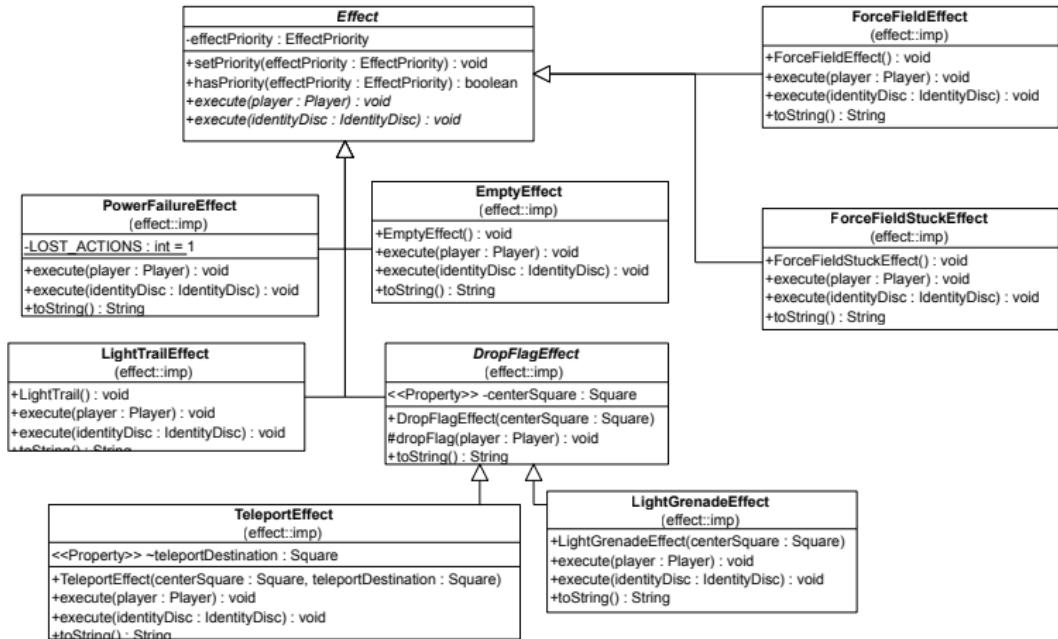
Items hebben vaak een effect op de player, hierop komen we later terug.

Player

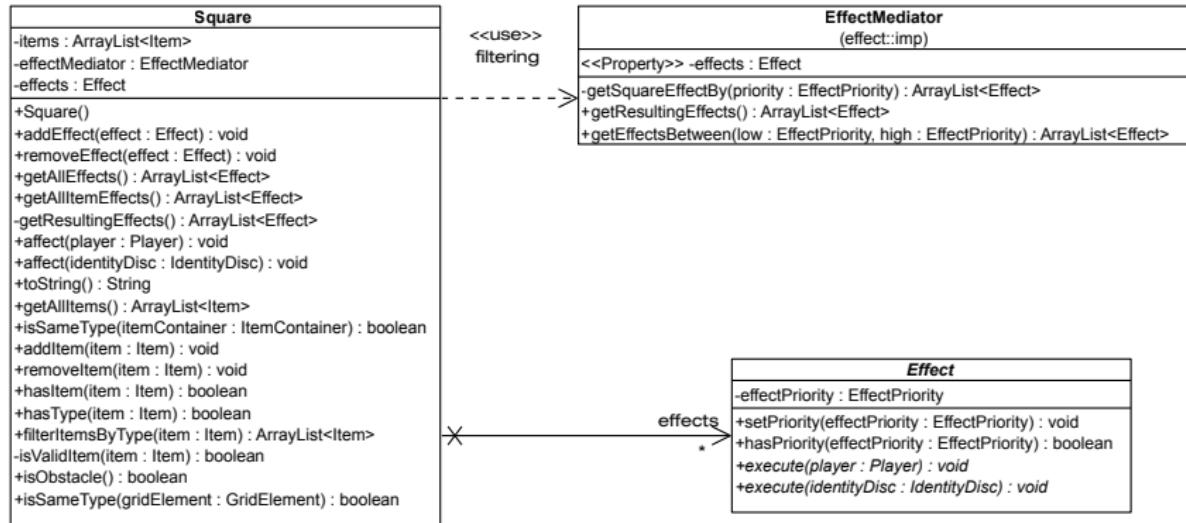


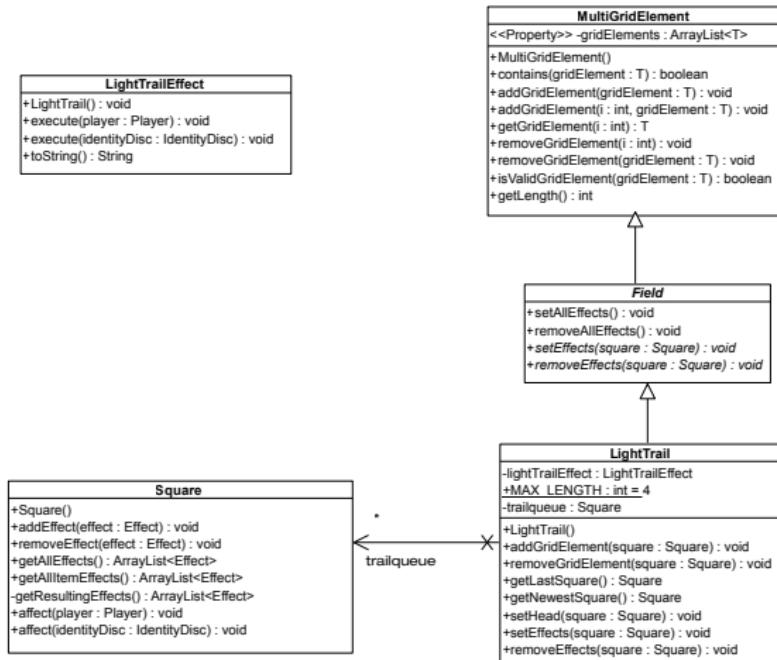
Square

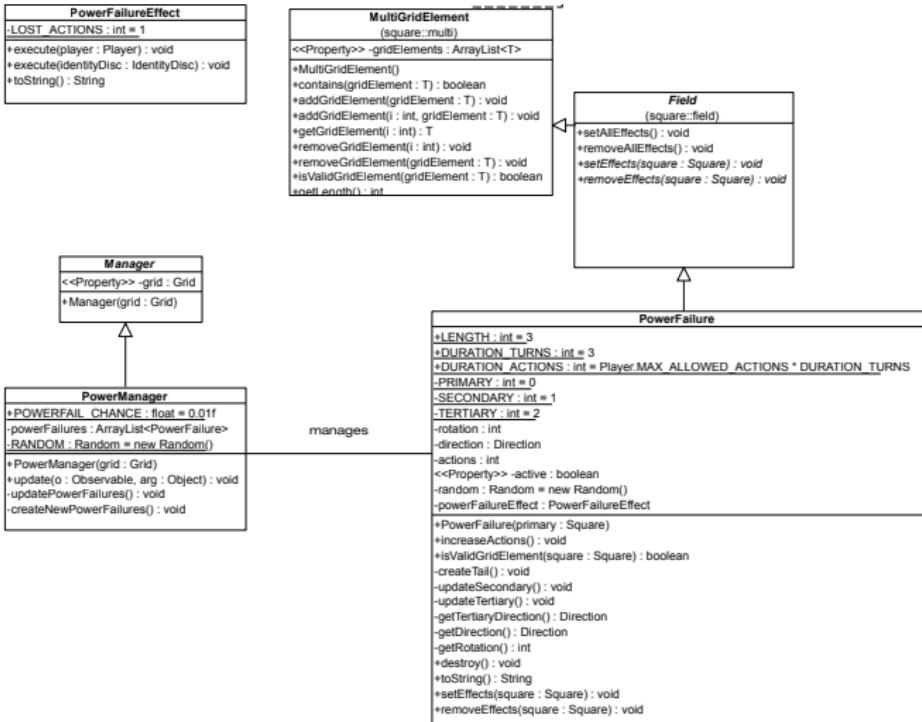




- Effecten worden afgehandeld via de Square.
- Effecten hebben invloed op elkaar. Effecten worden gefilterd door EffectMediator

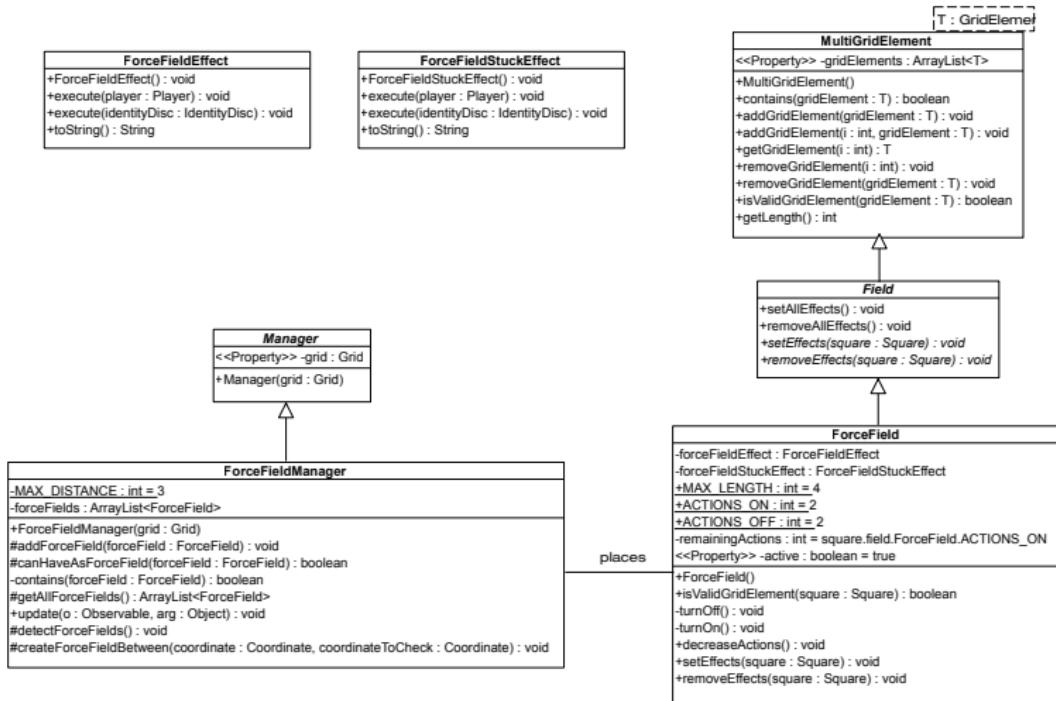




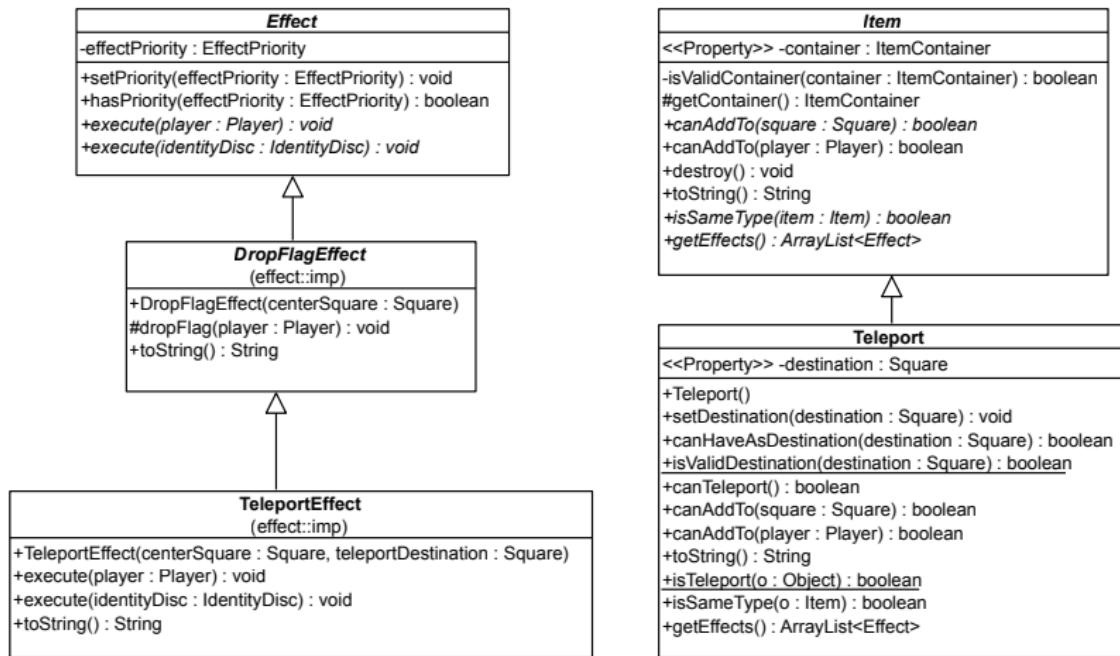


4.4 Effecten: ForceField

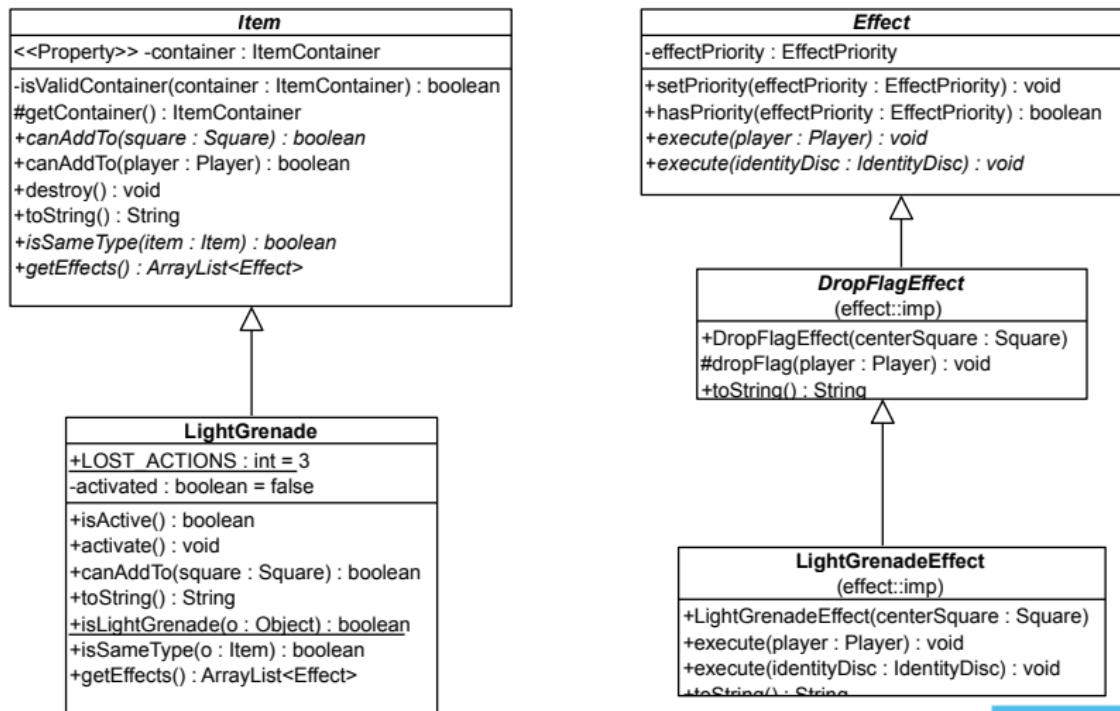
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Een teleport veroorzaakt de val van een vlag, het verplaatsen van een player.

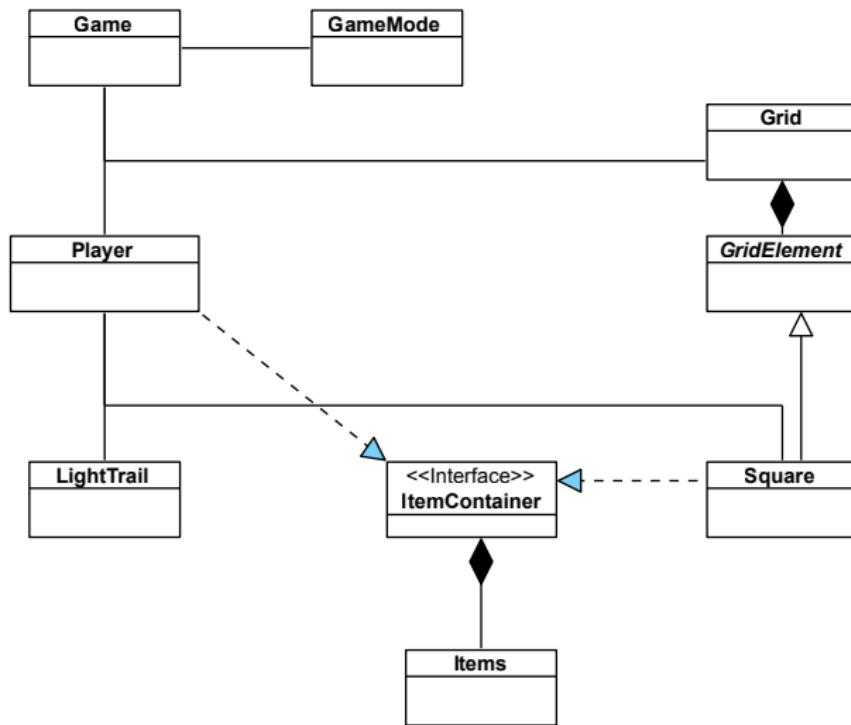


Lightgrenade veroorzaakt verlies van acties, val van een vlag.



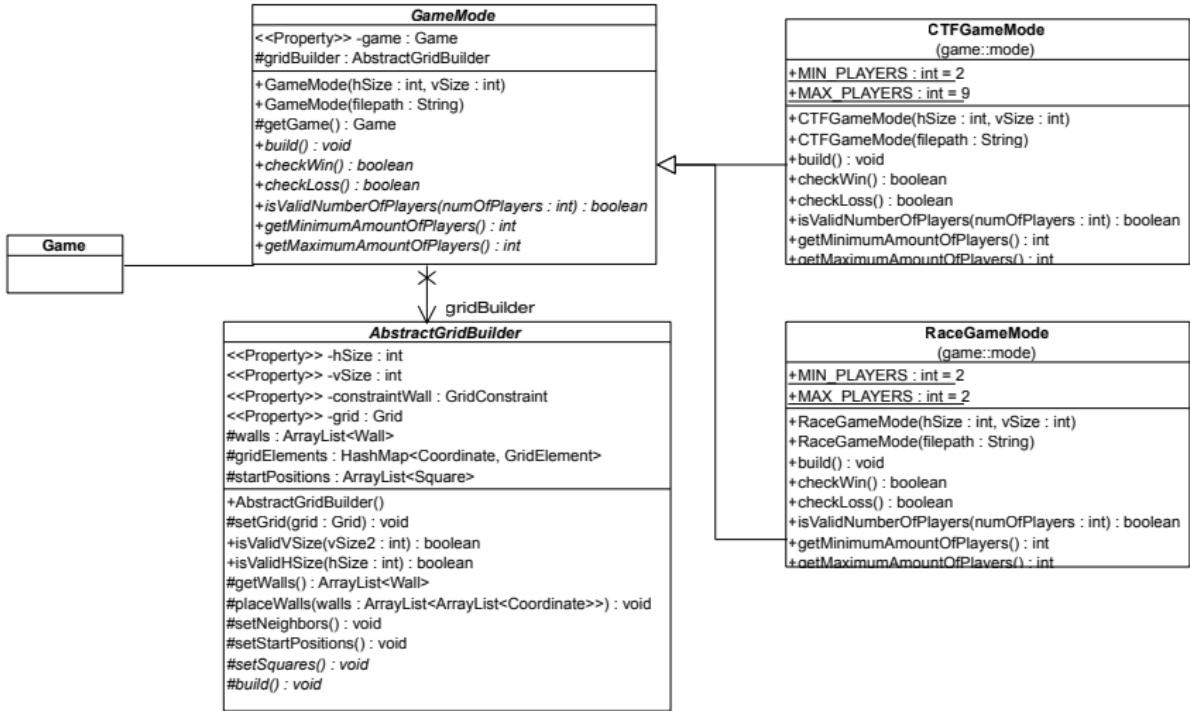
IdentityDisc zorgt ervoor dat player beurt verliest en val van een vlag.

Vereenvoudigde weergave van de structuur van een game

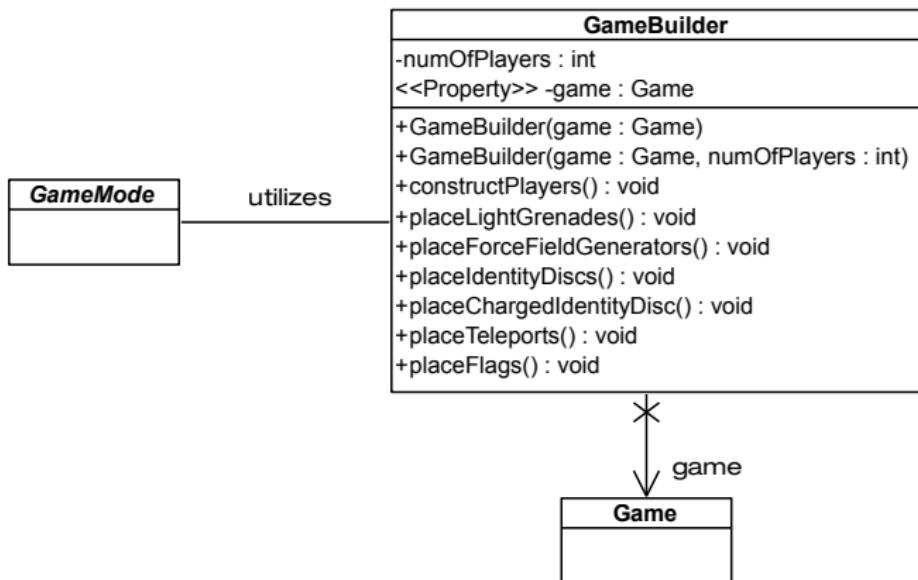


Capture the flag en Race Game

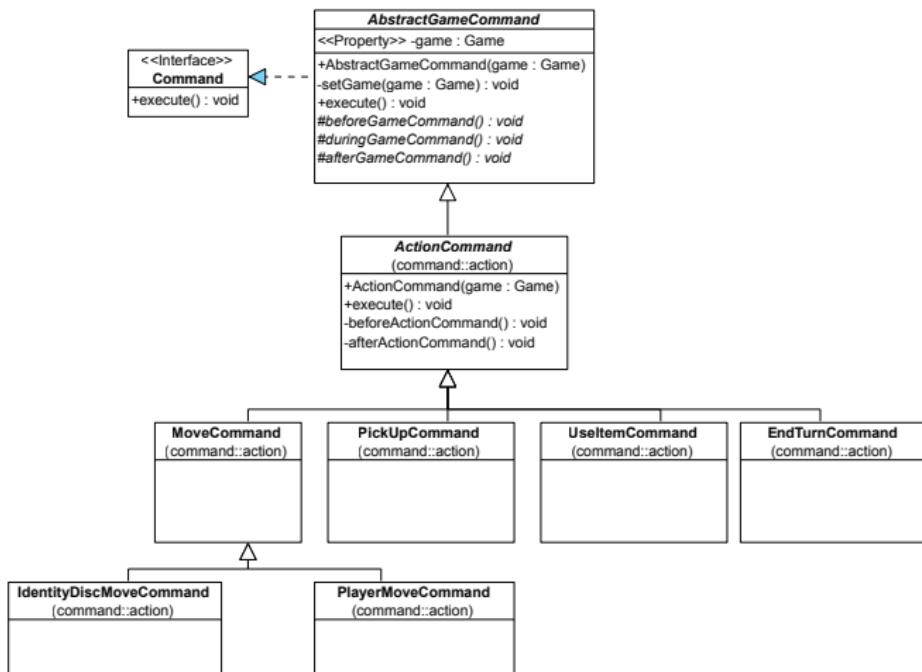
- verschillend bouwproces (Vlaggen plaatsen of niet)
- verschillend aantal spelers mogelijk.
- Verschillende win en lose conditions.



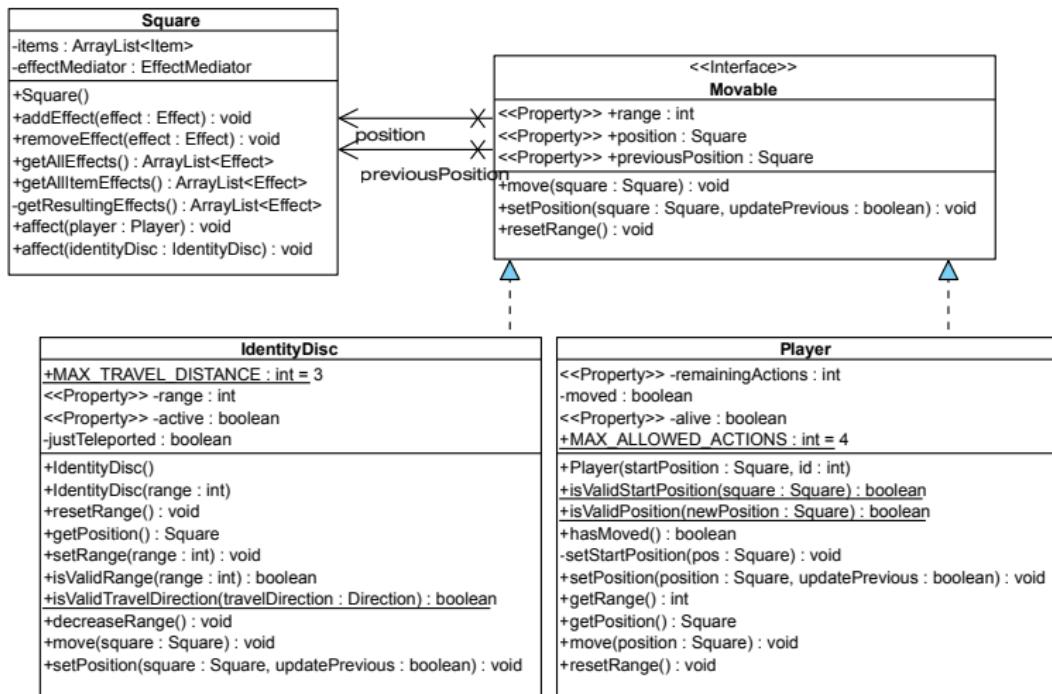
Wordt gebruikt door de GameMode om een correcte consistente opbouw van een game te garanderen.



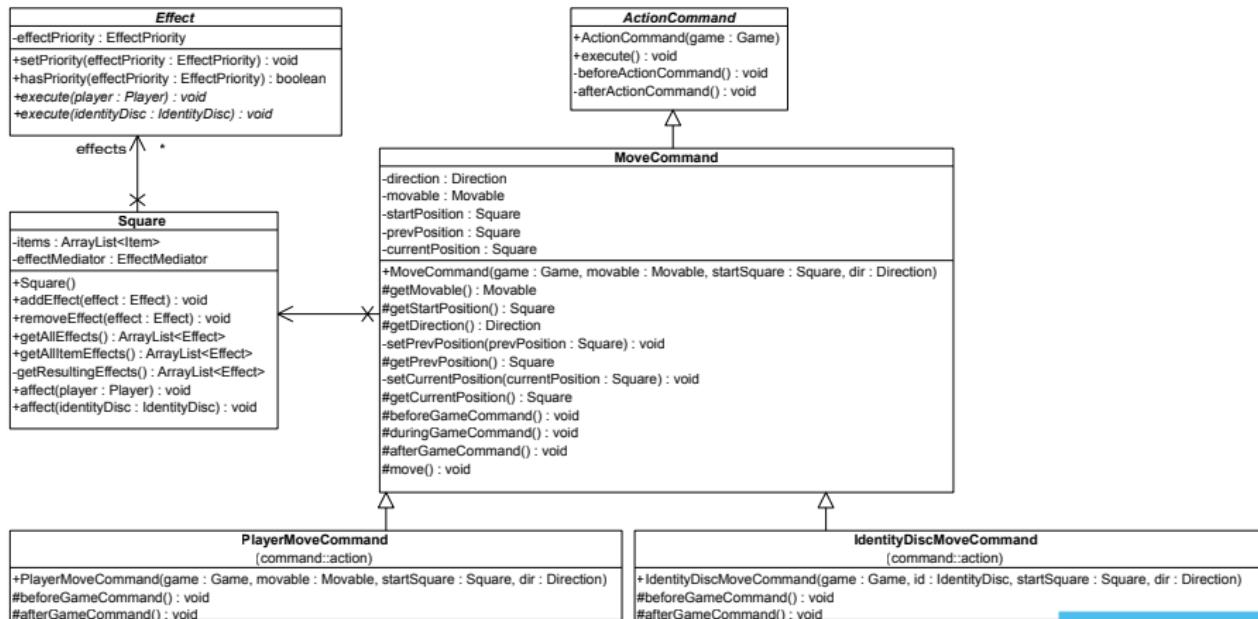
Alle acties door player worden uitgevoerd met behulp van commands.

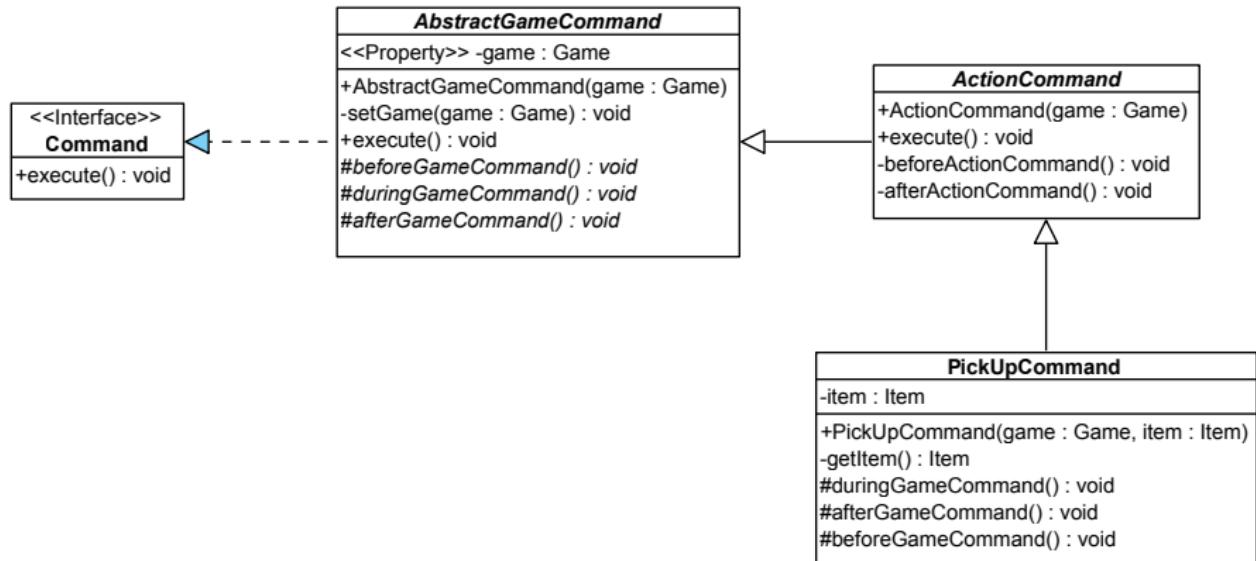


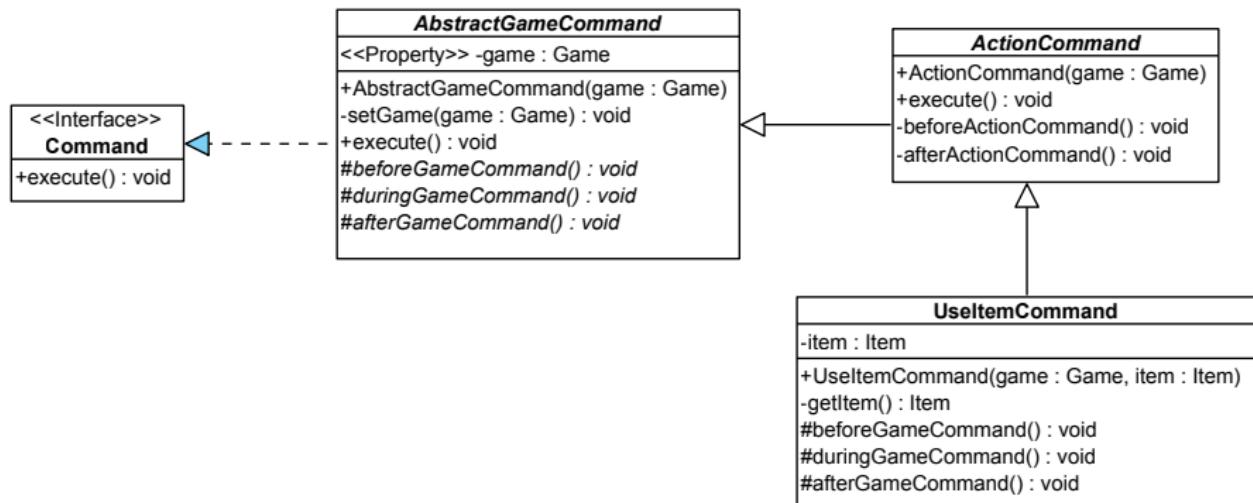
Weinig verschillen tussen Move van een player en move van een IdentityDisc.

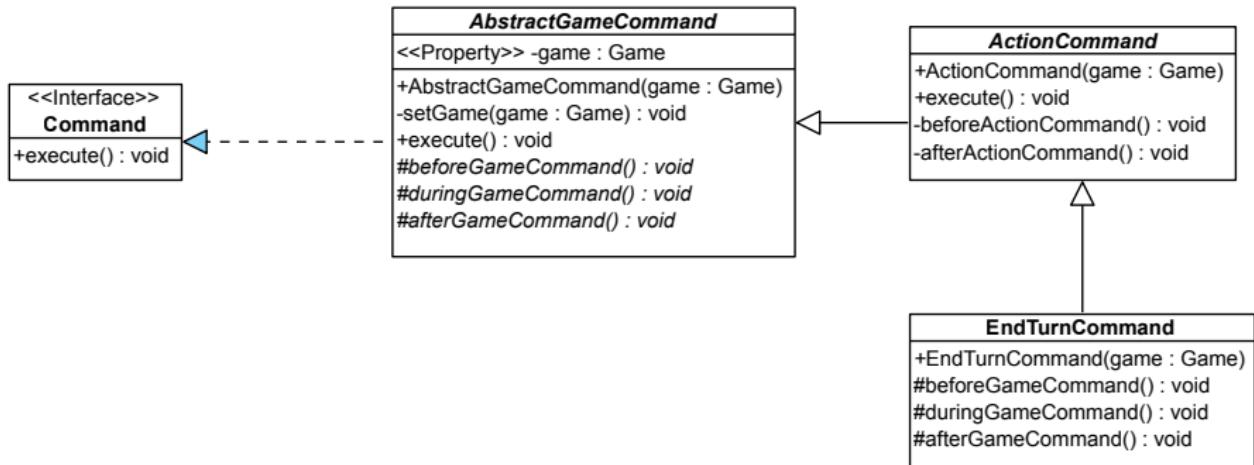


Move van IdentityDisc en Player wordt uitgevoerd met dezelfde methode.
Enkel pre- en postcondities verschillen. Verschillen worden opgevangen door de effecten.

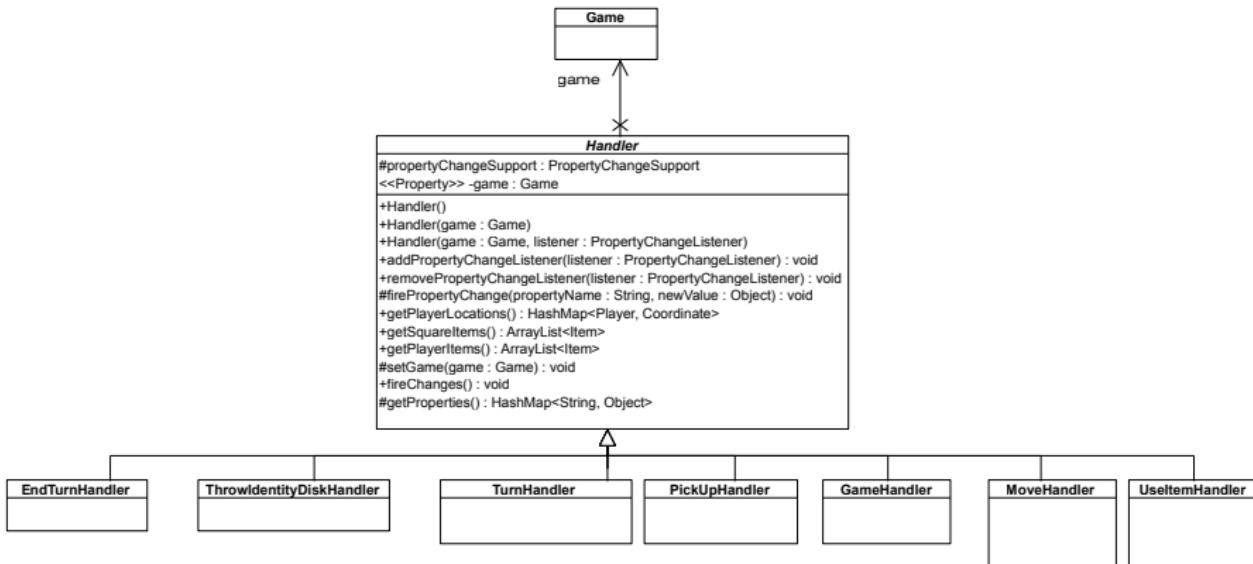


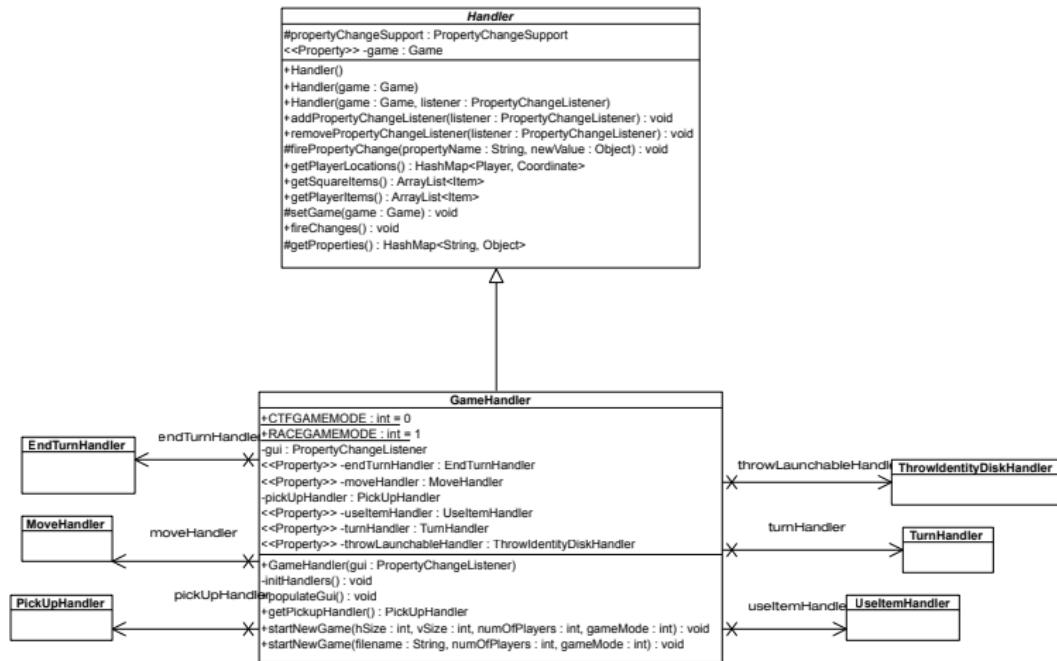




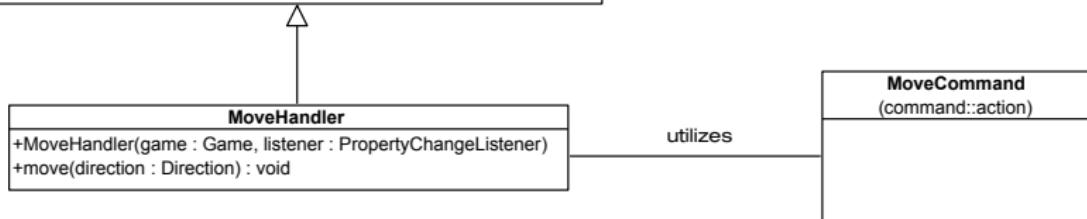


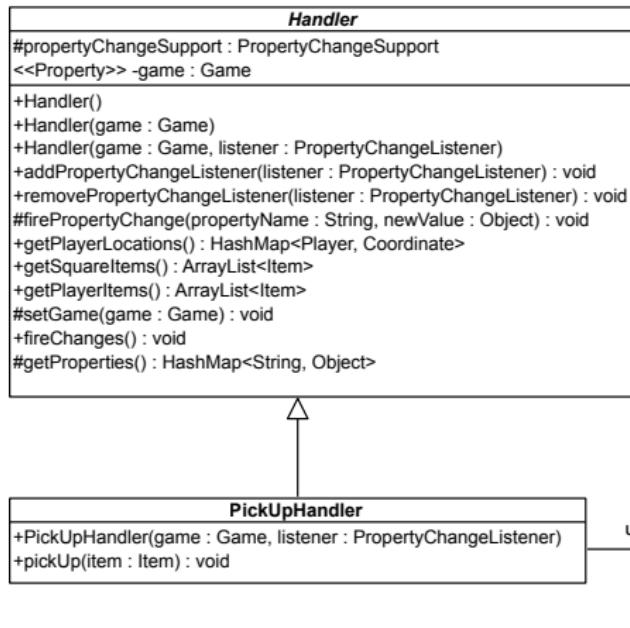
- Handlers controleren de flow tussen Model en View,
- LightWeight door gebruik van command Pattern
- Gebruikt propertyChanges om wijzigen aan GUI door te geven
= Model View Adapter



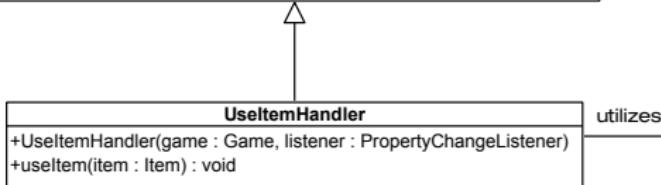


Handler
#propertyChangeSupport : PropertyChangeSupport <<Property>> -game : Game
+Handler() +Handler(game : Game) +Handler(game : Game, listener : PropertyChangeListener) +addPropertyChangeListener(listener : PropertyChangeListener) : void +removePropertyChangeListener(listener : PropertyChangeListener) : void #firePropertyChange(propertyName : String, newValue : Object) : void +getPlayerLocations() : HashMap<Player, Coordinate> +getSquareItems() : ArrayList<Item> +getPlayerItems() : ArrayList<Item> #setGame(game : Game) : void +fireChanges() : void #getProperties() : HashMap<String, Object>

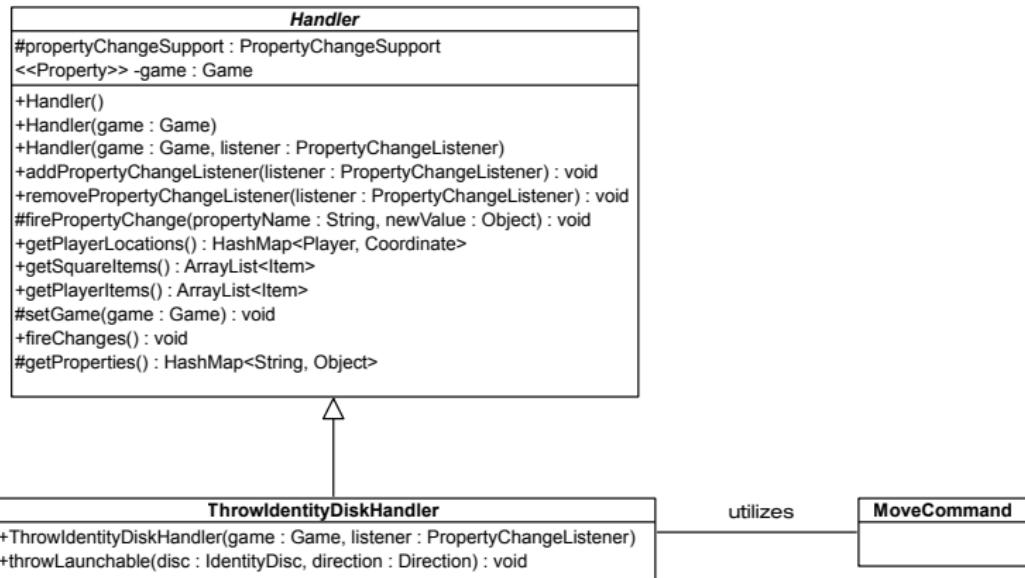


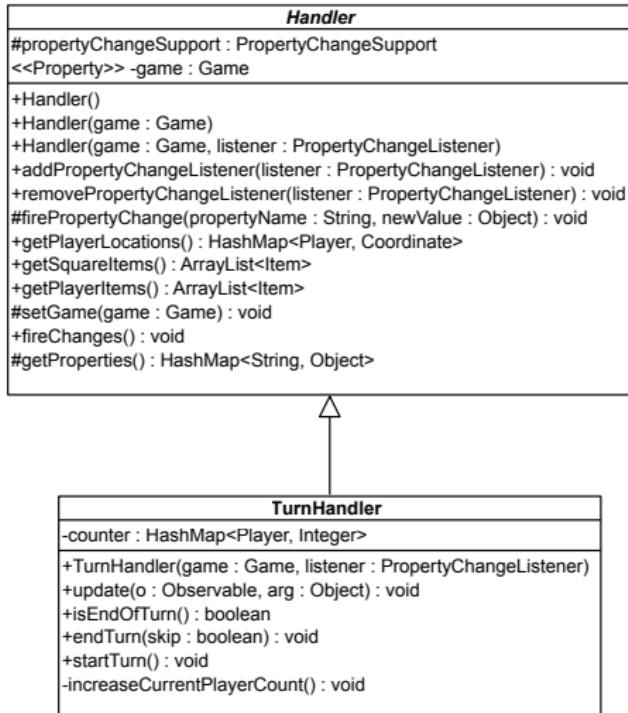


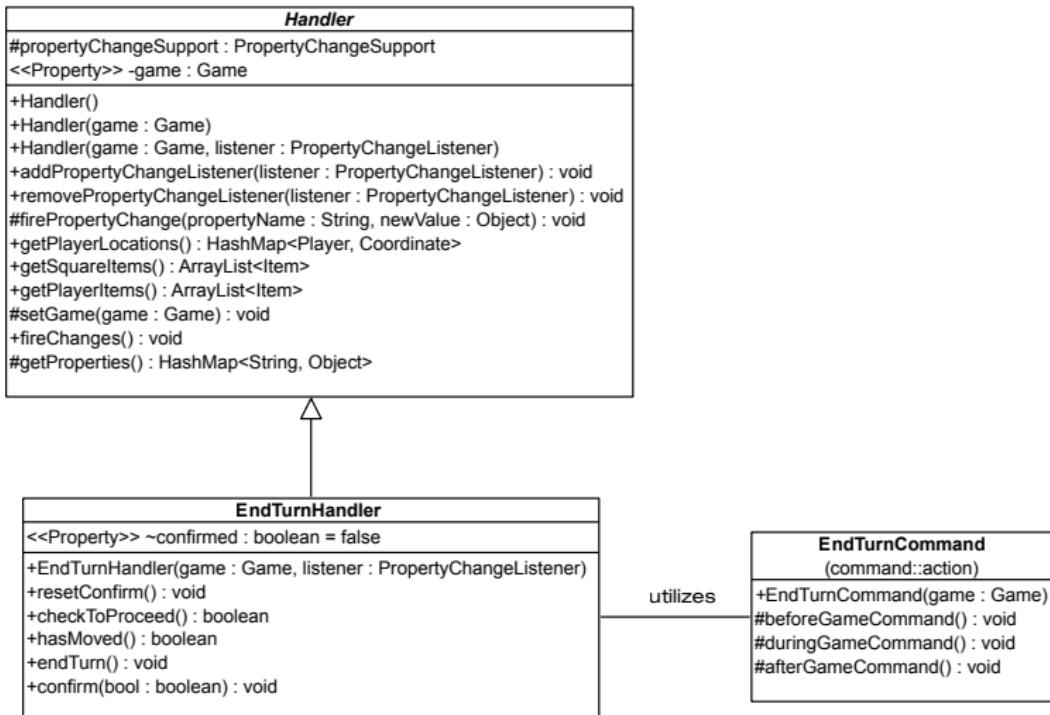
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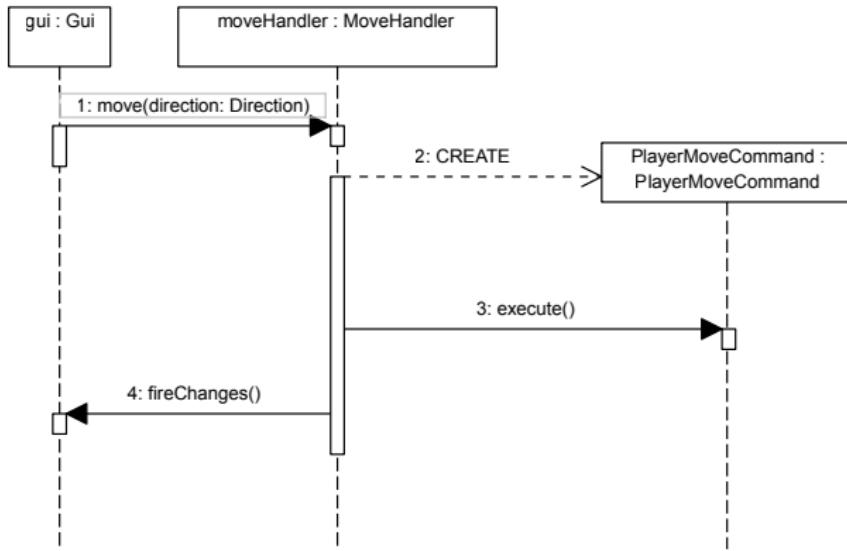


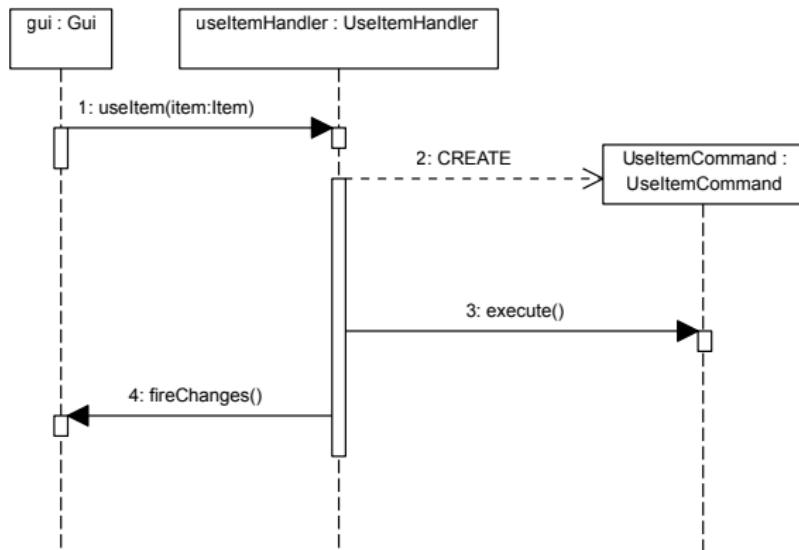
UseItemCommand
-item : Item
+UseItemCommand(game : Game, item : Item)
-getitem() : Item
#beforeGameCommand() : void
#duringGameCommand() : void
#afterGameCommand() : void

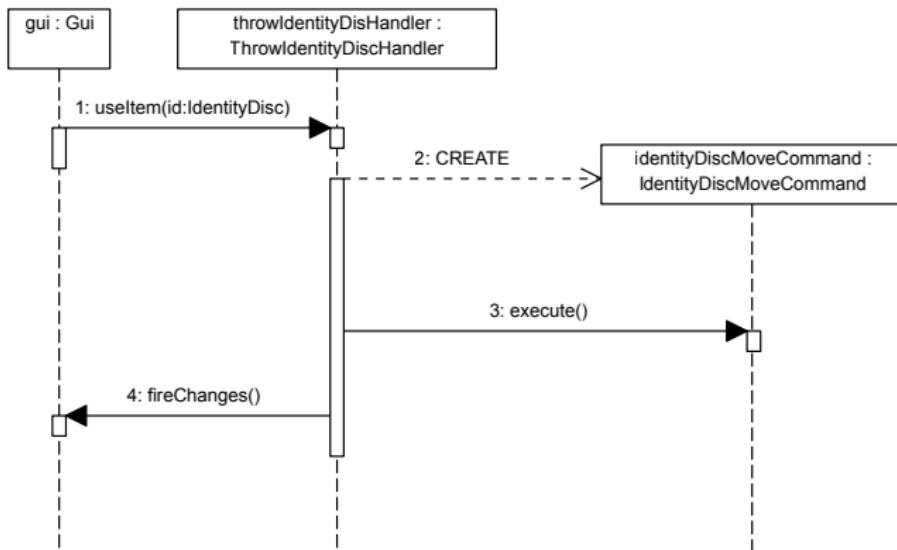


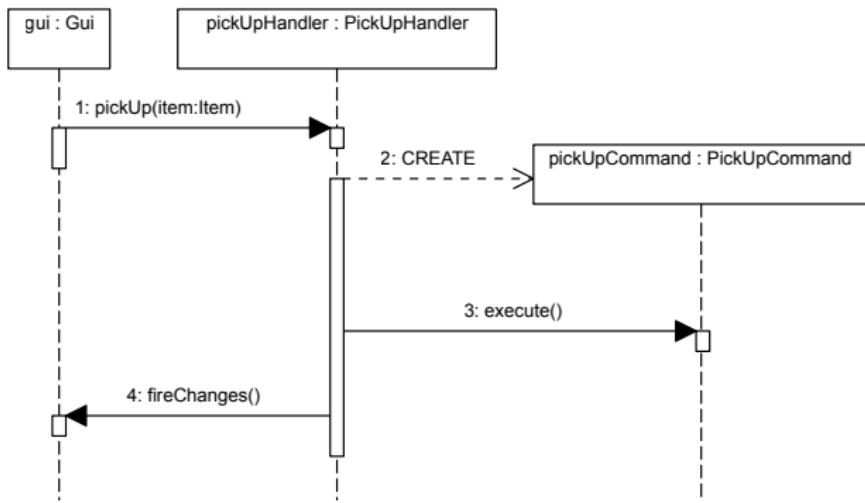


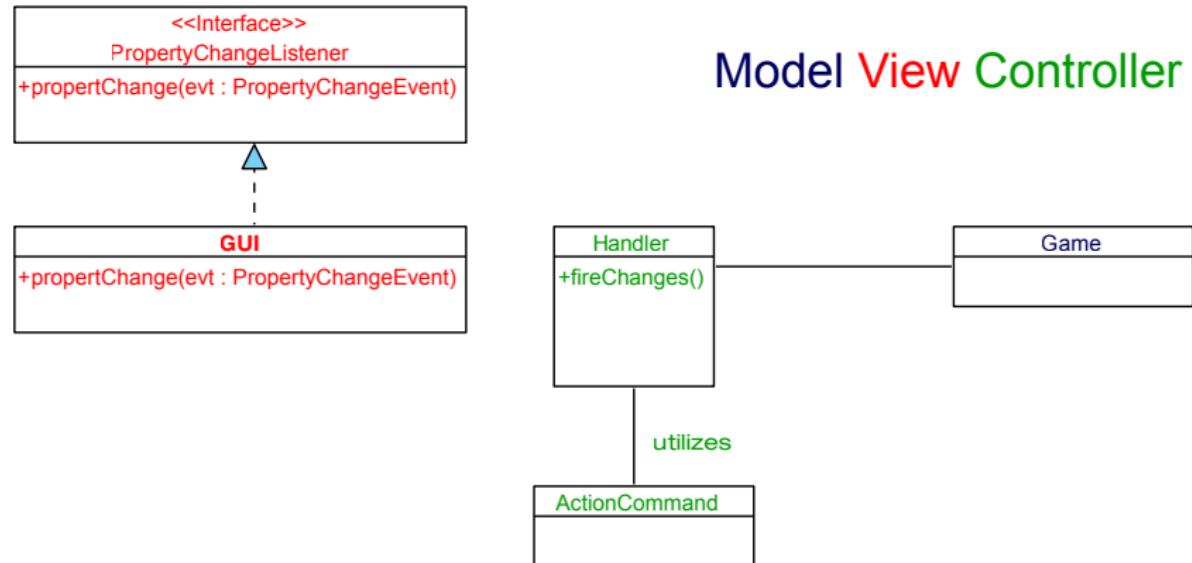












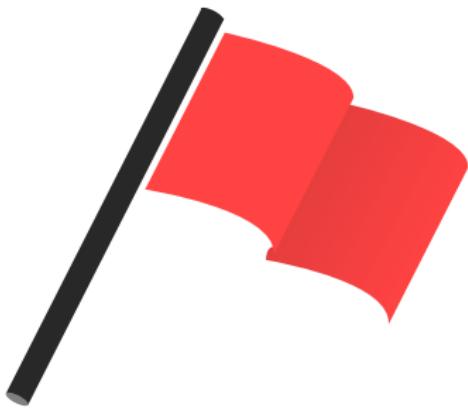
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Bedankt voor uw aandacht.