

# DiagrammeDeClasses\_Commande

Package in package 'Model'

DiagrammeDeClasses\_Commande

Version Phase 1.0 Proposed

bodiaa created on 2019-06-18. Last modified 2019-06-18

## DiagrammeDeClasses\_Commande diagram

Class diagram in package 'DiagrammeDeClasses\_Commande'

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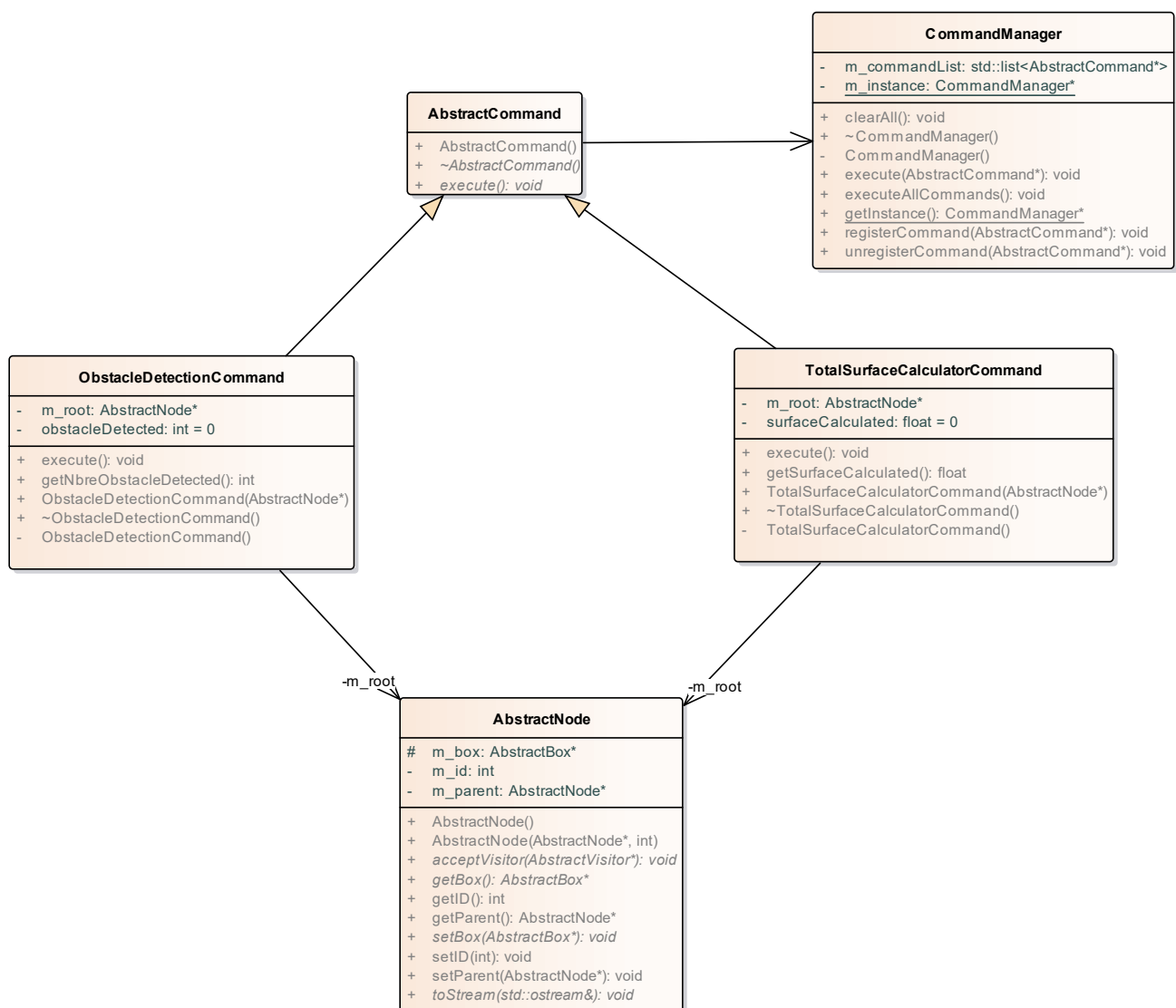


Figure 1: DiagrammeDeClasses\_Commande

## AbstractCommand

Class in package 'Class Model'

AbstractCommand

Version 1.0 Phase 1.0 Proposed

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**INCOMING STRUCTURAL RELATIONSHIPS**

⇒ Generalization from TotalSurfaceCalculatorCommand to AbstractCommand  
[ Direction is 'Source -> Destination'. ]

⇒ Generalization from ObstacleDetectionCommand to AbstractCommand  
[ Direction is 'Source -> Destination'. ]


**ASSOCIATIONS**


 Association (direction: Source -> Destination)

Source: Public (Class) AbstractCommand

Target: Public (Class) CommandManager

**OPERATIONS**

 AbstractCommand () : Public  
Properties:  
bodyLocation = classDec  
[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 ~AbstractCommand () : Public  
Properties:  
bodyLocation = classDec  
[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 execute () : void Public  
[ Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False. ]

## AbstractNode

*Class in package 'Class Model'*

AbstractNode

Version 1.0 Phase 1.0 Proposed




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**INCOMING STRUCTURAL RELATIONSHIPS**

⇒ Generalization from CompositeNode to AbstractNode  
[ Direction is 'Source -> Destination'. ]

⇒ Generalization from Obstacle to AbstractNode  
[ Direction is 'Source -> Destination'. ]






**ATTRIBUTES**



 <b>m_box : AbstractBox* Protected</b>	[ Is static False. Containment is Not Specified. ]
 <b>m_id : int Private</b>	[ Is static False. Containment is Not Specified. ]
 <b>m_parent : AbstractNode* Private</b>	[ Is static False. Containment is Not Specified. ]

**ASSOCIATIONS**

 . Association (direction: Source -> Destination)	
Source: Public (Class) AbstractNode	Target: Protected m_box (Class) AbstractBox
 . Association (direction: Source -> Destination)	
Source: Public (Class) ObstacleDetectionCommand	Target: Private m_root (Class) AbstractNode
 . Association (direction: Source -> Destination)	
Source: Public (Class) TotalSurfaceCalculatorCommand	Target: Private m_root (Class) AbstractNode

**OPERATIONS**



 <b>AbstractNode () : Public</b>	
Properties: initializer = m_parent(nullptr),m_id(0) bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 <b>AbstractNode (parent : AbstractNode* , id : int ) : Public</b>	
Properties: initializer = m_parent(parent),m_id(id) bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 <b>acceptVisitor (visitor : AbstractVisitor* ) : void Public</b>	[ Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False. ]
 <b>getBox () : AbstractBox* Public</b>	[ Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False. ]
 <b>getID () : int Public Const</b>	
Properties:	

OPERATIONS	
bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 getParent () : AbstractNode* Public Const  Properties: bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 setBox (box : AbstractBox* ) : void Public	[ Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False. ]
 setID (id : int ) : void Public  Properties: bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 setParent (parent : AbstractNode* ) : void Public  Properties: bodyLocation = classDec	[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]
 toStream (s : std::ostream& ) : void Public	[ Is static False. Is abstract True. Is return array False. Is query False. Is synchronized False. ]


## CommandManager







*Class in package 'Class Model'*

CommandManager  
 Version 1.0 Phase 1.0 Proposed  
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ATTRIBUTES	
 m_commandList : std::list<AbstractCommand*> Private	[ Is static False. Containment is Not Specified. ]
 m_instance : CommandManager* Private	[ Is static True. Containment is Not Specified. ]



ASSOCIATIONS	
 . Association (direction: Source -> Destination)	
Source: Public (Class) AbstractCommand	Target: Public (Class) CommandManager


OPERATIONS	
 <b>clearAll () : void Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>~CommandManager () : Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>CommandManager () : Private</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>execute (Command : AbstractCommand* ) : void Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>executeAllCommands () : void Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>getInstance () : CommandManager* Public</b> Properties: bodyLocation = classDec [ Is static True. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>registerCommand (Command : AbstractCommand* ) : void Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	
 <b>unregisterCommand (Command : AbstractCommand* ) : void Public</b> [ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]	

## ObstacleDetectionCommand

*Class in package 'Class Model'*

ObstacleDetectionCommand  
Version 1.0 Phase 1.0 Proposed  
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OUTGOING STRUCTURAL RELATIONSHIPS	
 Generalization from ObstacleDetectionCommand to AbstractCommand [ Direction is 'Source -> Destination'. ]	
ATTRIBUTES	
 <b>m_root : AbstractNode* Private</b> [ Is static False. Containment is Not Specified. ]	


**ATTRIBUTES**
 obstacleDetected : int Private = 0

[ Is static False. Containment is Not Specified. ]

**ASSOCIATIONS**
 Association (direction: Source -> Destination)

Source: Public (Class) ObstacleDetectionCommand


Target: Private m\_root (Class) AbstractNode

**OPERATIONS**
 execute () : void Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 getNbreObstacleDetected () : int Public


[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 ObstacleDetectionCommand (root : AbstractNode\* ) : Public

Properties:

initializer = AbstractCommand(),m\_root(root)

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 ~ObstacleDetectionCommand () : Public

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 ObstacleDetectionCommand () : Private

Properties:

initializer = AbstractCommand(),m\_root(nullptr)

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]


## TotalSurfaceCalculatorCommand

*Class in package 'Class Model'*

TotalSurfaceCalculatorCommand

Version 1.0 Phase 1.0 Proposed

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**OUTGOING STRUCTURAL RELATIONSHIPS**
 Generalization from TotalSurfaceCalculatorCommand to AbstractCommand

[ Direction is 'Source -&gt; Destination'. ]

**ATTRIBUTES**
 m\_root : AbstractNode\* Private

**ATTRIBUTES**

[ Is static False. Containment is Not Specified. ]


 `surfaceCalculated : float Private = 0`

[ Is static False. Containment is Not Specified. ]


**ASSOCIATIONS**
 . Association (direction: Source -> Destination)

Source: Public (Class) TotalSurfaceCalculatorCommand


Target: Private m\_root (Class) AbstractNode

**OPERATIONS**
 `execute () : void Public`

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 `getSurfaceCalculated () : float Public`


[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 `TotalSurfaceCalculatorCommand (root : AbstractNode* ) : Public`

Properties:

`initializer = AbstractCommand(),m_root(root)`

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 `~TotalSurfaceCalculatorCommand () : Public`

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]

 `TotalSurfaceCalculatorCommand () : Private`

Properties:

`initializer = AbstractCommand(),m_root(nullptr)`

[ Is static False. Is abstract False. Is return array False. Is query False. Is synchronized False. ]