

CASE TOOLS

Akhil Jain and Shubham Jain

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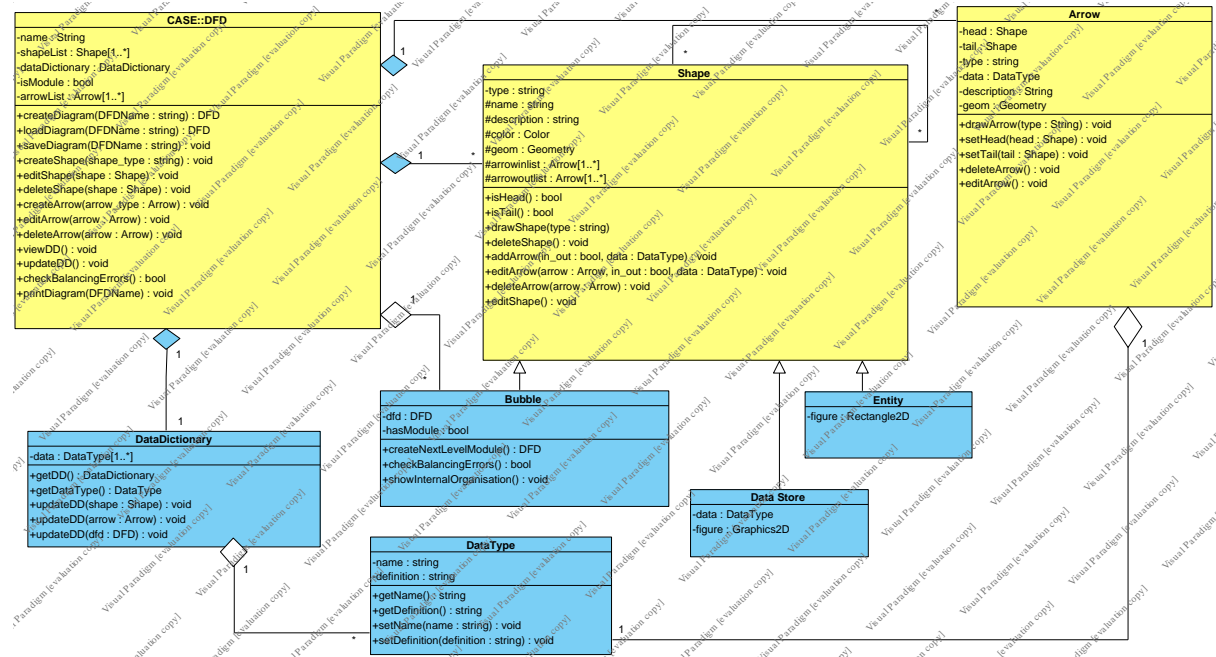
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Class Diagram

Class Diagram



Name	Value
Name	Class Diagram
Author	Akhil Jain
Create Date Time	22 Mar, 2016 4:47:02 PM
Last Modified	23 Mar, 2016 6:47:37 PM
Teamwork Create Date Time	1 Jan, 1970 5:30:00 AM
Point Connector End To Compartment Member	true

Summary


Name	Description
Arrow	
CASE::DFD	
Shape	
Bubble	
Entity	
DataDictionary	
Data Store	
DataType	


Details

Arrow

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:20:00 PM
	Last Modified	23 Mar, 2016 2:03:14 AM

Attributes

private head : Shape			
Type	 Shape		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:20:35 PM	
	Last Modified	22 Mar, 2016 7:24:21 PM	

private tail : Shape			
Type	 Shape		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:21:06 PM
	Last Modified	22 Mar, 2016 7:24:21 PM

private type : string			
Type	● string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:21:13 PM	
	Last Modified	22 Mar, 2016 7:24:21 PM	

private data : DataType			
Type	DataType		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:21:28 PM	
	Last Modified	22 Mar, 2016 7:24:21 PM	

private description : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		


Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 7:22:07 PM
	Last Modified		22 Mar, 2016 7:34:21 PM


private geom : Geometry			
Type	Geometry		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 7:24:57 PM
	Last Modified		22 Mar, 2016 7:34:21 PM

Operations

public drawArrow (type : String) : void			
Parameters	type		
	Multiplicity	Unspecified	
	Type	String	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 7:25:48 PM
		Last Modified	22 Mar, 2016 7:34:21 PM
Transit To	→ N/A (<unnamed> -> <unnamed>)		
Leaf	false		
Ordered	false		

Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:25:26 PM
	Last Modified	23 Mar, 2016 1:19:24 AM

public setHead (head : Shape) : void		
Parameters	head	
	Multiplicity	Unspecified
	Type	 Shape
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Project Management	Create Date Time
		22 Mar, 2016 7:26:25 PM
		Last Modified
		22 Mar, 2016 7:34:21 PM
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:25:48 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

public setTail (tail : Shape) : void		
Parameters	tail	
	Multiplicity	Unspecified
	Type	 Shape
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Project Management	Create Date Time
		22 Mar, 2016 7:26:39 PM
		Last Modified
		22 Mar, 2016 7:34:21 PM
Leaf	false	
Ordered	false	
Unique	true	
Query	false	

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:26:25 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

public deleteArrow () : void		
Transit To	→ N/A (<unnamed> -> <unnamed>)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:26:39 PM
	Last Modified	23 Mar, 2016 1:42:36 AM

public editArrow () : void		
Transit To	→ N/A (<unnamed> -> <unnamed>)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 12:29:00 AM
	Last Modified	23 Mar, 2016 2:03:14 AM

Relationships

* : Association

From	Name		Value
	End Model Element		◆ N/A
	Provide Property Getter Method		false
	Provide Property Setter Method		false
	Multiplicity		1
	Visibility		Unspecified
	Aggregation Kind		None
	Navigable		Navigable
	Derived		false
	Derived Union		false
	Read Only		false
	Static		false
	Leaf		false
	Type		◆ N/A
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 10:12:15 PM
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 10:12:15 PM
	Last Modified		22 Mar, 2016 10:48:08 PM

CASE::DFD

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 4:47:37 PM
	Last Modified	23 Mar, 2016 10:45:00 AM

Attributes

private name : String			
Type	String		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 4:48:49 PM	
	Last Modified	22 Mar, 2016 4:51:03 PM	

private shapeList : Shape			
Type Modifier	[1..*]		
Type	Shape		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 4:56:24 PM	
	Last Modified	22 Mar, 2016 5:01:03 PM	

private dataDictionary : DataDictionary			
Type	DataDictionary		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		

Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 4:59:19 PM	
	Last Modified	22 Mar, 2016 5:11:04 PM	

private isModule : bool			
Type	bool		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:02:05 PM	
	Last Modified	22 Mar, 2016 5:11:04 PM	

private arrowList : Arrow			
Type Modifier	[1..*]		
Type	Arrow		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:02:12 PM	
	Last Modified	22 Mar, 2016 5:11:04 PM	


Operations

public createDiagram (DFDName : string) : DFD			
Parameters	DFDName		
	Multiplicity	Unspecified	
	Type	● string	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:08:27 PM
		Last Modified	22 Mar, 2016 5:21:04 PM
Transit To	→ N/A (<unnamed> -> <unnamed>)		
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:03:31 PM
	Last Modified		23 Mar, 2016 1:09:01 AM

public loadDiagram (DFDName : string) : DFD			
Parameters	DFDName		
	Multiplicity	Unspecified	
	Type	● string	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:10:21 PM
		Last Modified	22 Mar, 2016 5:21:04 PM
Transit To	→ N/A (<unnamed> -> <unnamed>)		
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:08:36 PM
	Last Modified		23 Mar, 2016 1:53:13 AM

public saveDiagram (DFDName : string) : void			
--	--	--	--

Parameters	DFDName		
	Multiplicity	Unspecified	
	Type	● string	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:14:09 PM
		Last Modified	22 Mar, 2016 5:21:04 PM
Transit To	→ N/A (<unnamed> -> <unnamed>)		
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:10:27 PM
	Last Modified		23 Mar, 2016 10:45:00 AM

public createShape (shape_type : string) : void			
Parameters	shape_type		
	Multiplicity	Unspecified	
	Type	 string	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:18:53 PM
		Last Modified	22 Mar, 2016 5:21:04 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:10:30 PM
	Last Modified		22 Mar, 2016 5:21:04 PM

public editShape (shape : Shape) : void

Parameters	shape		
	Multiplicity	Unspecified	
	Type	Shape	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:20:21 PM
		Last Modified	22 Mar, 2016 5:21:04 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:19:29 PM
	Last Modified		22 Mar, 2016 5:21:04 PM

public deleteShape (shape : Shape) : void			
Parameters	shape		
	Multiplicity	Unspecified	
	Type	Shape	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:21:12 PM
		Last Modified	22 Mar, 2016 5:31:21 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:20:52 PM
	Last Modified		22 Mar, 2016 5:31:21 PM

public createArrow (arrow_type : Arrow) : void

Parameters	arrow_type		
	Multiplicity	Unspecified	
	Type	Arrow	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:22:13 PM
		Last Modified	22 Mar, 2016 5:31:21 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:21:12 PM
	Last Modified		22 Mar, 2016 5:31:21 PM

public editArrow (arrow : Arrow) : void			
Parameters	arrow		
	Multiplicity	Unspecified	
	Type	Arrow	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:22:31 PM
		Last Modified	22 Mar, 2016 5:31:21 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 5:22:13 PM
	Last Modified		22 Mar, 2016 5:31:21 PM

public deleteArrow (arrow : Arrow) : void
--

Parameters	arrow		
	Multiplicity	Unspecified	
	Type	Arrow	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 5:22:46 PM
		Last Modified	22 Mar, 2016 5:31:21 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:22:31 PM	
	Last Modified	22 Mar, 2016 5:31:21 PM	

public viewDD () : void		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:22:46 PM
	Last Modified	22 Mar, 2016 5:31:21 PM

public updateDD () : void		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:23:43 PM
	Last Modified	23 Mar, 2016 2:20:01 AM

public checkBalancingErrors () : bool		
Leaf	false	
Ordered	false	
Unique	true	

Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:24:40 PM
	Last Modified	22 Mar, 2016 5:31:21 PM



public printDiagram (DFDName) : void		
Parameters	DFDName	
	Multiplicity	Unspecified
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	23 Mar, 2016 10:42:22 AM
		23 Mar, 2016 10:45:00 AM
Transit To	→ N/A (<unnamed> -> <unnamed>)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 10:41:52 AM
	Last Modified	23 Mar, 2016 10:45:00 AM

◆ N/A

Name	Value	
Abstract	false	
Leaf	false	
Root	false	
Active	false	
Visibility	public	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:12:01 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Relationships


* : Association


To	Name		Value
	End Model Element	 Arrow	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	Unspecified	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	 Arrow	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 10:12:15 PM
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name		Value
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 10:12:15 PM	
	Last Modified	22 Mar, 2016 10:48:08 PM	


Shape

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:26:54 PM
	Last Modified	23 Mar, 2016 11:16:51 AM

Attributes

private type : string			
Type	 string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:27:21 PM	
	Last Modified	22 Mar, 2016 5:31:21 PM	

protected name : string			
Type	 string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:29:07 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

protected description : string			
Type	 string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		

Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:30:45 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

protected color : Color			
Type	Color		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:27:34 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

protected geom : Geometry			
Type	Geometry		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:27:47 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

protected arrowinlist : Arrow	
Type Modifier	[1..*]
Type	Arrow


Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:28:26 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

protected arrowoutlist : Arrow			
Type Modifier	[1..*]		
Type	Arrow		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 5:28:50 PM	
	Last Modified	22 Mar, 2016 5:41:22 PM	

Operations

public isHead () : bool		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:33:52 PM
	Last Modified	22 Mar, 2016 9:55:30 PM

public isTail () : bool		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:34:05 PM
	Last Modified	22 Mar, 2016 10:16:35 PM



public drawShape (type : string)		
Parameters	type	
	Multiplicity	Unspecified
	Type	 string
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
Transit To	→ (->)	
	→ Sequence Diagram1.3: drawShape(type : string) (: CASE::DFD -> : Shape)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:34:14 PM
	Last Modified	23 Mar, 2016 10:24:09 AM

public deleteShape () : void	
Transit To	→ (->)
	→ Sequence Diagram1.7: deleteShape() : void (: CASE::DFD -> : Shape)
Leaf	false
Ordered	false
Unique	true
Query	false


Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:42:54 PM
	Last Modified	23 Mar, 2016 11:16:51 AM

public addArrow (in_out : bool, data : DataType) : void		
Parameters	in_out	
	Multiplicity	Unspecified
	Type	bool
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	22 Mar, 2016 5:52:12 PM
		22 Mar, 2016 5:52:13 PM
	Last Modified	22 Mar, 2016 5:52:13 PM
		22 Mar, 2016 5:52:13 PM
	data	
	Multiplicity	Unspecified
	Type	DataType
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	22 Mar, 2016 7:14:43 PM
		22 Mar, 2016 7:24:21 PM
	Last Modified	22 Mar, 2016 7:24:21 PM
		22 Mar, 2016 7:24:21 PM
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 5:43:23 PM
	Last Modified	23 Mar, 2016 1:53:13 AM

public editArrow (arrow : Arrow, in_out : bool, data : DataType) : void



Parameters	arrow	
	Multiplicity	Unspecified
	Type	 Arrow
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	22 Mar, 2016 7:15:55 PM
	Last Modified	23 Mar, 2016 12:35:13 AM
	in_out	
	Multiplicity	Unspecified
	Type	bool
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	22 Mar, 2016 7:15:55 PM
	Last Modified	23 Mar, 2016 12:35:13 AM
	data	
	Multiplicity	Unspecified
	Type	 DataType
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	23 Mar, 2016 12:25:42 AM
	Last Modified	23 Mar, 2016 12:35:13 AM
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:15:28 PM
	Last Modified	23 Mar, 2016 12:35:13 AM

```
public deleteArrow (arrow : Arrow) : void
```


Parameters	arrow		
	Multiplicity	Unspecified	
	Type	 Arrow	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	23 Mar, 2016 12:26:02 AM
		Last Modified	23 Mar, 2016 12:35:13 AM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:15:55 PM	
	Last Modified	23 Mar, 2016 12:35:13 AM	



public editShape () : void		
Transit To	→ (->)	
	→ Sequence Diagram1.5: editShape() : void (: CASE::DFD -> : Shape)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 12:30:47 AM
	Last Modified	23 Mar, 2016 10:34:45 AM

Relationships

Unnamed Generalization		
To	 Bubble	
Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:57:48 PM
	Last Modified	22 Mar, 2016 10:16:35 PM
Unnamed Generalization		
To	 Entity	

Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:57:55 PM
	Last Modified	22 Mar, 2016 10:05:32 PM

Unnamed Generalization		
To	 Data Store	
Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:58:14 PM
	Last Modified	22 Mar, 2016 10:16:35 PM

* : Association		
To	Name	Value
	End Model Element	 Shape
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	*
	Visibility	Unspecified
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 Shape
	Project Management	Name
		Value
		Author
	Create Date Time	Akhil Jain
		22 Mar, 2016 10:13:13 PM
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Derived	false	

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:13:13 PM
	Last Modified	22 Mar, 2016 10:36:37 PM



* : Association				
From	Name	Value		
	End Model Element	◆ N/A		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	1		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Type	◆ N/A		
	Project Management	Name	Value	
		Author	Akhil Jain	
		Create Date Time	22 Mar, 2016 10:10:19 PM	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		Akhil Jain	
	Create Date Time		22 Mar, 2016 10:10:19 PM	
	Last Modified		22 Mar, 2016 10:26:36 PM	

◆ N/A

Name	Value
Abstract	false
Leaf	false
Root	false
Active	false
Visibility	public

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 8:04:52 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Relationships



* : Association				
To	Name	Value		
	End Model Element	 Shape		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	Unspecified		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Type	 Shape		
	Project Management	Name	Value	
		Author	Akhil Jain	
		Create Date Time	22 Mar, 2016 10:10:19 PM	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name	Value		
	Author	Akhil Jain		
	Create Date Time	22 Mar, 2016 10:10:19 PM		
	Last Modified	22 Mar, 2016 10:26:36 PM		

 **N/A**

Name	Value
Abstract	false
Leaf	false
Root	false
Active	false

Visibility	public	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:37:45 PM
	Last Modified	22 Mar, 2016 10:48:08 PM

Relationships



Unnamed Association		
To	Name	Value
	End Model Element	 Bubble
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	*
	Visibility	Unspecified
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 Bubble
	Project Management	Name
		Value
		Author
		Akhil Jain
		Create Date Time
		22 Mar, 2016 10:38:30 PM
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Derived	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:38:30 PM
	Last Modified	22 Mar, 2016 10:48:08 PM

 **N/A**

Name	Value
Abstract	false
Leaf	false
Root	false

Active	false	
Visibility	public	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:17:27 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Relationships



Unnamed Association		
To	Name	Value
	End Model Element	 DataType
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	1
	Visibility	Unspecified
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 DataType
	Project Management	Name
		Value
		Author
		Akhil Jain
		Create Date Time
		22 Mar, 2016 10:18:19 PM
Abstract	false	
Leaf	false	
Visibility	Unspecified	
Derived	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:18:19 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

 **N/A**

Name	Value
Abstract	false
Leaf	false

Root	false	
Active	false	
Visibility	public	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:14:58 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Relationships

1 : Association		
To	Name	Value
	End Model Element	 DataDictionary
	Provide Property Getter Method	false
	Provide Property Setter Method	false
	Multiplicity	Unspecified
	Visibility	Unspecified
	Aggregation Kind	None
	Navigable	Navigable
	Derived	false
	Derived Union	false
	Read Only	false
	Static	false
	Leaf	false
	Type	 DataDictionary
	Project Management	Name
		Value
		Author
Abstract	false	
	false	
	Unspecified	
	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:15:41 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Bubble

Name	Value
Active	false

Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:36:17 PM
	Last Modified	22 Mar, 2016 11:01:14 PM

Attributes

private dfd : DFD			
Type	DFD		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:36:25 PM	
	Last Modified	22 Mar, 2016 7:44:22 PM	

private hasModule : bool			
Type	bool		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:38:06 PM	
	Last Modified	22 Mar, 2016 7:44:22 PM	


Operations

public createNextLevelModule () : DFD		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:38:41 PM
	Last Modified	22 Mar, 2016 7:44:22 PM

public checkBalancingErrors () : bool		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:41:47 PM
	Last Modified	22 Mar, 2016 7:44:22 PM

public showInternalOrganisation () : void		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:53:27 PM
	Last Modified	22 Mar, 2016 11:01:14 PM

Relationships

Unnamed Generalization		
From	 Shape	
Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:57:48 PM
	Last Modified	22 Mar, 2016 10:16:35 PM
Unnamed Association		

From	Name	Value	
	End Model Element	◆ N/A	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	◆ N/A	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 10:38:30 PM
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 10:38:30 PM	
	Last Modified	22 Mar, 2016 10:48:08 PM	


Entity

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:27:38 PM
	Last Modified	22 Mar, 2016 10:05:32 PM

Attributes

private figure : Rectangle2D			
Type	Rectangle2D		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:27:48 PM	
	Last Modified	22 Mar, 2016 7:34:21 PM	


Relationships

Unnamed Generalization		
From	 Shape	
Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:57:55 PM
	Last Modified	22 Mar, 2016 10:05:32 PM

DataDictionary

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:30:46 PM
	Last Modified	23 Mar, 2016 10:34:45 AM

Attributes


private data : DataType			
Type Modifier	[1..*]		
Type	 DataType		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:33:58 PM	
	Last Modified	22 Mar, 2016 7:34:21 PM	


Operations

public getDD () : DataDictionary		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:34:26 PM
	Last Modified	23 Mar, 2016 12:35:13 AM

public getDataType () : DataType		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 12:33:41 AM
	Last Modified	23 Mar, 2016 12:35:13 AM

public updateDD (shape : Shape) : void		
--	--	--

Parameters	shape		
	Multiplicity	Unspecified	
	Type	 Shape	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	23 Mar, 2016 1:05:53 AM
		Last Modified	23 Mar, 2016 1:09:01 AM
Transit To	→ (->)		
	→ Sequence Diagram1.3.1: updateDD(shape : Shape) : void (: Shape -> : DataDictionary)		
	→ Sequence Diagram1.5.1: updateDD(shape : Shape) : void (: Shape -> : DataDictionary)		
	→ Sequence Diagram1.7.1: updateDD(shape : Shape) : void (: Shape -> : DataDictionary)		
Leaf	false		
Ordered	false		
Unique	true		
Query	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	23 Mar, 2016 1:04:00 AM	
	Last Modified	23 Mar, 2016 10:34:45 AM	

public updateDD (arrow : Arrow) : void			
Parameters	arrow		
	Multiplicity	Unspecified	
	Type	 Arrow	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	23 Mar, 2016 1:06:10 AM
		Last Modified	23 Mar, 2016 1:09:01 AM
Transit To	→ Sequence Diagram1.4.1: updateDD(arrow : Arrow) : void (: Arrow -> : DataDictionary)		
	→ Sequence Diagram1.8.1: updateDD(arrow : Arrow) : void (: Arrow -> : DataDictionary)		
	→ Sequence Diagram1.6.1: updateDD(arrow : Arrow) : void (: Arrow -> : DataDictionary)		
Leaf	false		
Ordered	false		

Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 1:05:53 AM
	Last Modified	23 Mar, 2016 2:03:14 AM

public updateDD (dfd : DFD) : void		
Parameters	dfd	
	Multiplicity	Unspecified
	Type	DFD
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	23 Mar, 2016 2:16:57 AM
	Last Modified	23 Mar, 2016 2:20:01 AM
Transit To	→ Sequence Diagram1.2.1: updateDD(dfd : DFD) : void (: CASE::DFD -> : DataDictionary)	
	→ Sequence Diagram1.1.1: updateDD(dfd : DFD) : void (: CASE::DFD -> : DataDictionary)	
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	23 Mar, 2016 2:16:07 AM
	Last Modified	23 Mar, 2016 10:24:09 AM

Relationships

1 : Association

From	Name		Value
	End Model Element		◆ N/A
	Provide Property Getter Method		false
	Provide Property Setter Method		false
	Multiplicity		1
	Visibility		Unspecified
	Aggregation Kind		None
	Navigable		Navigable
	Derived		false
	Derived Union		false
	Read Only		false
	Static		false
	Leaf		false
	Type		◆ N/A
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 10:15:41 PM
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name		Value
	Author		Akhil Jain
	Create Date Time		22 Mar, 2016 10:15:41 PM
	Last Modified		22 Mar, 2016 10:26:36 PM

Data Store


Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:29:26 PM
	Last Modified	22 Mar, 2016 10:48:08 PM

Attributes

private data : DataType			
Type	DataType		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:29:39 PM	
	Last Modified	22 Mar, 2016 7:34:21 PM	

private figure : Graphics2D			
Type	Graphics2D		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:29:52 PM	
	Last Modified	22 Mar, 2016 7:34:21 PM	


Relationships


Unnamed Generalization		
From	 Shape	
Substitutable	false	
Visibility	Unspecified	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 9:58:14 PM
	Last Modified	22 Mar, 2016 10:16:35 PM

Data Type

Name	Value	
Active	false	
Business Key Mutable	true	
Business Model	false	
Visibility	public	
Leaf	false	
Root	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:32:29 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Attributes

private name : string			
Type	 string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 7:32:51 PM	
	Last Modified	22 Mar, 2016 7:34:21 PM	


private definition : string			
Type	 string		
Allow Empty Name	false		
Getter	false	Setter	false
Derived	false		
Multiplicity	Unspecified		
Aggregation	None		
Derived Union	false		
Read Only	false		
Is ID	false		
Leaf	false		

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:01 PM
	Last Modified	22 Mar, 2016 7:34:21 PM


Operations

public getName () : string		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:01 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

public getDefinition () : string		
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:17 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

public setName (name : string) : void			
Parameters	name		
	Multiplicity	Unspecified	
	Type	 string	
	Direction	inout	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 7:33:01 PM
		Last Modified	22 Mar, 2016 7:34:21 PM
Leaf	false		
Ordered	false		
Unique	true		
Query	false		

Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:01 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

public setDefinition (definition : string) : void		
Parameters	definition	
	Multiplicity	Unspecified
	Type	 string
	Direction	inout
	Project Management	Name
		Value
		Author
		Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:17 PM
		22 Mar, 2016 7:34:21 PM
		22 Mar, 2016 7:34:21 PM
Leaf	false	
Ordered	false	
Unique	true	
Query	false	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 7:33:17 PM
	Last Modified	22 Mar, 2016 7:34:21 PM

Relationships

Unnamed Association



From	Name		Value	
	End Model Element		◆ N/A	
	Provide Property Getter Method		false	
	Provide Property Setter Method		false	
	Multiplicity		1	
	Visibility		Unspecified	
	Aggregation Kind		None	
	Navigable		Navigable	
	Derived		false	
	Derived Union		false	
	Read Only		false	
	Static		false	
	Leaf		false	
	Type		◆ N/A	
	Project Management		Name	Value
			Author	Akhil Jain
			Create Date Time	22 Mar, 2016 10:18:19 PM
Abstract		false		
Leaf		false		
Visibility		Unspecified		
Derived		false		
Project Management		Name	Value	
		Author	Akhil Jain	
		Create Date Time	22 Mar, 2016 10:18:19 PM	
		Last Modified	22 Mar, 2016 10:26:36 PM	
Unnamed Association				

From	Name	Value	
	End Model Element	◆ N/A	
	Provide Property Getter Method	false	
	Provide Property Setter Method	false	
	Multiplicity	1	
	Visibility	Unspecified	
	Aggregation Kind	None	
	Navigable	Navigable	
	Derived	false	
	Derived Union	false	
	Read Only	false	
	Static	false	
	Leaf	false	
	Type	◆ N/A	
	Project Management	Name	Value
		Author	Akhil Jain
		Create Date Time	22 Mar, 2016 10:21:44 PM
Abstract	false		
Leaf	false		
Visibility	Unspecified		
Derived	false		
Project Management	Name	Value	
	Author	Akhil Jain	
	Create Date Time	22 Mar, 2016 10:21:44 PM	
	Last Modified	22 Mar, 2016 10:26:36 PM	

◆ N/A

Name	Value	
Abstract	false	
Leaf	false	
Root	false	
Active	false	
Visibility	public	
Project Management	Name	Value
	Author	Akhil Jain
	Create Date Time	22 Mar, 2016 10:21:24 PM
	Last Modified	22 Mar, 2016 10:26:36 PM

Relationships

Unnamed Association				
To	Name	Value		
	End Model Element	 DataType		
	Provide Property Getter Method	false		
	Provide Property Setter Method	false		
	Multiplicity	*		
	Visibility	Unspecified		
	Aggregation Kind	None		
	Navigable	Navigable		
	Derived	false		
	Derived Union	false		
	Read Only	false		
	Static	false		
	Leaf	false		
	Type	 DataType		
	Project Management	Name	Value	
		Author	Akhil Jain	
		Create Date Time	22 Mar, 2016 10:21:44 PM	
Abstract	false			
Leaf	false			
Visibility	Unspecified			
Derived	false			
Project Management	Name		Value	
	Author		Akhil Jain	
	Create Date Time		22 Mar, 2016 10:21:44 PM	
	Last Modified		22 Mar, 2016 10:26:36 PM	