

How to Edit an Attribute's Initial Value

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Initial value defines the default value for attribute when the owning object is instantiated. You can give a text value for initial value, or select a public attribute from other classes. In this tutorial, you can study how to define default value for attribute of a class and then share the same default value with another class.

 Create a new project by selecting **Project > New** from the application toolbar. In the **New Project** window, enter *A Simple Model* as project name and click **Create Blank Project**.

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Create New F	Project	
		_
Name:	A Simple Model	
Author:	John	
Data type set:	UML 🗸	
Description:		_
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Advanced O	ptions	
	Create Blank Project Cancel	

2. Create a class diagram by selecting **Diagram > New** from the application toolbar. Select **Class Diagram** and click **Next**.

٩		New Diagram	×
	Q. Search		
		Class Diagram Design object model, persistence model for Hibernate ORM and REST API with classes, their attributes, operations and inter-relationship.	^
		Communication Diagram Model the relationships between objects. Communication Diagram focuses on telling whether a relationship exists between objects. It does not tell their order and how objects interact with each other.	
		Component Diagram Model how components are connected with each other in forming a software systems and the interfaces of those components. Examples of components include third party libraries, files, executable, etc.	
		Composite Structure Diagram Model the internal structure and composition of classes.	~
		Next Cano	el

- 3. Click **OK** to confirm.
- 4. Create a class by selecting **Class** from the diagram toolbar in advance and clicking it on the diagram. Name it as *COLOR*. In some programming languages, a constant class is named in upper case.



5. Although *COLOR* is constant class, you can set it to be a static class. Right-click on the class and select **Open Specification...** from the pop-up menu.



6. In the Class Specification window, open Class Code Details tab and check final and static. Next, click OK button.

		Class Speci	fication	
General	Attribute	s Operations	Relations	Chart Relations
References Tagged Values		Constraints	Diagrams	Traceability
Template Parameters		Class Code Details	Java Annotatio	ons Stereotypes
final	This type implemen A class ca subclasse	has no implementation, t it by providing impleme on be declared final if its are desired or require	but otherwise un intations for its ab definition is comp d.	related classes can ostract methods.

7. *COLOR* contains several attributes for different colors. Let's create an attribute for red. Rightclick on COLOR and select **Add** > **Attribute** from the pop-up menu.



8. Enter +*red* : *int* = 1 and press **Enter** to confirm. Entering + means you set it as public, thereby, it becomes accessible to other classes. Here *red* is the name of attribute while 1 is the default value.



9. Similarly, enter green : int = 2 and blue : int = 3 respectively. The image below shows the result:



10. Since the three colors are static, you'd better set their scope to be classifier. Select all the three attributes, right-click on them and select **Model Element Properties** > **Scope** > **Classifier** from the pop-up menu.



11. Now, create another class through diagram toolbar and name it as Shape.



12. Add an attribute and then name it as *color : int*, press Enter and then Esc to confirm.



13. Let's customize the default color of shape as green. You have to set the initial color for the color attributes as *COLOR.green* in advance. Right-click on the attribute *color* and select **Open Specification...** from the pop-up menu.



14. In the Attribute Specification window, open General tab. Press the upside down arrow in the Initial value field to select green : int in the tree. Click OK to close the specification window. Note that only public attributes are available to select as the initial color.

	Att	ribute Speci	fication		
References	Project	Management	Quality	Comments	
Stereotypes	Tagged	Values	Constraints	Traceability	
Redefined	Properties	Subsette	d Properties	Relations	
General	Attribute Code De	tails Jav	a Annotations	XML Schema	
Name:	color				
Classifier:	Shape				
nitial value:				~	
Multiplicity:	Filter (e.g. Class.a	ttribute)	✓ Attributes	 Operations 	
√isibility:					
Гуре:	green	int int			
Type modifier:		thờ			
Scope:					
Aggregation:					
Description:					
Derived	Derived union	Setter	Getter		
	Leaf	Read only	🗌 ID		
Abstract					

The result of Shape class is shown as follows:



Related Links

• Full set of UML tools and UML diagrams



Visual Paradigm home page (https://www.visual-paradigm.com/)

Visual Paradigm tutorials (https://www.visual-paradigm.com/tutorials/)