



## How to Edit an Attribute's Initial Value

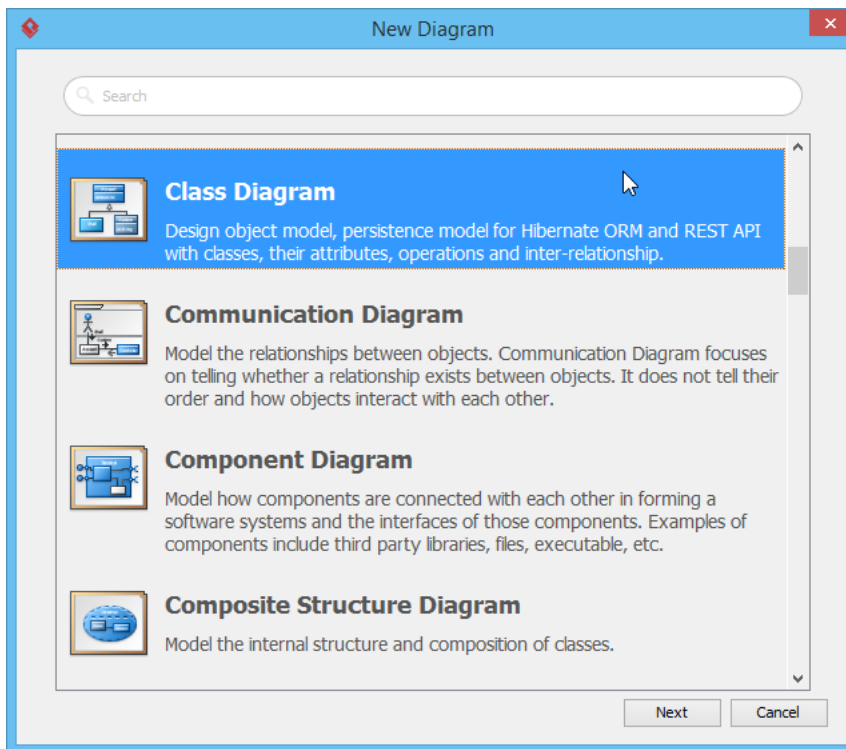
Written Date : August 16, 2010

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.

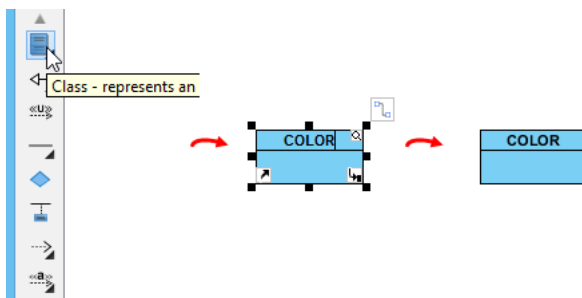
1. Create a new project by selecting **Project > New** from the application toolbar. In the **New Project** window, enter *A Simple Model* as project name and click **Create Blank Project**.

A screenshot of the "New Project" dialog box in Visual Paradigm. The dialog has a blue title bar with the text "New Project" and a close button (X) on the right. Inside the dialog, there is a section titled "Create New Project" with the instruction "Create a new project by filling in the following information." Below this, there are four input fields: "Name:" with the text "A Simple Model", "Author:" with the text "John", "Data type set:" with a dropdown menu showing "UML", and "Description:" with a large empty text area. At the bottom left, there is a checkbox labeled "Advanced Options" which is currently unchecked. At the bottom right, there are two buttons: "Create Blank Project" and "Cancel".

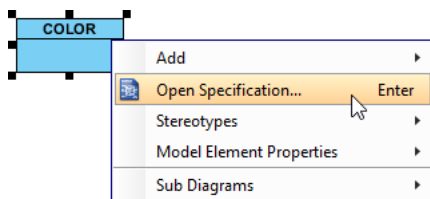
2. Create a class diagram by selecting **Diagram > New** from the application toolbar. Select **Class Diagram** and click **Next**.



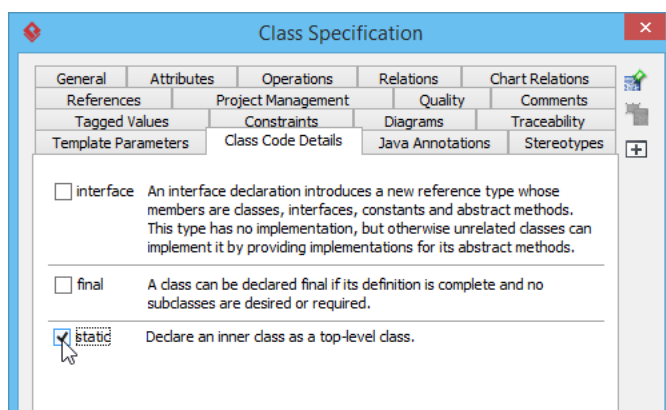
3. Click **OK** to confirm.
4. Create a class by selecting **Class** from the diagram toolbar in advance and clicking it on the diagram. Name it as **COLOR**. In some programming languages, a constant class is named in upper case.



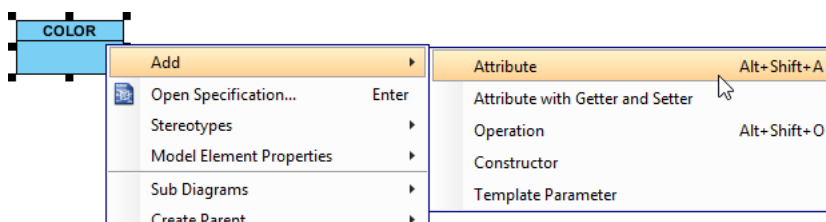
- Although *COLOR* is constant class, you can set it to be a static class. Right click on the class and select **Open Specification...** from the pop-up menu.



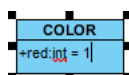
- In the **Class Specification** window, open **Class Code Details** tab and check **final** and **static**. Next, click **OK** button.



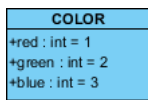
- COLOR* contains several attributes for different colors. Let's create an attribute for red. Right click on *COLOR* and select **Add > Attribute** from the pop-up menu.



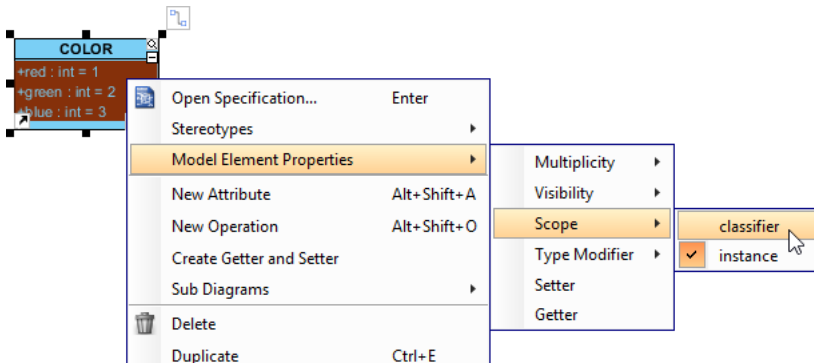
- Enter `+red : int = 1` and press **Enter** to confirm. Entering `+` means you set it as public, thereby, it becomes accessible to other classes. Here `red` is the name of attribute while `1` is the default value.



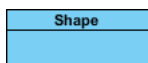
9. Similarly, enter *green : int = 2* and *blue : int = 3* respectively. The image below shows the result:



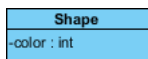
10. Since the three colors are static, you'd better set their scope to be classifier. Select all the three attributes, right click on them and select **Model Element Properties > Scope > Classifier** from the pop-up menu.



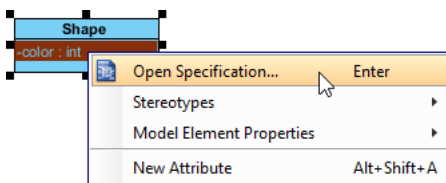
11. Now, create another class through diagram toolbar and name it as *Shape*.



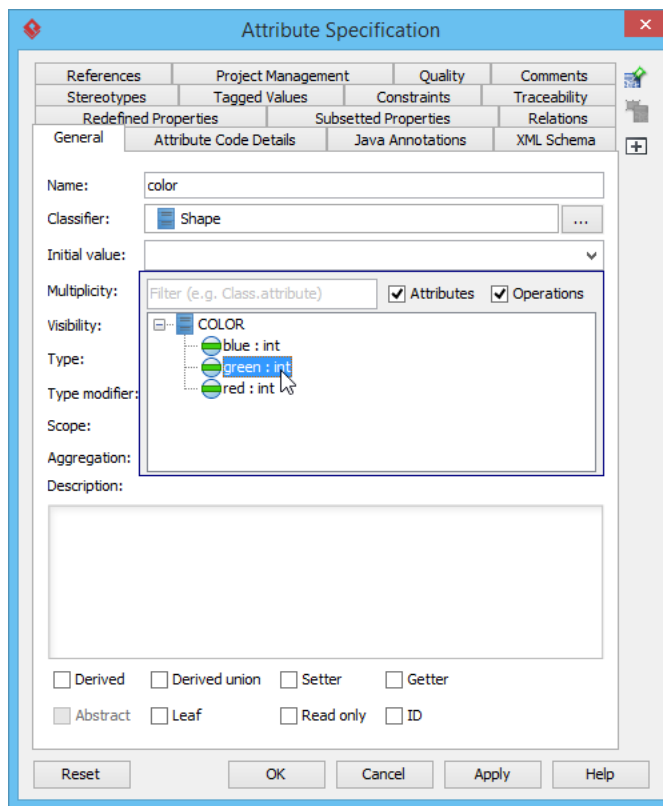
12. Add an attribute and then name it as *color : int*, press **Enter** and then **Esc** to confirm.



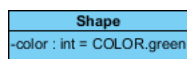
13. Let's customize the default color of shape as green. You have to set the initial color for the color attributes as *COLOR.green* in advance. Right click on the attribute *color* and select **Open Specification...** from the pop-up menu.



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.



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/)  
(<https://www.visual-paradigm.com/>)

[Visual Paradigm tutorials](https://www.visual-paradigm.com/tutorials/)  
(<https://www.visual-paradigm.com/tutorials/>)