

Icon and Diagram Views

Spoken Tutorial Project
<http://spoken-tutorial.org>

National Mission on Education through ICT
<http://sakshat.ac.in>

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Learning Objectives

In this tutorial, we are going to learn how to:

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- ▶ **specify icon and diagram views of a class**

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In this tutorial, we are going to learn how to:

- ▶ **specify icon and diagram views of a class**
- ▶ **insert a polygon and ellipse in icon/diagram view**

System Requirements

- ▶ **OpenModelica 1.9.2**

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- ▶ **Any OS: Linux, Windows, Mac OS X or FOSSEE OS on ARM**

Prerequisites

- ▶ **Knowledge of class definition in Modelica**

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- ▶ **Knowledge of annotations**

Prerequisites

- ▶ Knowledge of class definition in Modelica
- ▶ Knowledge of annotations
- ▶ Prerequisite tutorials are mentioned on our website

www.spoken-tutorial.org

Icon and Diagram Views

- ▶ **Icon and Diagram Views enable viewing a model graphically**

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- ▶ **Annotations can be used to specify Icon and Diagram Views of a model**

Icon and Diagram Views

- ▶ **Icon and Diagram Views enable viewing a model graphically**
- ▶ **Annotations can be used to specify Icon and Diagram Views of a model**
- ▶ **They enable drag-and-drop functionality for component-oriented modeling**

Icon/Diagram

coordinateSystem

graphics

coordinateSystem

coordinateSystem

extent initialScale preserveAspectRatio grid



Syntax of Icon/Diagram Annotation

```
annotation(Icon(coordinateSystem(extent = {{-100, -100}, {100, 100}},  
preserveAspectRatio = true, initialScale = 0.1, grid = {2, 2}),  
Diagram(coordinateSystem(extent = {{-100, -100}, {100, 100}},  
preserveAspectRatio = true, initialScale = 0.1, grid = {2, 2}));
```

Graphical Items

graphics record may have the following items.

- ▶ Line

Graphical Items

graphics record may have the following items.

- ▶ Line
- ▶ Rectangle

Graphical Items

graphics record may have the following items.

- ▶ **Line**
- ▶ **Rectangle**
- ▶ **Ellipse**

Graphical Items

graphics record may have the following items.

- ▶ **Line**
- ▶ **Rectangle**
- ▶ **Ellipse**
- ▶ **Polygon**

Graphical Items

graphics record may have the following items.

- ▶ Line
- ▶ Rectangle
- ▶ Ellipse
- ▶ Polygon
- ▶ Text

Graphical Items

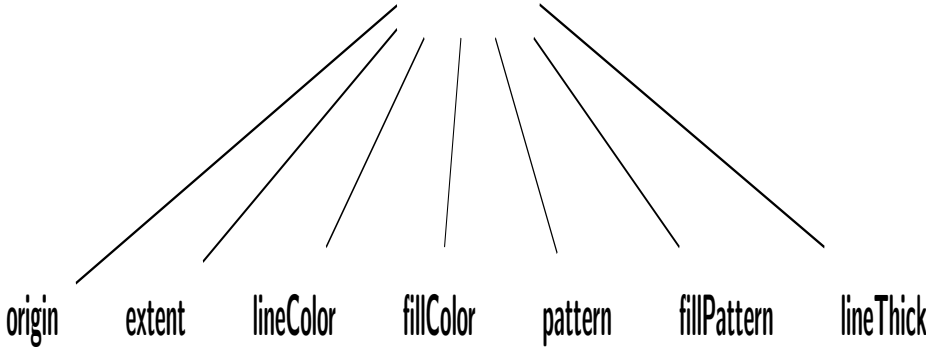
graphics record may have the following items.

- ▶ Line
- ▶ Rectangle
- ▶ Ellipse
- ▶ Polygon
- ▶ Text
- ▶ Bitmap



Ellipse

Ellipse



Assignment

Insert line, polygon, rectangle and text in Icon View of a model. Modify their properties. Understand their annotations

About the Spoken Tutorial Project

- ▶ Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project
- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org

Forum to answer questions

- ▶ Do you have questions in **THIS Spoken Tutorial?**
- ▶ Choose the minute and second where you have the question.
- ▶ Explain your question briefly.
- ▶ Someone from the **FOSSEE** team will answer them.

Please visit <http://forums.spoken-tutorial.org/>



Textbook Companion Project

- ▶ **The FOSSEE team coordinates coding of solved examples of popular books**
- ▶ **We give honorarium and certificate to those who do this**

For more details, please visit this site:

<http://OM.fossee.in/Textbook-Companion-Project>



Lab Migration Project

- ▶ **The FOSSEE team helps migrate commercial simulator labs to OpenModelica**
- ▶ **We give honorarium and certificates to those who do this**

For more details, please visit this site:

<http://OM.fossee.in/lab-migration-project>



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- ▶ It is supported by the National Mission on Education through ICT, MHRD, Government of India
- ▶ More information on this Mission is available at <http://spoken-tutorial.org/NMEICT-Intro>



Thanks!

<http://openmodelica.org>