

# Spoken Tutorial LibreOffice Draw - Flowcharts, Glue points and Beizer curves

**Script and Narration by  
DesiCrew Solutions Pvt.Ltd.**

**Talk to a Teacher Project**

**<http://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://www.sakshat.ac.in>**

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# Learning Objectives



# Learning Objectives

- **Draw Beizer curves and Flowcharts**



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# Learning Objectives

- ▶ **Draw Beizer curves and Flowcharts**
- ▶ **Connect Flowcharts using Connectors and Glue points**



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# System Requirements



# System Requirements

- **Ubuntu Linux version 10.04**



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# System Requirements

- ▶ **Ubuntu Linux version 10.04**
- ▶ **LibreOffice Suite version 3.3.4**



# Bezier Curves



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# Bezier Curves

- ▶ **Bezier Curves are used mainly in computer graphics**



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# Bezier Curves

- ▶ **Bezier Curves are used mainly in computer graphics**
- ▶ **To make curves smoother.**



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# Bezier Curves

- ▶ Bezier Curves are used mainly in computer graphics
- ▶ To make curves smoother.
- ▶ Use these curves to experiment



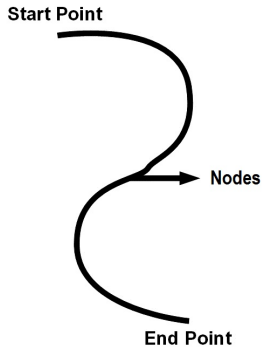
# Bezier Curves

- ▶ **Bezier Curves are used mainly in computer graphics**
- ▶ **To make curves smoother.**
- ▶ **Use these curves to experiment**
- ▶ **With the shape and size of curves.**



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# Bezier Curves



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# Assignment



# Assignment

- Draw a Bezier curve



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# Assignment

- ▶ Draw a Bezier curve
- ▶ Work with all the options



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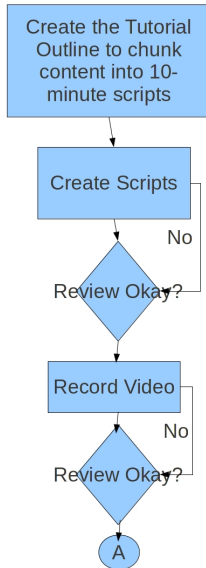
# Assignment

- ▶ **Draw a Bezier curve**
- ▶ **Work with all the options**
- ▶ **Using the Edit Points toolbar**



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# Show Figure One



# Connectors

- **Connectors are lines or arrows**



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# Connectors

- ▶ **Connectors are lines or arrows**
- ▶ **Whose ends are attached or docked to an object**



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# Glue Points

- ▶ **Glue points are the points**



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# Glue Points

- ▶ **Glue points are the points**
- ▶ **That glue the connectors to the objects**



# Glue Points

- ▶ Glue points are the points
- ▶ That glue the connectors to the objects
- ▶ All objects have glue points



# Glue Points

- ▶ **These are invisible**



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# Glue Points

- ▶ **These are invisible**
- ▶ **They become visible**



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# Glue Points

- ▶ These are invisible
- ▶ They become visible
  - ▶ When a connector is selected from the Drawing toolbar



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# Glue Points

- ▶ These are invisible
- ▶ They become visible
  - ▶ When a connector is selected from the Drawing toolbar
  - ▶ When the mouse pointer is moved over an object



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# Glue Points

- ▶ **Glue points are not the same as handles**



# Glue Points

- ▶ **Glue points are not the same as handles**
- ▶ **We use handles to re-size the object**



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# Glue Points

- ▶ **Glue points are not the same as handles**
- ▶ **We use handles to re-size the object**
- ▶ **Glue points are used to glue the connector to an object**



# Connectors and Arrows

**How are connectors different from Lines and Arrows?**



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# Connectors and Arrows

**How are connectors different from Lines and Arrows?**

- ▶ **Connectors are lines or arrows**



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# Connectors and Arrows

## How are connectors different from Lines and Arrows?

- ▶ **Connectors are lines or arrows**
- ▶ **Whose end points are automatically docked**



# Connectors and Arrows

## How are connectors different from Lines and Arrows?

- ▶ Connectors are lines or arrows
- ▶ Whose end points are automatically docked
- ▶ To the glue point of an object



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# Connectors and Arrows


## How are connectors different from Lines and Arrows?

- ▶ **Connectors are lines or arrows**
- ▶ **Whose end points are automatically docked**
- ▶ **To the glue point of an object**
- ▶ **Lines and Arrows do not dock automatically**



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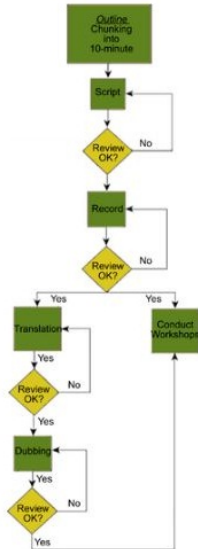
# Assignment I

- ▶ Create the second part of the Spoken Tutorial flow chart
- ▶ Color the processes boxes
- ▶ Draw a connector with the letter 
- ▶ It should be the first object in this flowchart



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# Assignment II



# Summary



# Summary

- ▶ **Flowcharts**
- ▶ **Connectors**
- ▶ **Glue points**



# About the Spoken Tutorial Project





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- ▶ Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project



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- ▶ 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](mailto:contact@spoken-tutorial.org)



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# Acknowledgements

- ▶ Spoken Tutorial Project is a part of the Talk to a Teacher project
- ▶ 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>



# About the contributor

- ▶ This tutorial has been contributed by **DesiCrew Solutions Pvt.Ltd.**
- ▶ **[www.desicrew.in](http://www.desicrew.in)**
- ▶ Thanks for joining



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