

# Building a GUI for basic plotting

**Spoken Tutorial Project**

<https://spoken-tutorial.org>

**National Mission on Education through ICT**

<http://sakshat.ac.in>

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**FOSSEE Team**

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# Learning Objectives

**In this tutorial, we will learn:**



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**In this tutorial, we will learn:**

- ▶ **About Checkbox.**



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In this tutorial, we will learn:

- ▶ About Checkbox.
- ▶ **Generate graphs of the sine and cosine functions using GUI.**



# System Requirements

**To record this tutorial, I am using**



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► **Windows 10 OS**



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- ▶ **Scilab 6.1.0**



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**The process demonstrated in this tutorial is identical in Linux OS also.**



# Pre-requisites

**To follow this tutorial:**



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- ▶ **The learner must have basic knowledge of Scilab and GUI Builder toolbox.**



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## To follow this tutorial:

- ▶ The learner must have basic knowledge of Scilab and GUI Builder toolbox.
- ▶ For pre-requisite Scilab tutorials please visit <https://spoken-tutorial.org>



# Code Files

- ▶ The files used in this tutorial are provided in the Code files link.



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- ▶ Make a copy and then use them while practising.





# What is Checkbox?

- ▶ **A Checkbox is a button with two states.**



# What is Checkbox?

- ▶ **A Checkbox is a button with two states.**
- ▶ **It is used when a user wants to make multiple independent choices.**



# Summary

**In this tutorial, we have learnt:**

- ▶ **About Checkbox.**
- ▶ **Generated graphs of the sine and cosine functions using GUI.**



# Assignment

- ▶ **Add two Checkboxes to the current GUI to find:**
  - ▶ inverse of  $\sin(t)$
  - ▶ inverse of  $\cos(t)$
- ▶ **Display the response of a system using an Axes.**



# About Spoken Tutorial project

- ▶ Watch the video available at [https://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](https://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](mailto:contact@spoken-tutorial.org)



# Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org/>
- ▶ Choose the minute and second where you have the question.
- ▶ Explain your question briefly.
- ▶ The Spoken Tutorial project will ensure an answer.
- ▶ You will have to register to ask questions.



- For any general or technical questions on Scilab, visit the FOSSEE forum and post your question.

<https://forums.fossee.in/>





# Textbook Companion project

- ▶ **The FOSSEE team coordinates the Textbook Companion project.**
- ▶ **We give Certificates and Honorarium to the contributors.**
- ▶ **For more details, please visit:**  
**[https://scilab.in/Textbook\\_Companion\\_Project](https://scilab.in/Textbook_Companion_Project)**



# Lab Migration

- ▶ The FOSSEE team coordinates the Lab Migration project.
- ▶ For more details, please visit:  
[https://scilab.in/  
Lab\\_Migration\\_Project](https://scilab.in/Lab_Migration_Project)



# Acknowledgements

- ▶ **The Spoken Tutorial project is funded by the Ministry of Education, Government of India.**



# Thank you

- ▶ **This is Iswariya Sasikumar, a FOSSEE intern 2021, IIT Bombay signing off.**
- ▶ **Thanks for joining.**

