

Creating a GUI based Interest calculator

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Script: Rashmi P, Iswariya S

Video: Iswariya Sasikumar

FOSSEE Team

23 May 2021



Learning Objectives

In this tutorial, we will:



Learning Objectives

In this tutorial, we will:

- ▶ **Learn about Radiobuttons.**



Learning Objectives

In this tutorial, we will:

- ▶ **Learn about Radiobuttons.**
- ▶ **Calculate simple and compound interest using GUI.**



System Requirements

To record this tutorial, I am using



System Requirements

To record this tutorial, I am using

- ▶ **Windows 10 OS**



System Requirements

To record this tutorial, I am using

- ▶ Windows 10 OS
- ▶ **Scilab 6.1.0**



System Requirements

To record this tutorial, I am using

- ▶ Windows 10 OS
- ▶ Scilab 6.1.0
- ▶ **GUI Builder Toolbox 4.2.1**



System Requirements

To record this tutorial, I am using

- ▶ **Windows 10 OS**
- ▶ **Scilab 6.1.0**
- ▶ **GUI Builder Toolbox 4.2.1**



System Requirements

To record this tutorial, I am using

- ▶ **Windows 10 OS**
- ▶ **Scilab 6.1.0**
- ▶ **GUI Builder Toolbox 4.2.1**

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



Pre-requisites

To follow this tutorial:



Pre-requisites

To follow this tutorial:

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



Pre-requisites

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.**



Code Files

- ▶ **The files used in this tutorial are provided in the Code files link.**
- ▶ **Please download and extract the files.**



Code Files

- ▶ The files used in this tutorial are provided in the Code files link.
- ▶ Please download and extract the files.
- ▶ **Make a copy and then use them while practising.**



What is a Radiobutton?

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



What is a Radiobutton?

- ▶ **A Radiobutton is a button with two states.**
- ▶ **They are intended to be mutually exclusive.**



What is a Radiobutton?

- ▶ **A Radiobutton is a button with two states.**
- ▶ **They are intended to be mutually exclusive.**
- ▶ **As a result, at any given time only one button is in a selected state.**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ **Principal Amount,**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ **Principal Amount,**
 - ▶ **Rate of Interest,**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ **Principal Amount,**
 - ▶ **Rate of Interest,**
 - ▶ **Time.**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ Principal Amount,
 - ▶ Rate of Interest,
 - ▶ Time.
- ▶ **Two Radiobuttons:**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ Principal Amount,
 - ▶ Rate of Interest,
 - ▶ Time.
- ▶ **Two Radiobuttons:**
 - ▶ **Simple interest,**



Objects to calculate simple and compound interest

- ▶ **Three Edit boxes:**
 - ▶ Principal Amount,
 - ▶ Rate of Interest,
 - ▶ Time.
- ▶ **Two Radiobuttons:**
 - ▶ Simple interest,
 - ▶ **Compound interest.**



Objects to calculate simple and compound interest

- ▶ **One Text box to display the answer.**



Summary

In this tutorial, we have:

- ▶ **Learnt about Radiobuttons.**
- ▶ **Calculated simple and compound interest using GUI.**



Assignment

Create a GUI which has

- ▶ **An Edit box to take user input in meters.**
- ▶ **Two Radiobuttons to convert it into inches and feet.**
- ▶ **One Text box to display the output.**



About Spoken Tutorial project

- ▶ Watch the video available at 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



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.**

