

BLOCK NAME	GRAPHICAL USER INTERFACES I
BLOCK CODE	CS-L2B2
COURSE	1
LEVEL	2
CREDITS	6
CLASS HOURS	60
HOMEWORK	90
TOTAL HOURS	150

DESCRIPTION

This block introduces the creation of basic graphical user interfaces for desktop applications. We will face the challenge of creating a program with GUI. It will facilitate learning of the operation of graphical user interfaces, the management of widgets, event handling, and layout managers.

PRE-REQUISITES

Basic programming skills are needed.
CS-L1B1

OBJECTIVES

The goal is for students to understand the graphical interface paradigm and to be able of creating basic GUIs for desktop applications.

SKILLS TO BE DEVELOPED

- 1 - Graphical user interface basics.**
 - 1.1 - Understand the basis of the graphical interface paradigm.
 - 1.2 - Write and execute programs that use a GUI to interact with the user.
 - 1.3 - Create basic desktop GUIs.
- 2 - Widgets.**
 - 2.1 - Use widgets to show information to the user.
 - 2.2 - Use widgets to get information from the user.
- 3 - Layout managers.**
 - 3.1 - Write programmas with resizable GUI.
 - 3.2 - Use the most common layout managers.
- 4 - Interactions and events**
 - 4.1 - Implement event handling functions.
 - 4.2 - Bind functions to be used as event handlers.

SYLLABUS

- 1 - Graphical user interface basics.
- 2 - Widgets.
- 3 - Layout Managers.
- 4 - Interactions and events.

METHODOLOGY

Resolution of practical activities supervised by the mentor. Compulsory attendance.

DEDICATION AND EVALUATION

The student must pass the mandatory activities (challenges/projects) that are covered in the block.

Each challenge/project produces its own score and has been designed to cover certain block percentages.

Such score is 80% objective (the program that solves the challenge/project works without errors and producing the expected results) and 20% subjective (solution elegance, how clean the code is, documentation).

Block scores are finally calculated by prorating individual activities with respect to their block coverage percentages.