



Curtin University

Graphical User Interfaces

ISYS5002, School of Marketing and Management

ELECTRONIC WARNING NOTICE FOR COPYRIGHT STATUTORY LICENCES

WARNING

This material has been reproduced and communicated to you by or on behalf of **Curtin University** in accordance with section 113P of the *Copyright Act 1968 (the Act)*

The material in this communication may be subject to copyright under the Act. Any further reproduction or communication of this material by you may be the subject of copyright protection under the Act.

Do not remove this notice.

I acknowledge the traditional custodians of the land on which I work and live, and recognise their continuing connection to land, water and community. I pay respect to elders past, present and emerging.

GUI - History

- Punch Cards
- Text-Based
- Sketch Pad (Ivan Sutherland's light pen)
- Stanford Online System (hyperlinks)
- Xerox PARC

GUI – Key Features

- Windows
- Menus
- Icons
- Controls



GUI – Interactive Elements

- Pointers
- Cursor
- Insertion Point
- Selection
- Adjustment Handle

Python Options

- Script Based
 - Tkinter
 - PyQt
 - wxPython
 - PySide
 - Kivy
 - PySimpleGUI
 - Streamlit
- Notebooks
 - ipywidgets (within)
 - Colab forms
 - Visualisation Library
 - Anvil (link, webapp)

Common Controls/Widgets

- Buttons
- Radio buttons
- Check Boxes
- Text Boxes
- Sliders
- Date Pickers
- Colour Pickers
- Tabs

GUI Considerations

- Same across all computers
- How to put ‘widgets’ together
- Prototype with mockups, wireframes
- Intuitive User Experience
- Capture Inputs
- Display Outputs
- Commercial vs OpenSource
- Desktop vs Mobile vs Web App