uCertify

Course Outline

Python GUI with PyQt

04 Aug 2025

1. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions
2. Expert Instructor-Led Training
3. ADA Compliant & JAWS Compatible Platform
4. State of the Art Educator Tools
5. Award Winning Learning Platform (LMS)
6. Chapter & Lessons

   Syllabus

   Chapter 1: Preface

   Chapter 2: Introduction to PyQt5 and Qt Designer Tool

   Chapter 3: Getting Insights of Layout Management

   Chapter 4: Getting Insights of Events, Signals and Slots

   Chapter 5: Getting Insights of Button Widgets in Qt Designer

   Chapter 6: Getting Insights of Item Views in Qt Designer

   Chapter 7: Getting Insights of Item Based Widgets in Qt Designer

   Chapter 8: Getting Insights of Containers in Qt Designer

   Chapter 9: Getting Insights of Input Widgets in Qt Designer

   Chapter 10: Getting Insights of Display Widgets in Qt Designer

   Videos and How To

1. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

2. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

3. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

4. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution

- **2015**
    1. Best Education Solution

2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**
    1. Best Virtual Learning Solution
    2. Best Education Cloud-based Solution
    3. Best College and Career Readiness Solution
    4. Best Corporate / Workforce Learning Solution
    5. Best Postsecondary Learning Content Solution
    6. Best Postsecondary LMS or Learning Platform
    7. Best Learning Relationship Management Solution

- **2017**
    1. Best Overall Education Solution
    2. Best Student Assessment Solution
    3. Best Corporate/Workforce Learning Solution
    4. Best Higher Education LMS or Learning Platform

- **2018**
    1. Best Higher Education LMS or Learning Platform
    2. Best Instructional Solution in Other Curriculum Areas
    3. Best Learning Relationship Management Solution

- **2019**
    1. Best Virtual Learning Solution
    2. Best Content Authoring Development or Curation Solution
    3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

5. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Preface

Chapter 2: Introduction to PyQt5 and Qt Designer Tool

- Introduction
- Comparison of PyQt5 with tkinter library
- PyQt5 framework installation
- First GUI form creation using PyQt5 without using class
- GUI form creation using PyQt5 by using class
- Installation of Qt Designer with pre-defined templates
- Components of Qt Designer

- User credential app demo
- Conclusion
- Points to remember

Chapter 3: Getting Insights of Layout Management

- Introduction
- Widgets placement using absolute positioning
- Widgets placement using layout classes
- Conclusion
- Points to remember

Chapter 4: Getting Insights of Events, Signals and Slots

- Introduction
- Introduction to Events, Signals, and Slots
- Usage of Toolbar icons in Qt Designer
- Signal slot examples in Qt Designer
- Conclusion
- Points to remember

Chapter 5: Getting Insights of Button Widgets in Qt Designer

- Introduction
- Push Button
- Tool Button
- Radio Button
- Check Box
- Command Link Button
- Dialog Button Box
- Common properties for Button widgets
- Conclusion
- Points to remember

Chapter 6: Getting Insights of Item Views in Qt Designer

- Introduction
- Data presentation
- List view
- Tree view
- Table view
- Column view

- QFrame
- QAbstractScrollArea
- QAbstractItemView
- QStandardItemModel
- Conclusion
- Points to remember

Chapter 7: Getting Insights of Item Based Widgets in Qt Designer

- Introduction
- List widget
- Tree widget
- Table widget
- Conclusion
- Points to remember

Chapter 8: Getting Insights of Containers in Qt Designer

- Introduction
- Group Box
- Scroll area

- Toolbox
- Tab widget
- Stacked widget
- Frame
- Widget
- MDI Area
- Dock widget
- Conclusion
- Points to remember

Chapter 9: Getting Insights of Input Widgets in Qt Designer

- Introduction
- Combo Box
- Font Combo Box
- Line Edit
- TextEdit
- Plain Text Edit
- Spin Box
- Double Spin Box

- Date/Time Edit
- Dial
- QScrollBar
- QSlider
- Key Sequence Edit
- Conclusion
- Points to remember

Chapter 10: Getting Insights of Display Widgets in Qt Designer

- Introduction
- Introduction to the display widgets in Qt Designer
- Label
- Text browser
- Calendar widget
- LCD number
- Progress bar
- Conclusion
- Points to remember

- Questions

You can’t stay away! Get in touch with our team to

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