Introduction to GUI Development using Pycharm

Laboratory Activity 4

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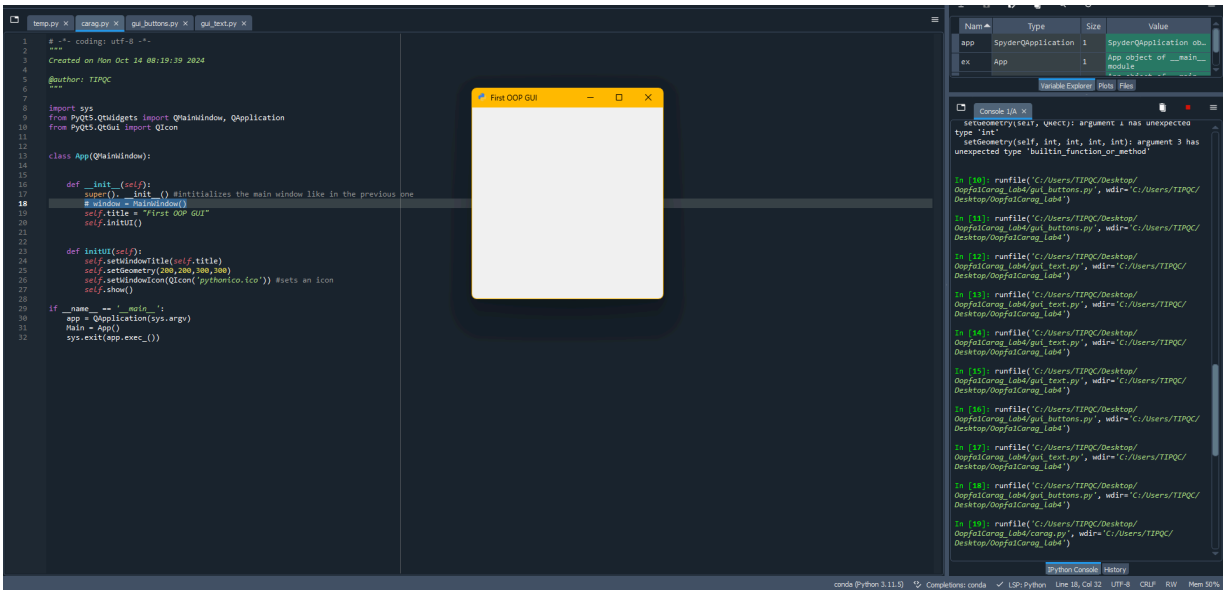
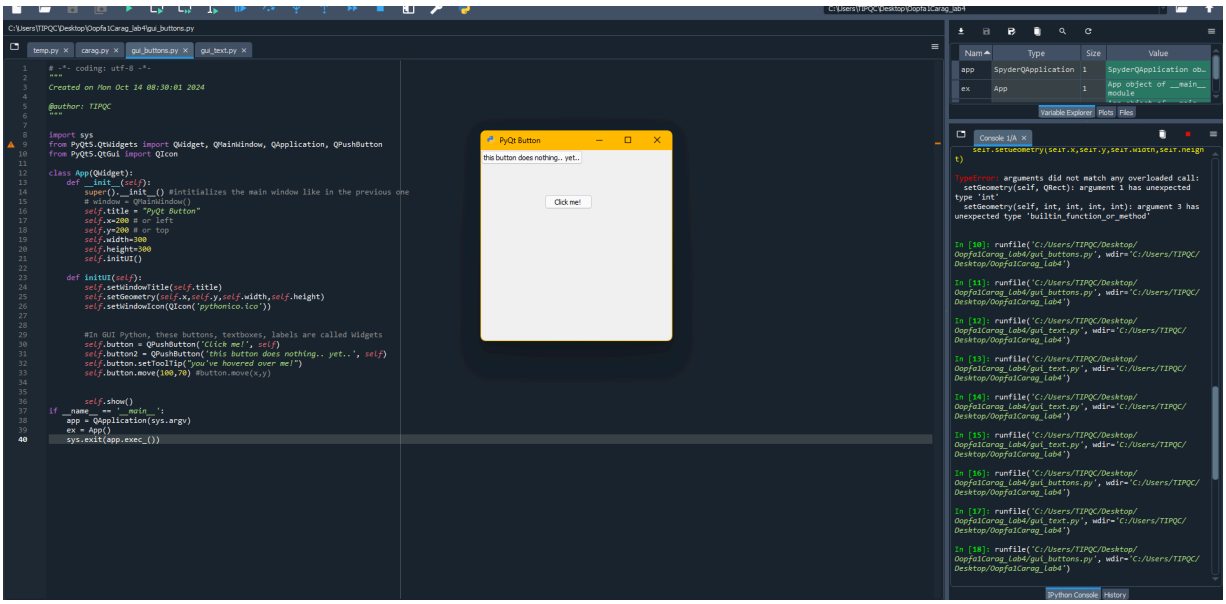
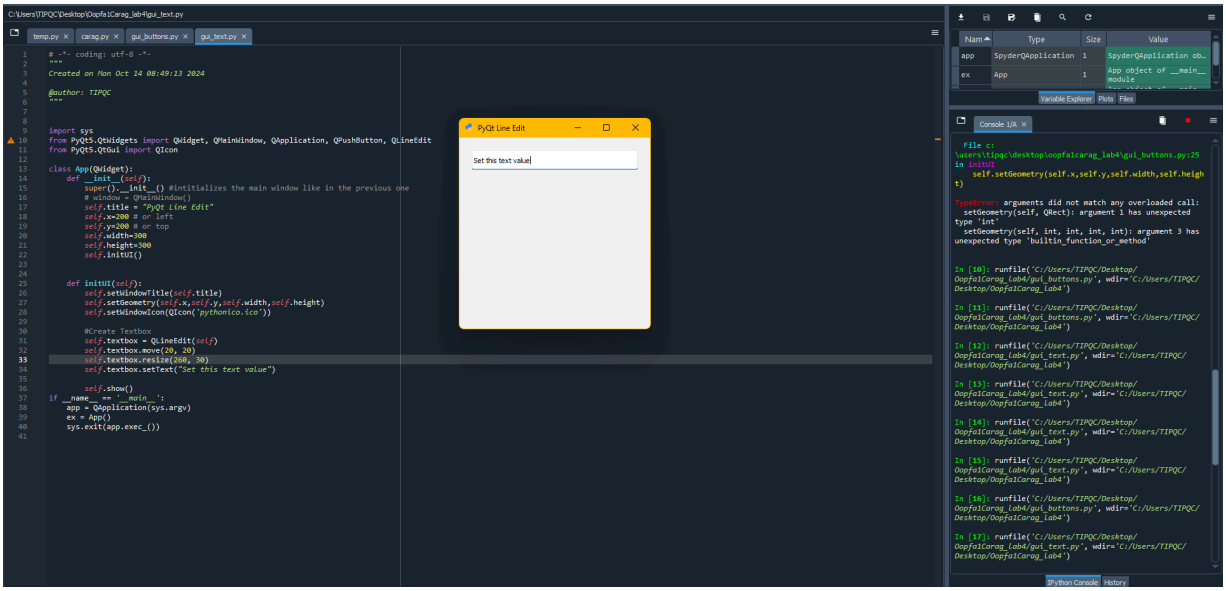
Output Results

GUI Icon

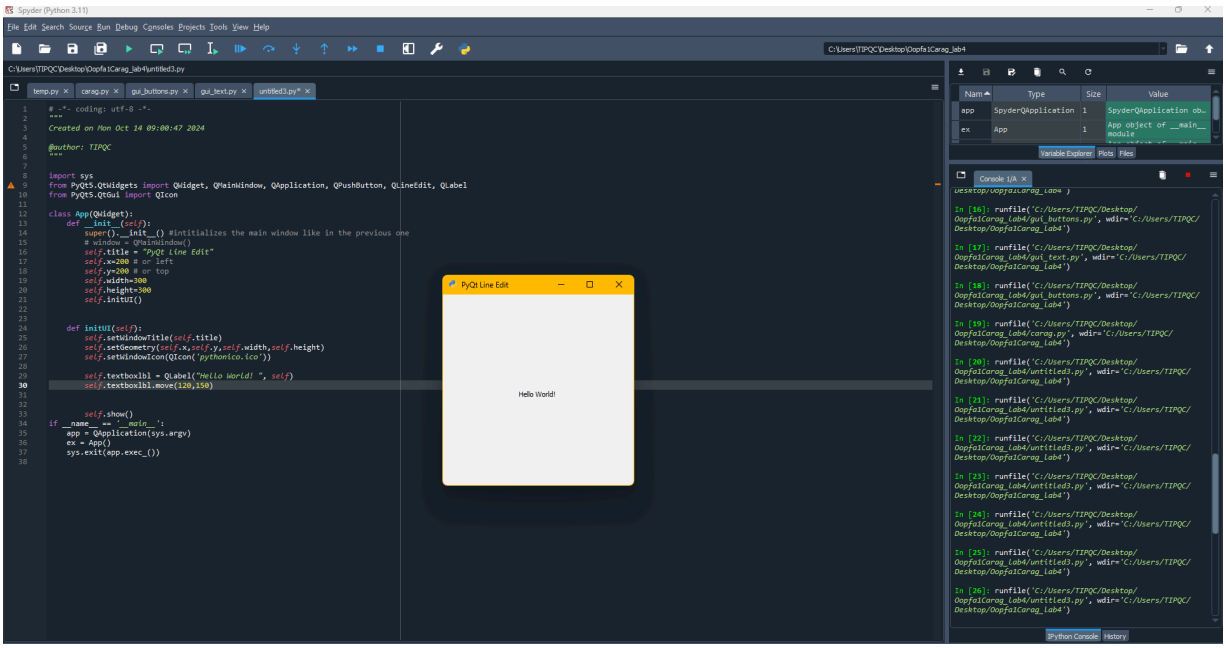




GUI Button

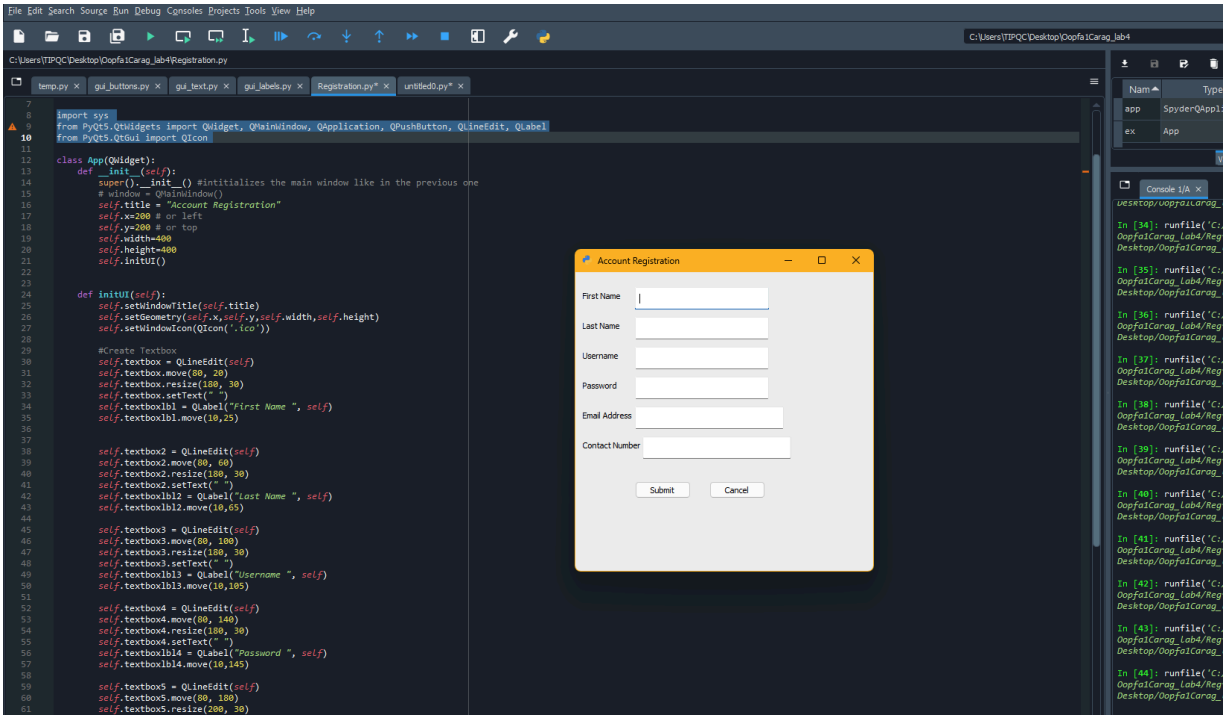


GUI Text



GUI Label

Supplementary Activity:



What are the common GUI Applications that general end-users such as home users, students,

and office employees
use? (give at least 3 and describe each)

- Microsoft Office Suite (Word, Excel, PowerPoint):
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- Word: A word processing application widely used for creating documents, reports, and letters. It features a user-friendly interface that allows users to format text, insert images, and utilize templates easily.
-
- Excel: A spreadsheet program ideal for organizing, analyzing, and visualizing data. Users can create formulas, charts, and pivot tables, making it essential for tasks like budgeting and data analysis.
-
- PowerPoint: A presentation software used to create visual slideshows for meetings, lectures, or events. It offers various templates, animations, and multimedia integration to help convey information effectively.

2. Based from your answer in question 1, why do you think home users, students, and office employees use those GUI
programs?

- The ease of functions enables users such as students and employees perform their necessary tasks with quality and meaning.

3. How does Pycharm help developers in making GUI applications, what would be the difference if developers made GUI programs without GUI Frameworks such as Pycharm or Tkinter?

- In terms of **Integrated Development Environment (IDE)**The PyCharm provides a whole workspace where developers can write, edit, and run code, making it easier to manage and control projects.

4. What are the different platforms a GUI program may be created and deployed on? (Three is required then state why?

- Desktop Platforms (Windows, macOS, Linux):
- Because they provide a wide range of resources and capabilities, including the access to hardware (like printers and storage) and a steady environment for complex applications.

might a program be created on that specific platform)

5. What is the purpose of app = QApplication(sys.argv), ex = App(), and sys.exit(app.exec_())?

- The application is initialized by this line QApplication(sys.argv). The primary class for controlling the main settings and control flow of a GUI application is called QApplication. Command-line arguments can be provided to the application via the sys.argv option.
- ex = App(), It defines the main window of the application. This line effectively creates and prepares the GUI for display.

- sys.exit(app.exec_(), This line starts the application's event loop. When the event loop is completed, the sys.exit() function guarantees a clean program exit by returning to the application's exit status.

Conclusions:

I have learned the different ways on how to create GUI such as making for its icons wherein we have to first import the PyQt5 widgets after that we have to define the attributes associated with it containing the objects that our attributes may give way for us to access. On the GUI button interface we have added the name “QPush Button” in the imports in order for us to implement the attributes and variables such as the name and the position of the button, this is the same with what we have done in the GUI text and label we have also initialized their variable names in the import header to allow its implementation in the program. Overall I have used my knowledge and intelligence acquired in the activities and performed it in the supplementary activity in which I created a program that allows me to enter the account informations like their first and last name, email addresses, contact number, and username.