Interactive e-Books on Aakash Tablet
PyQt Programming

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1 Introduction

- A programming toolkit by Python for creating GUI applications.
- Brings the power of Python and QT at a single place.
- Developed by Riverbank computing
- Latest Version PyQt5.2

2 Basic PyQt Modules

PyQt contains various classes that are subdivided in to different modules.

- QtCore : Contains all non GUI facilities
- QtGui : Contains all GUI facilities
- QtXml : Contains classes so that we can work with XML files
- QtSql : Provides facility for working with databases

3 Simple PyQt Program

- import sys
  Here we have imported sys because we may use the command line arguments passed to the program which are stored in sys.argv.

- from PyQt4 import QtGui
  We have imported QtGui which contains all the basic widgets we need for GUI Programming.
```python
import sys
from PyQt4.QtGui import QtGul

def main():
    appli_object = QtGul.QApplication(sys.argv)
    wld = QtGul.QWIdget()
    wld.resize(250, 150)
    wld.move(300, 300)
    wld.setWindowTitle('Prashant Kumar Singh')
    wld.show()
    sys.exit(appli_object.exec_())

if __name__ == '__main__':
    main()
```

Figure 1: PyQt Program

```python
import sys
from PyQt4.QtGui import QtGul

def main():
    appli_object = QtGul.QApplication(sys.argv)
    wld = QtGul.QWIdget()
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    wld.show()
    sys.exit(appli_object.exec_())

if __name__ == '__main__':
    main()
```

Figure 2: Output
• appli_object = QtGui.QApplication(sys.argv)
  Every PyQt application must have an application object that is present in Qt.GUI module. It takes sys.argv as input

• wid = QtGui.QWidget()
  widget class is the base class for all interface we require for GUI programming

• wid.resize(250, 150)
  It resizes the window

• wid.move(300, 300)
  It places the window to a specified position on Desktop

• wid.setWindowTitle('Prashant Kumar Singh')
  It gives a name to window.

• wid.show() It displays the window on main screen.

• sys.exit(appli_object.exec_())
  sys.exit is the exit point.