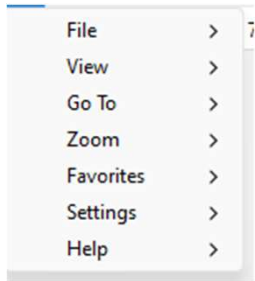


# Pemrograman Desktop 6

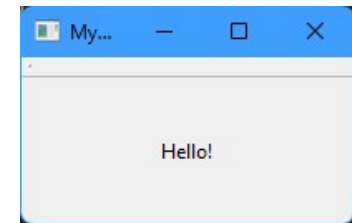
Yonathan F. Hendrawan

# Toolbars & Menu



# Toolbars

```
class MainWindow(QMainWindow):  
    def __init__(self):  
        super().__init__()  
        self.setWindowTitle("My App")  
  
        label = QLabel("Hello!")  
        label.setAlignment(Qt.AlignmentFlag.AlignCenter)  
        self.setCentralWidget(label)  
  
        toolbar = QToolBar("My main toolbar")  
        self.addToolBar(toolbar)  
  
    def onMyToolBarButtonClick(self, s):  
        print("click", s)
```



# QAction

- Sebuah class untuk mendefinisikan abstract user interfaces
  - Satu object (dengan satu fungsi) dapat digunakan di banyak tempat

# QAction

```
class MainWindow(QMainWindow):
    def __init__(self):
        super().__init__()
        self.setWindowTitle("My App")
        label = QLabel("Hello!")
        label.setAlignment(Qt.AlignmentFlag.AlignCenter)
        self.setCentralWidget(label)

        toolbar = QToolBar("My main toolbar")
        self.addToolBar(toolbar)

        button_action = QAction("Your button", self)
        button_action.setStatusTip("This is your button")
        button_action.triggered.connect(self.onMyToolBarButtonClick)
        toolbar.addAction(button_action)

    def onMyToolBarButtonClick(self, s):
        print("click", s)
```

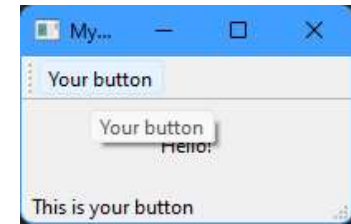
# Penambahan Status Bar

```
class MainWindow(QMainWindow):
    def __init__(self):
        super().__init__()
        self.setWindowTitle("My App")
        label = QLabel("Hello!")
        label.setAlignment(Qt.AlignmentFlag.AlignCenter)
        self.setCentralWidget(label)
        toolbar = QToolBar("My main toolbar")
        self.addToolBar(toolbar)

        button_action = QAction("Your button", self)
        button_action.setStatusTip("This is your button")
        button_action.triggered.connect(self.onMyToolBarButtonClick)
        toolbar.addAction(button_action)

        self.setStatusBar(QStatusBar(self))

    def onMyToolBarButtonClick(self, s):
        print("click", s)
```



# Toggle

- Tulisan yang tampil di terminal selalu False
- Itu karena dia menampilkan status checked, sementara button yang ada tidak checkable, hanya clickable
- Untuk mengganti, cukup tambahkan:
  - `button_action.setCheckable(True)`

# Icon

- Umum digunakan untuk merepresentasikan sebuah tombol di toolbar
- Download icon bug.png
- Didapat dari: <https://p.yusukekamiyamane.com/>
- Drag-and-drop ke project folder di PyCharm



# Icon

```
basedir = os.path.dirname(__file__)
```

```
class MainWindow(QMainWindow):
```

```
    def __init__(self):
```

```
        super().__init__()
```

```
        self.setWindowTitle("My App")
```

```
        label = QLabel("Hello!")
```

```
        label.setAlignment(Qt.AlignmentFlag.AlignCenter)
```

```
        self.setCentralWidget(label)
```

```
        toolbar = QToolBar("My main toolbar")
```

```
        toolbar.setIconSize(QSize(16, 16))
```

```
        self.addToolBar(toolbar)
```

```
        button_action = QAction( QIcon(os.path.join(basedir, "bug.png")), "Your button", self )
```

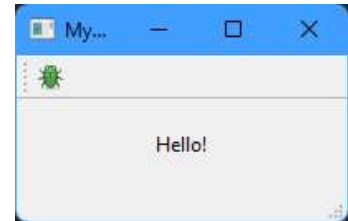
```
        button_action.setStatusTip("This is your button")
```

```
        button_action.triggered.connect(self.onMyToolBarButtonClick)
```

```
        button_action.setCheckable(True)
```

```
        toolbar.addAction(button_action)
```

```
        self.setStatusBar(QStatusBar(self))
```

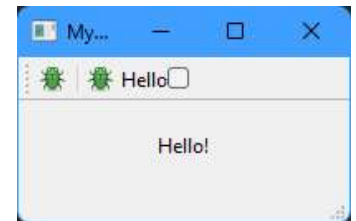


# Multiple buttons & Checkbox

```
toolbar.addSeparator()
button_action2 = QAction(
    QIcon(os.path.join(basedir, "bug.png")), "Your button2", self )
button_action2.setStatusTip("This is your button2")
button_action2.triggered.connect(self.onMyToolBarButtonClick)
button_action2.setCheckable(True)
toolbar.addAction(button_action2)

toolbar.addWidget(QLabel("Hello"))
toolbar.addWidget(QCheckBox())

self.setStatusBar(QStatusBar(self))
```

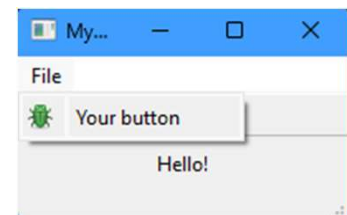
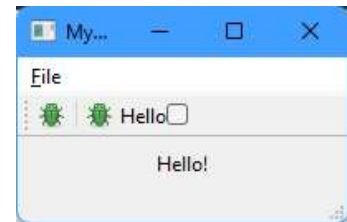


# Menu

```
menu = self.menuBar()
```

```
file_menu = menu.addMenu("&File")
```

```
file_menu.addAction(button_action)
```



# Menu Separator

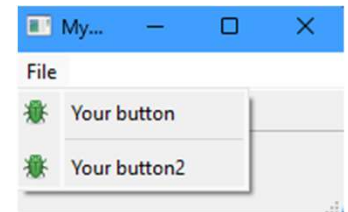
```
menu = self.menuBar()
```

```
file_menu = menu.addMenu("&File")
```

```
file_menu.addAction(button_action)
```

```
file_menu.addSeparator()
```

```
file_menu.addAction(button_action2)
```



# Sub menu

```
menu = self.menuBar()
```

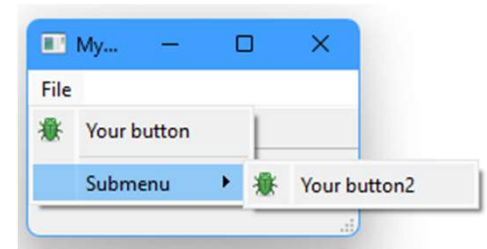
```
file_menu = menu.addMenu("&File")
```

```
file_menu.addAction(button_action)
```

```
file_menu.addSeparator()
```

```
file_submenu = file_menu.addMenu("Submenu")
```

```
file_submenu.addAction(button_action2)
```



UTS