## Reservation Calculator

Joe

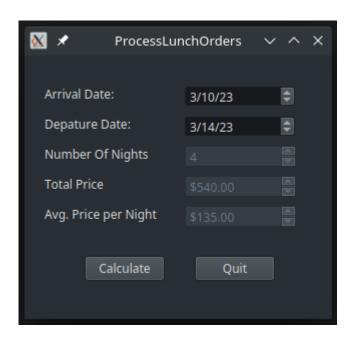
March 31, 2023

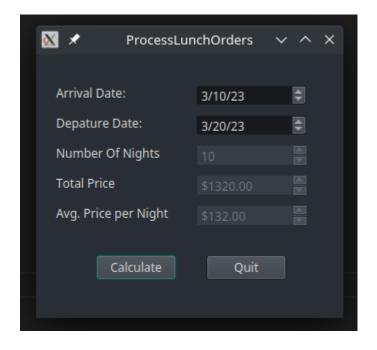
## 1 Source Code

Source code for app.py 1 #!/bin/python 2 import sys 3 4 5 from PyQt6 import uic from PyQt6. QtCore import QDate from PyQt6. QtWidgets import ( 8 QApplication, 9 QWidget, QPushButton, 10 11 QRadioButton, 12 QTextEdit, 13 QCheckBox, 14 QGroupBox, 15 QDateEdit, 16 ) 17 18 class MyApp(QWidget): 19 20 def \_\_init\_\_(self): super().\_\_init\_\_() 21 22 23 # load ui file uic.loadUi("app.ui", self) 2425 26 # Connect controls 27 exitButton = self.findChild(QPushButton, " exitButton") 28 exitButton.clicked.connect(self.cleanExit) 29 calculateButton = self.findChild(QPushButton, " 30 calculateButton") 31 calculateButton.clicked.connect(self.calculate) 32

```
33
            self.arrivalDate = self.findChild(QDateEdit, "
               arrivalDate")
34
            self.arrivalDate.setDate(QDate(2023, 3, 10))
            self.departureDate = self.findChild(QDateEdit,
35
              "departureDate")
            self.departureDate.setDate(QDate(2023, 3, 14))
36
37
            self.numNights = self.findChild(QTextEdit, "
38
              numberNights")
            self.totalPrice = self.findChild(QTextEdit, "
39
               totalPrice")
            self.avgPrice = self.findChild(QTextEdit, "
40
               avgPricePerNight")
41
           # Constants
42
            self.pricePerNight = 120.0
43
            self.extraPrice = 150.0
44
45
46
       def calculate (self):
            n_nights = self.duration(self.arrivalDate.date
47
               (), self.departureDate.date())
            price = 0
48
49
            for i in range (n_nights):
                day = self.arrivalDate.date().dayOfWeek() +
50
                    i % 7
51
                print(day)
                if day = 5 or day = 6:
52
                    price += self.extraPrice
53
54
                else:
                    price += self.pricePerNight
55
56
            self.numNights.setText(str(n_nights))
57
58
            self.totalPrice.setText(f"${price:.2f}")
59
            self.avgPrice.setText(f"${price/n_nights:.2f}")
60
61
62
       def duration (self, a, b):
63
            return a.daysTo(b)
```

```
64
65
       def cleanExit(self):
           sys.exit(app.exec())
66
67
68
69 if __name__ == "__main__":
       app = QApplication(sys.argv)
70
71
       widget = MyApp()
       widget.show()
72
73
       sys.exit(app.exec())
```





Autogenerated using scripts by Joe and LATEX. Please find the full source code and binaries included.