

1

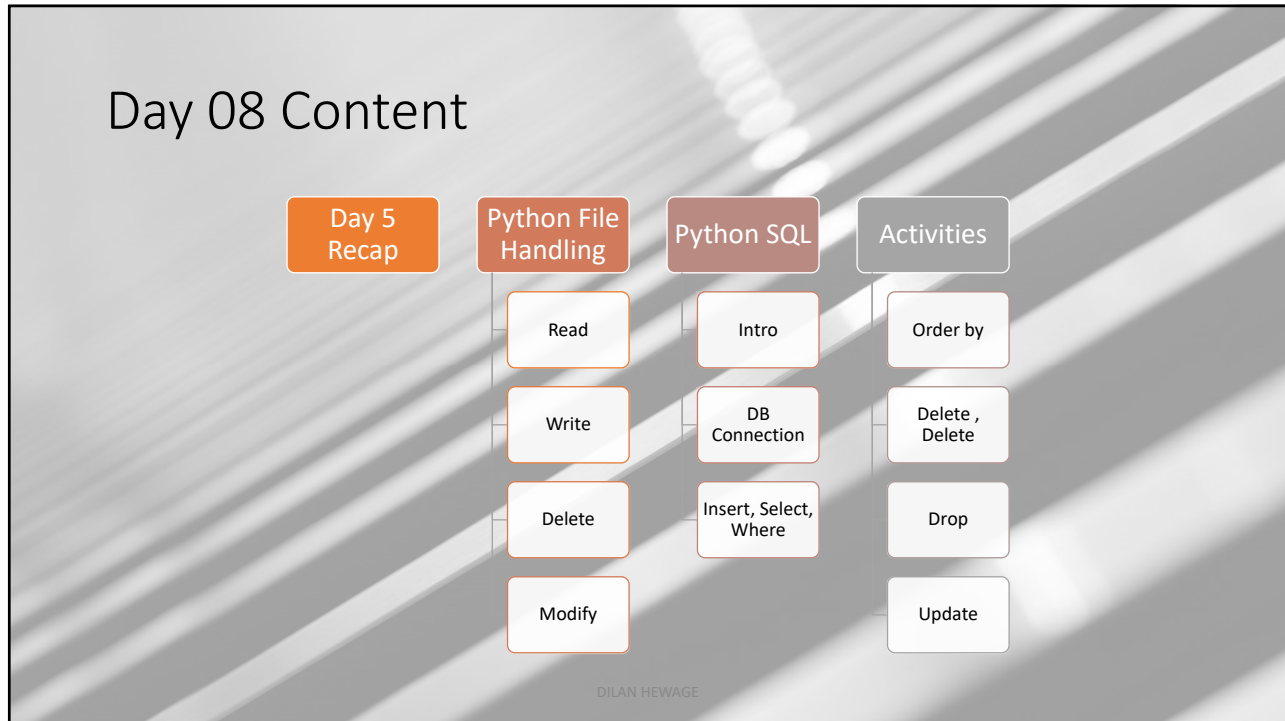
ඇල්ගොරිදම් සංවර්ධනය සහ පයිතන් ක්‍රමලේඛනය

Algorithm Development & Python Programming

Workshop Day - 8

DILAN HEWAGE
BIT – University of Colombo / CIDM – APIDM
Founder of WiTeds Solutions
Co-Founder of Print Arcade

2



3

Day 7 Recap


7 දින සාරාංශය

DILAN HEWAGE

4

Python File Handling

පයිතන් ලිපි ගොනු කළමනාකරණය



DILAN HEWAGE

5

Python File Handling

- File handling is an important part of any web application.
- Python has several functions for creating, reading, updating, and deleting files.
- The key function for working with files in Python is the `open()` function.
- The `open()` function takes two parameters; filename, and mode.

There are four different methods (modes) for opening a file:

- "r" - Read - Default value. Opens a file for reading, error if the file does not exist
- "a" - Append - Opens a file for appending, creates the file if it does not exist
- "w" - Write - Opens a file for writing, creates the file if it does not exist
- "x" - Create - Creates the specified file, returns an error if the file exists

In addition you can specify if the file should be handled as binary or text mode

- "t" - Text - Default value. Text mode
- "b" - Binary - Binary mode (e.g. images)

Dilan Hewage

6

Python File Handling contd.

- To open a file for reading it is enough to specify the name of the file:

```
f = open("demofile.txt")
```

- The code above is the same as:

```
f = open("demofile.txt", "rt")
```

- Because "r" for read, and "t" for text are the default values, you do not need to specify them.
- Note: Make sure the file exists, or else you will get an error.

There are four different methods (modes) for opening a file:

"r" - Read - Default value. Opens a file for reading, error if the file does not exist

"a" - Append - Opens a file for appending, creates the file if it does not exist

"w" - Write - Opens a file for writing, creates the file if it does not exist

"x" - Create - Creates the specified file, returns an error if the file exists

In addition you can specify if the file should be handled as binary or text mode

"t" - Text - Default value. Text mode

"b" - Binary - Binary mode (e.g. images)

Dilan Hewage

7

Python SQL

- Python can be used in database applications.
- One of the most popular databases is MySQL.
- To be able to experiment with the code examples in this tutorial, you should have MySQL installed on your computer.
- Python needs a MySQL driver to access the MySQL database.

```
import mysql.connector

mydb = mysql.connector.connect(
    host="localhost",
    user="yourusername",
    password="yourpassword"
)

print(mydb)
```

Download and install "MySQL Connector":

```
C:\Users\Your_Name\AppData\Local\Programs\Python\Python36-32\Scripts>python -m pip install mysql-connector-python
```

Dilan Hewage

8

End of the Day 8

Have you learned something?
See you all again on day 9

9