

Python Create Text File

Summary: in this tutorial, you'll learn how to create a new text file in Python using the `open()` function.

Using the `open()` function to create a new text file

To create a new text file, you use the `open()` function. The `open()` function has many parameters. However, we'll focus on the first two parameters:

```
f = open(path_to_file, mode)
```

In this syntax, the `path_to_file` parameter specifies the path to the text file that you want to create.

For creating a new text file, you use one of the following modes:

- `'w'` – open a file for writing. If the file doesn't exist, the `open()` function creates a new file. Otherwise, it'll overwrite the contents of the existing file.
- `'x'` – open a file for exclusive creation. If the file exists, the `open()` function raises an error (`FileExistsError`). Otherwise, it'll create the text file.

For example, the following creates a new file called `readme.txt` and write some text into it:

```
with open('readme.txt', 'w') as f:  
    f.write('Create a new text file!')
```

This script creates a file with the name `readme.txt` in the same directory where the script file locates. If you want to create a file in a specified directory e.g., `docs/readme.txt` , you need to ensure that the `docs` directory exists before creating the file. Otherwise, you'll get an [exception](#). For example:

```
with open('docs/readme.txt', 'w') as f:
```

```
f.write('Create a new text file!')
```

Error:

```
FileNotFoundError: [Errno 2] No such file or directory: 'docs/readme.txt'
```

In this example, Python **raises an exception** because the **docs** directory doesn't exist. Therefore, it could not create the **readme.txt** file in that directory. To fix the issue, you need to create the **docs** directory first and then create the **readme.txt** file in that folder.

Also, you can handle the exception using the try-except statement as follows:

```
try:
    with open('docs/readme.txt', 'w') as f:
        f.write('Create a new text file!')
except FileNotFoundError:
    print("The 'docs' directory does not exist")
```

Output:

```
The 'docs' directory does not exist
```

If you don't want to create a new text file in case it already exists, you can use the **'x'** mode when calling the **open()** function:

```
with open('readme.txt', 'x') as f:
    f.write('Create a new text file!')
```

Summary

- Use the **open()** function with the **'w'** or **'x'** mode to create a new text file.