

Assignment SU6 – Instructions

CMPG111 – Files and Exceptions

SU6_1 Food Festival

You've been asked to help prepare for an upcoming South African food festival.

Write a Python program that allows the event organiser to enter the names of different traditional South African dishes (such as Bunny Chow, Bobotie, aMagwinya, Scambani, etc.). Your program should write each dish entered by the organiser into a text file called `food_festival_menu.txt`.

Your program should include basic exception handling to ensure the file can be created and written successfully, displaying a clear error message if any exception occurs.

Submit your work on CodeGrade named: `SU6_1.py`

SU6_2 Music Concert

The organisers of a local music concert in Johannesburg has prepared a text file named `concert_artist.txt` that contains names of various South African musicians who will be performing at the event. Each line in the file represents one artist.

Write a Python program that reads from this file, neatly displays all the artist names, and count how many artists will be performing at the concert. Your program must include exception handling to gracefully manage errors, such as if the file is missing or unreadable, clearly informing the user of any such problems.

Submit your work on CodeGrade named: `SU6_2.py`

SU6_3 Weather Service

The South African Weather Service has provided you with a text file called `rainfall_data.txt`. Each city's information is stored on two separate lines in the file: the first line contains the name of the city, and the second line contains the monthly rainfall total measured in millimetres. For example:

```
Cape Town  
85
```

Write a Python program that reads the rainfall data from this file, calculates and displays the average rainfall across all cities, and identifies the city with the highest rainfall. Your program should then write a neatly formatted summary of these findings to a new text file named `rainfall_summary.txt`.

Your program must comprehensively handle possible errors, including missing files, incorrect data formats, and any unforeseen issues, providing clear messages to help the user understand and fix problems.

Submit your work on CodeGrade named: `SU6_3.py`