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| Programming Language Research Project  Practical Project Part 1 |  |
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| Evidence of Learning   **Variable**  In main.py file, I have 3 variables in the picture to store the value. **csv\_reader** is the reader object, **header** is the first line of the csv file stores all column names, and **records** is an empty list to store the Travel object for later use.    **Method**  This is a method defined inside travel.py to display to the screen a formatted string represents the object of this class    **A loop structure**  This is a loop structure to traverse the **csv\_reader** for every line from the external data, create a Travel object and then add it into the **records** list.    **File IO Reading from dataset**  In this project, I use Path class from **pathlib API** to read the external file    **Exception handling**  This is my exceptional handling to catch any error when accessing and reading the external file    Use of API  I use 2 APIs in this project which are **csv** and **pathlib** to access and control the external csv file.      **Data structure - List**  In my project, I created an empty list and store the object read from the external file. Program Demonstration via Screenshots Create a record object |  |

This class is a Travel class which corresponding attributes to store the data from the csv file.

Use File-IO to access to the external csv file

A screen shot of a computer program

Description automatically generated

Using try-except-else and pathlib to access and read the external file, I will handle the exception FileNotFoundError when the file is missing at line 11. If the file exists, it will handle the record by creating an instance and then store it to the list named **records**.

In line 21, I loop over the file and record object is stored in line 4.

From the line 48, I loop over the first 20 records in the **records** and display to the screen. The result is:

A black background with many small squares

Description automatically generated