

Ashton Fire

Charlie Stainton
08.12.24

Task / Solution

- Task: FDS file reader, output summary
- Solution: Simple Python cmd line program

```
usage: fds_read.py [-h] [-f OUTPUT] input

positional arguments:
  input                Pathway to input fds file

optional arguments:
  -h, --help            show this help message and exit
  -f OUTPUT, --output OUTPUT
                        Pathway to output file, default: out.txt
```

Code / Demo

- Attempted use of Python open-source fds reader code
- Own design: OO data structure – extensible and encapsulation
- Structure:
 - Define OO data types
 - Read file into ‘blocks’ (line by line)
 - Parse parameters and instantiate data objects

Issues / Improvements

- Given more time, use open source parser – why didn't this work?
- Assumptions about data format: block attributes
- Resorted to regex due to multiple uses of ',' delimiter
- (Needed to know more about data format)
- More options, other calculations easily added to OO structure
- Simplest iteration – could be used to further elucidate requirements