Ashton Fire

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Task / Solution

- Task: FDS file reader, output summary
- Solution: Simple Python cmd line program
- Run `python fds_read.py pre-task.fds` in terminal /cmd line

```
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 to use Python open-source 'fdsreader' – issues
- Own design: OO data structure – extensible, data encapsulation
- Structure:
    - Define Model data type with methods for summary/ calculation
    - Read file (line by line) into parameter 'blocks' as string
    - Parse parameter blocks and instantiate Model data object

Issues / Improvements

- Use open source parser – Given more time, why didn't this work?
- Made assumptions about data format and structure: block attributes, nesting
- Resorted to parse using regex (due to multiple uses of ',' delimiter)
- (More understanding of data format required)
- More options, other calculations could be easily added to OO structure
- Simplest iteration – could be used to further elucidate requirements