

Day_flow's Python Language Coding Standards

Last update: 10 November 2023

Comment Rules

Comment Rules

1. Every source file (.c and .h files) must include a comment at the beginning of the file that briefly describes the purpose of the source file and which lists the author and the date. For example:

```
"""
```

```
main_ui.py
```

```
The main user interface program for the day_flow project
including these features
```

```
-Search for events by their title – show all matches with date, time
```

```
-Display month, week, and day display
```

```
-Edit and delete event
```

```
-Export events for a specified date range in CSV format
```

```
most functionalities involve a lot on user interfaces
```

```
Created by Roong 19 October 2023
```

```
"""
```

2. Every function, except the main function, must be preceded by a block comment that explains

a) the purpose of the function

b) the purpose of each argument to the function except for the `self` argument

c) what the function returns (if anything). For example:

```
""" Calculate and print the change to be returned for
a supermarket order.
```

```
Arguments:
```

```
    totalBill – the total the customer must pay
```

```
    paidAmount - the amount the customer gave the cashier
```

```
Assume the calling program has already checked that the
paid amount is sufficient to cover the bill.
```

```
"""
```

```
calculate_change(total_bill, paid amount)
```

```
{
```

```
...
```

```
}
```

3. Use comments within a function only when you feel that the code alone is not self-explanatory.

More comments does not usually mean better style. For example:

```
# we will stop when the user enters
```

```
While ((value >= 0) and (count < MAXVALS))
```

4. Use comments all variables

Naming Rules

Naming conventions for variables, functions, and classes.

-Variables and functions: **lowercase_with_underscores** (snake_case).

-Constants: **UPPERCASE_WITH_UNDERSCORES**.

-Classes: **CapWords** (CamelCase).

CamelCase

Class SumOfSquares

or Class sumOfSquares

snake_case

sum_of_squares = 0

final_velocity

Constants

ROW = 30

COLUMN = 25

-Avoid Using Single Letters for Variables:

Use descriptive variable names. Except for i, j, and k in the loop.

Poor Style

n = 10

Better Style

item_count = 10

-Avoid really long variable names, which are also difficult to understand. For example:

Poor style

int residualIncomeAfterDeductions; // better: residual_income

double bahtToDollarExchangeRate; // better: baht_dollar

Maximum Line Length

Limit lines to **79** characters for code and **72** for docstrings/comments. You can go up to **120** characters if necessary, but try to keep it readable.

Multiple Imports

Multiple Imports should usually be on separate lines.

For example:

```
import sys
import datetime
import calendar
```

Always on the Top

Imports are always put at the top of the file i.e.

After any module comments and docstrings.

Before module globals and constants.

For example:

```
import sys
import datetime
import calendar
```

```
if __name__ == "__main__":
    pass
```