Code Inspection

Team 10

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Link to download the video:

Since the filesize limit on github is 100mb, we used mega:

https://mega.nz/#!P1xQSISL!DLruJwB Z6Rru8cagBG6wfdklYzyPv7gYLYPUNPLKSM

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Code Review Strategies and Outcomes - please see page 25 of Deliverable 5 document

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autoupdate_daemon.py

Reviewer: Eric Papagiannis

Code under review: autoupdate_daemon.py Author of the code under review: Tony Wu

Date: Nov 23, 2016

Bugs:

N/A

Poor code logic:

- Line 37: printing usage string and exiting as opposed to raising exception would be an easier solution.
- The argument to -i is in hours, which could be inconvenient to the user; interpreting the argument as minutes may provide greater flexibility.
- Verbose mode can only be flagged by manually switching a boolean, maybe could have method to toggle that

Poor coding style:

• Line 40: commandstr should not be hardcoded in the middle of the function; Keeping it at the top of the file could improve readability.

Missing documentation:

- Autoupdate_daemon.py could use a more verbose description of the purpose and principle of operation.
- Function main() is missing docstring.
- Inline comments are extremely sparse for the function main().

Unreadable code:

N/A

Vulnerabilities in code:

N/A

Poor testing:

N/A

UnitConverter

Reviewer Name: Vasili Skurydzin, Jerry Cheng

Code under review: UnitConverter class in CSV_data_parser.py (added after last code

review)

Date of Review: Nov 23, 2016 **Author of the code:** Albion Fung

Bugs:

N/A

Poor code logic:

- ConvertToOpen method contains nested functions. (state the reason in docstring)
- Nested Functions inside convertToOpen, such as convertDate and convertEURA, contain many hard-coded values that makes the functions non-modular.
- May be better to put UnitConverter class in its own file

Poor coding style:

• If name == " main " block contains a code block that is not used.

Missing documentation:

- ConvertToOpen method docstring is not very informative (description is too vague). Documentation does not specify what is a valid input for the parameters 'field', 'data' and 'source'
- ConvertToOpen method nested functions are missing internal / external documentation.
- Class documentation could be more informative, including the purpose of the class and what it cooperates with.

Unreadable code:

N/A

Vulnerabilities in code:

N/A

Poor testing:

Refer to UnitConverterTest.py

UnitConverterTest.py

Reviewer Name: Jerry Cheng

Code under review: UnitConverterTest.py Date of Review: November 23, 2016

Author of code: Albion Fung

Bugs:

N/A

Poor Code Logic:

N/A

Poor Coding Style:

N/A

Missing Documentation:

N/A

Unreadable code:

N/A

Missing Documentation:

- No documentation for any of the unittests explaining what each of the tests do
- Testcase names in UnitConverterTest do not adequately explain what the test case is testing

Poor Testing:

- No tests to check data input errors in UnitConverter (inputting object types other than Strings)
- No tests to check if the 'field' input parameter for convertToOpen is valid
- No tests to check if the 'source' input parameter for convertToOpen is valid
- No tests to check different possible date formats the user can enter for convertDate
- No tests to check for entering negative numbers that the user can enter for convertEURA and convertEUDEC
- No tests for convertNASARA and convertNASADEC to check for potential inputs in formats other than '**h**m**s', where n is a single digit number.

buildStar method in CSV_data_parser.py

Reviewer Name: Eric Papagiannis

Code under review: buildStar method in CSV_data_parser.py (added after last code

review)

Date of Review: Nov 23, 2016 Author of code: Albion Fung

Bugs:

N/A

Poor Code Logic:

 Reuse of code from buildPlanet can be refactored into a method they both call to parse data fields and error fields

Poor Coding Style:

• Try excepts have pass on the except statement

Missing Documentation:

Minimal inline comments

Unreadable Code:

• Some nested statements and try excepts could be harder to read at a glance

Vulnerabilities in Code:

N/A

Poor Testing:

Sufficient manual and automated testing

show_range, accept_range, deny_range, postpone_range in Driver_Commands.py

Reviewer Name: Jerry

Code under review: show_range, deny_range, postpone_range, accept_range

(methods) in driver commands.py

Date of Review: 11/28/16
Author of code: Eric

Bugs:

N/A

Poor Code Logic:

• A lot of code is being reused across all the range functions for input validation. It could be better having a helper function to handle that aspect.

Poor Coding Style:

Inconsistent variable naming in deny_range: both camelcase and snake_case used.

Missing Documentation:

- No Description on the functionality of deny range
- No Description on the functionality of postpone_range
- The docString in accept_range has conflicting information regarding valid user input, the description states (int, int, int) is valid, but the type contract asks only for (str, str, int)

Unreadable Code:

Postpone_range has a pass statement in Docstrings

Vulnerabilities in Code:

N/A

Poor Testing:

N/A

deny_number, postpone_all, unpack_changes in Driver_Commands.py

Reviewer Name: Tony Wu

Code under review: deny_number, postpone_all, unpack_changes (methods)

Date of Review: Nov 23, 2016

Author of code: Vasili

Bugs:

N/A

Poor Code Logic:

• In postpone all, logic flow of code unclear, overly complex

- In postpone all, reasoning unclear why empty list passed into method
- In unpack changes, logic flow of code unclear, overly complex
- In deny_number, config was set to both the string "blacklist" and a variable named blacklist

Poor Coding Style:

• For all these methods, driver commands shouldn't have to worry about printing

Missing Documentation:

 For all these methods, as code is really specific, a more verbose explanation as to how it works would be preferred in their docstrings

Unreadable Code:

• In deny_number, there is spelling error found in in-line comment

Vulnerabilities in Code:

N/A

Poor Testing:

N/A