



Precision Development

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**DELIVERABLE #4: CODE INSPECTION**

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**Date : Nov 10, 2015**

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## Table of Contents

|                                                        |          |
|--------------------------------------------------------|----------|
| <b>1 INSPECTION MEETING VIDEO.....</b>                 | <b>3</b> |
| <b>2 CODE INSPECTION #1: CITATIONEDITORWIN.PY.....</b> | <b>3</b> |
| <b>3 CODE INSPECTION #2: BATCHEDITORWIN.PY.....</b>    | <b>4</b> |
| <b>4 CODE INSPECTION #3: BTOOL.PY.....</b>             | <b>5</b> |
| <b>5 CODE INSPECTION #4: USERDATA.PY.....</b>          | <b>6</b> |
| <b>6 CODE INSPECTION #5: COUPLE.PY.....</b>            | <b>7</b> |

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## 1 Inspection Meeting Video

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The inspection meeting video is located here:

[https://www.youtube.com/watch?v=sep\\_eR5opxQ](https://www.youtube.com/watch?v=sep_eR5opxQ)

## 2 Code Inspection #1: citationEditorWin.py

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| <b>Reviewer name:</b> Brandon Chow | <b>Code author:</b> Wilfred Wong              |
| <b>Date:</b> November 10, 2015     | <b>Code under review:</b> citationEditorWin.p |

### Unreadable Code:

#### **#UC1: Poor spacing/indentation/lines**

**Location:** Between blocks of code. Poor spacing between operators

**Fix suggestion:** Consult Python coding standards

#### **#UC2: Unnecessary blank lines**

**Location:** End of function definitions, after function headers

**Fix suggestion:** PEP-8

#### **#UC3: Inconsistent naming convention**

**Location:** Function headers/variable names switch between pot\_hole and camelCase and capitalization.

**Fix suggestion:** PEP-8

### Vulnerabilities:

#### **#V1: Config file can be changed outside of code and will not be checked.**

**Location:** When the class is created in Init

**Fix suggestion:** Check with Zotero API to confirm with keys and library ID are valid.

#### **#V2: API key and Library ID are not encrypted.**

**Location:** When keys and ID are written to a file in function writeToFile.

**Fix suggestion:** Encrypt the user data file.

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### **Poor Testing:**

#### **#P1: There are no test file created**

**Location:** Folder location

**Fix suggestion:** Create unit test file.

### **Bugs:**

#### **#B1: Data not stored**

**Steps to reproduce:** Save any csl file with any (unused) name. Edit the csl and save again using the same name. File saving does not account for name collisions.

**Location:** Folder location

**Fix suggestion:** Add functionality to replace saved files.

## **3 Code Inspection #2: batchEditorWin.py**

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|                                 |                                             |
|---------------------------------|---------------------------------------------|
| <b>Reviewer name:</b> Kenny Lam | <b>Code author:</b> Brandon Chow            |
| <b>Date:</b> November 9, 2015   | <b>Code under review:</b> batchEditorWin.py |

### **Bugs:**

#### **#B1: Tag values are not updated in the tag list when they are modified/removed.**

##### **Steps to reproduce:**

- 1 Add any tag to the "tags to change list".
- 2 Set the "Action" to "modify" or "remove".
- 3 Press "Apply".

**Location:** In function -> btnApplyHandler(self)

**Fix suggestion:** After the changes are applied, update the tag list accordingly. Call the "refreshListWidgets(self)" function at the end of "btnApplyHandler(self)".

#### **#B2: Recently modified tags cannot be moved from the "tag" list to the "tags to change" list.**

##### **Steps to reproduce:**

- Modify a tag.
- Search for the new tag.
- Press the ">>" button to try and move the tag to the other list.

**Location:** In function -> btnApplyHandler(self), line 216

**Fix suggestion:** The error seems to be caused by adding an object of type QString to the list of tag strings. Cast the QString object to a regular string object.

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### **Vulnerabilities:**

**#V1: We can replace a tag with the empty string (this doesn't delete the tag and it is represented as an unrecognizable symbol in the Zotero client).**

**Location:** In function -> btnApplyHandler(self)

**Fix suggestion:** After line 192, add a check if the variable *new\_value* is the empty string and if *action* is the "modify" action (since we don't care about the value if we are removing). If so, show a messagebox warning the user that *new\_value* cannot be empty.

### **Missing documentation:**

**MD#1:** No docstrings or comments to help understand the code

**Location:** In class declaration and all functions (missing docstrings, and comments).

**Fix suggestion:** Add docstrings/comments.

### **Unreadable Code:**

**UC#1:** Many blocks of code are commented out and placed in the middle of working code.

**Location:** Entire document.

**Fix suggestion:** Either collapse the commented out code or remove it entirely.

## **4 Code Inspection #3: btool.py**

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| <b>Reviewer name:</b> Jason Zheng | <b>Code author:</b> Daniel Presaud |
| <b>Date:</b> November 9, 2015     | <b>Code under review:</b> btool.py |

### **Vulnerabilities:**

**#V1:** On line 6, of btool.py, there is a loop to go through the range of items in the server library, it does not consider an empty library. Either never call the function unless the library is populated, or create a simple check to see if the items call returns an empty dictionary

### **Poor Code Logic**

**#L1:** Redundant function `validate_credentials`, the entire app requires this validation and it should be done as a top level when user signs into the app.

**#L2:** There is no call on `validate_path`, it should be called in pickler object.

### **Coding Style**

**#U1:** In `savelog` and `restore`, there are left over code bits that should be removed

### **Missing documentation:**

**#MD1: Restore doesn't have a docstring, all of the docstrings don't have detailed information for the parameters and what they are accepting.**

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## 5 Code Inspection #4: userData.py

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| <b>Reviewer name:</b> Wilfred Wong | <b>Code author:</b> Kenny Lam         |
| <b>Date:</b> November 9, 2015      | <b>Code under review:</b> userData.py |

### **Missing documentation:**

**#MD1: There are no comments to understand what this file does.**

**Location:** Every function except for class header.

**Fix suggestion:** Add doc strings and comment.

### **Vulnerabilities in code:**

**#V1: Config file can be changed outside of code and will not be checked.**

**Location:** When the class is created in Init

**Fix suggestion:** Check with Zotero API to confirm with keys and library ID are valid.

**#V2: API key and Library ID are not encrypted.**

**Location:** When keys and ID are written to a file in function writeToFile.

**Fix suggestion:** Encrypt the user data file.

### **Poor Testing:**

**#P1: There are no test file created**

**Location:** Folder location

**Fix suggestion:** Create unit test file.

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## 6 Code Inspection #5: couple.py

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|--------------------------------------|-------------------------------------|
| <b>Reviewer name:</b> Daniel Persaud | <b>Code author:</b> Jason Zheng     |
| <b>Date:</b> November 10, 2015       | <b>Code under review:</b> couple.py |

### **Missing documentation:**

**#MD1: There are no comments to understand what this file does.**

**Location:** Every function except for class header.

**Fix suggestion:** Add doc strings and comment.

### **Poor Coding Style:**

**#PS1: Bad Style:** declares self.zot in config() instead of \_\_init\_\_()

**#PS2: Bad Style:** declares variables outside of class

**#PS3: Bad Style:** line 66: if key == 'n/a' - a workaround to work with gui should be commented properly because it risks breaking the code jsonFileUpdater() line 102, 113, and 115 open files but never close them

### **Poor Testing:**

**#P1:** Some testing was done in \_\_main\_\_ and that code was not removed, test code that was left in \_\_main\_\_ could have easily been done in unit test code.