**Change Management Log Python Script:**

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| **Version #** | **Implemented**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| 0.1 | Ryan Huffman | 28-August | Ryan Huffman | 29-August | Initial Research and Discovery Period Ends, basic visualization script implemented |
| 0.2 | Ryan Huffman | 4 October | Ryan Huffman | 4 October | Twython selected as primary development module for python script. Integration of twitter development account. |
| 1.0 | Ryan Huffman | 18 October | Ryan Huffman | 18 October | Twython and visualization integrated. |
| 1.1 | Ryan Huffman | 25 October | Ryan Huffman | 25 October | Testing and Evaluation for outputs reveal errors and authentication concerns, additional modules added to attempt to solve them. |
| 2.0 | Ryan Huffman | 30 October | Ryan Huffman | 2 November | Errors with Twython result in closure of original developer account in twitter, as well as limitations on the interface. Tweepy selected due to easier backend code environment as well as better security on communication of the data |
| 2.1 | Ryan Huffman | 31 November 2018 | Ryan Huffman,  Tom Hood, Jared Edler,  Noland Crane | 2 December, 2018 | Final backend script developed and data visualization methods added. Output folder and input from front end will be done in 3.0 |

**Versions 0.x** were the initial discovery and integration steps of the back end. Methods were gathered and lightly tested for viability, as well as necessary accounts and accesses were created and managed. Planning of the needs of the script were done as well, including flowcharts and documentation of the modules potentially going to be used. This period occurred from 28-August until 18th of October. Sub step were implemented per the Gantt Chart attached in the report.

**Version 1.x** This version focuses on the use of the Twython python module to retrieve the data and the matplotlib to create and visualize the data. Access tokens to perform the twitter searches were created using a twitter development library. Issues with the module and authentication methods were discovered and were unable to be resolved.

**Version 2.x** This version focuses on the use of the Tweepy python module. Authenitcation is more robust, and the module has a larger community support to address bugs and other errors, and a more sensible layout and function call scheme. Visualization is using the matplotlib module, and input out to and from the script to the front end was outlined and began design.

**Version 3.x** Front end and back end final integration and verification.

