## **Chapter Four**

## Test Cases and Team Updates

We have completed our testing framework that will automatically run all test cases and return results in the form of an html table. Our framework will be testing the methods fmtremaining from progress.py, intersect from simplemerge.py, countcpus from worker.py, count from templatefilters.py and tolist from namespaces.py.

We have run into some issues with test cases 11-15 since their is no output if the method fails, but does not say that the method failed. We figured how do deal with this issue and moved forward to complete the assignment.

| Test Case        | 01   |
|------------------|--|
| Requirement      | Break a given integer into the largest increments of time it can be broken into. |
| Component        | progress.py  |
| Method           | fmtremaining(int)  |
| Test Input(s)    | 100  |
| Expected Outcome | 1m40s  |

| Test Case        | 02   |
|------------------|--|
| Requirement      | Given the range of two points, calculate the point of overlap between them |
| Component        | simplemerge.py   |
| Method           | intersect(ra, rb)  |
| Test Input(s)    | (0,100), (50,150)  |
| Expected Outcome | (50,100)   |

| Test Case | 03 |
|-----------|----|
|-----------|----|

| Requirement      | Counts the number of processors available to the operating system |
|------------------|---|
| Component        | worker.py   |
| Method           | countcpus()   |
| Test Input(s)    | n/a   |
| Expected Outcome | 1   |

| Test Case        | 04                                    |
|------------------|---------------------------------------|
| Requirement      | Return the length of the given string |
| Component        | templatefilters.py                    |
| Method           | count(String i)                       |
| Test Input(s)    | "abcde"                               |
| Expected Outcome | 5                                     |

| Test Case        | 05  |
|------------------|---|
| Requirement      | Return elements in an array concatenated into one element in a larger array |
| Component        | namespaces.py   |
| Method           | tolist(String)  |
| Test Input(s)    | "1","2","3","4"   |
| Expected Outcome | ['1234']  |

| Test Case   | 06   |
|-------------|--|
| Requirement | Break a given integer into the largest increments of time it can be broken into. |
| Component   | progress.py  |

| Method           | fmtremaining(int) |
|------------------|-------------------|
| Test Input(s)    | 59                |
| Expected Outcome | 59s               |

| Test Case        | 07   |
|------------------|--|
| Requirement      | Break a given integer into the largest increments of time it can be broken into. |
| Component        | progress.py  |
| Method           | fmtremaining(int)  |
| Test Input(s)    | 0  |
| Expected Outcome | Os   |

| Test Case        | 08   |
|------------------|--|
| Requirement      | Break a given integer into the largest increments of time it can be broken into. |
| Component        | progress.py  |
| Method           | fmtremaining(int)  |
| Test Input(s)    | 3601   |
| Expected Outcome | 1h01m  |

| Test Case        | 09   |
|------------------|--|
| Requirement      | Break a given integer into the largest increments of time it can be broken into. |
| Component        | progress.py  |
| Method           | fmtremaining(int)  |
| Test Input(s)    | 3599   |
| Expected Outcome | 59m59s   |

| Test Case        | 10   |
|------------------|--|
| Requirement      | Break a given integer into the largest increments of time it can be broken into. |
| Component        | progress.py  |
| Method           | fmtremaining(int)  |
| Test Input(s)    | 86401  |
| Expected Outcome | 24h01m   |

| Test Case        | 11   |
|------------------|--|
| Requirement      | Given the range of two points, calculate the point of overlap between them |
| Component        | simplemerge.py   |
| Method           | intersect(ra, rb)  |
| Test Input(s)    | (0,10), (5,15)   |
| Expected Outcome | (5,10)   |

| Test Case        | 12   |
|------------------|--|
| Requirement      | Given the range of two points, calculate the point of overlap between them |
| Component        | simplemerge.py   |
| Method           | intersect(ra, rb)  |
| Test Input(s)    | (0,100), (50,50)   |
| Expected Outcome | n/a  |

| Test Case   | 13  |
|-------------|---|
| Requirement | Given the range of two points, calculate the point of overlap |
|             | between them  |

| Component        | simplemerge.py    |
|------------------|-------------------|
| Method           | intersect(ra, rb) |
| Test Input(s)    | (0,10), (10,10)   |
| Expected Outcome | n/a               |

| Test Case        | 14   |
|------------------|--|
| Requirement      | Given the range of two points, calculate the point of overlap between them |
| Component        | simplemerge.py   |
| Method           | intersect(ra, rb)  |
| Test Input(s)    | (0,2), (1,15)  |
| Expected Outcome | (1,2)  |

| Test Case        | 15   |
|------------------|--|
| Requirement      | Given the range of two points, calculate the point of overlap between them |
| Component        | simplemerge.py   |
| Method           | intersect(ra, rb)  |
| Test Input(s)    | (0,10), (10,0)   |
| Expected Outcome | Error  |

| Test Case     | 16                                    |
|---------------|---------------------------------------|
| Requirement   | Return the length of the given string |
| Component     | templatefilters.py                    |
| Method        | count(String i)                       |
| Test Input(s) | on                                    |

| Expected Outcome | 0                                     |
|------------------|---------------------------------------|
|                  |                                       |
| Test Case        | 17                                    |
| Requirement      | Return the length of the given string |
| Component        | templatefilters.py                    |
| Method           | count(String i)                       |
| Test Input(s)    | " n "                                 |
| Expected Outcome | 5                                     |
|                  |                                       |
| Test Case        | 18                                    |
| Requirement      | Return the length of the given string |
| Component        | templatefilters.py                    |
| Method           | count(String i)                       |
| Test Input(s)    | "1_%YTb"                              |
| Expected Outcome | 6                                     |
|                  |                                       |
| Test Case        | 19                                    |
| Requirement      | Return the length of the given string |
| Component        | templatefilters.py                    |
| Method           | count(String i)                       |
| Test Input(s)    | "aaaaaaaaaaaaa"                       |
| Expected Outcome | 15                                    |
|                  |                                       |
| Test Case        | 20                                    |

| Requirement      | Return the length of the given string |
|------------------|---------------------------------------|
| Component        | templatefilters.py                    |
| Method           | count(String i)                       |
| Test Input(s)    | "hello" "world"                       |
| Expected Outcome | 10                                    |

| Test Case        | 21  |
|------------------|---|
| Requirement      | Return elements in an array concatenated into one element in a larger array |
| Component        | namespaces.py   |
| Method           | tolist(String)  |
| Test Input(s)    | "add" "These" "Words" "Together"  |
| Expected Outcome | ['addTheseWordsTogether']   |

| Test Case        | 22  |
|------------------|---|
| Requirement      | Return elements in an array concatenated into one element in a larger array |
| Component        | namespaces.py   |
| Method           | tolist(String)  |
| Test Input(s)    | "This"" ""is"" ""a"" ""sentence."   |
| Expected Outcome | ['This is a sentence.']   |

| Test Case   | 23  |
|-------------|---|
| Requirement | Return elements in an array concatenated into one element in a larger array |
| Component   | namespaces.py   |

| Method           | tolist(String)  |
|------------------|-----------------|
| Test Input(s)    | "1""+""2""=""3" |
| Expected Outcome | ['1+2=3']       |

| Test Case        | 24  |
|------------------|---|
| Requirement      | Return elements in an array concatenated into one element in a larger array |
| Component        | namespaces.py   |
| Method           | tolist(String)  |
| Test Input(s)    | " "" "A" " " " " " " " " " " " " " " "                                      |
| Expected Outcome | [' A ']   |

| Test Case        | 25  |
|------------------|---|
| Requirement      | Return elements in an array concatenated into one element in a larger array |
| Component        | namespaces.py   |
| Method           | tolist(String)  |
| Test Input(s)    | un  |
| Expected Outcome | ["]   |