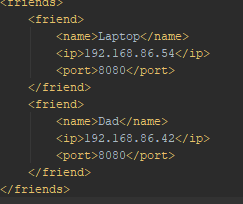
# **Sam Wood**

# **159.352 Assignment 1 Usage and Test Report**

**Usage**

All files go in the dir

Create a status.xml with a <updates>

Create a friends.xml with a <friends> tag and add friends like the picture. Use port 8080 for all.

Get a picture called picture.jpg, less than 100kb

Run server.py

Go to localhost:8080/update.html

**Test**

I have tested my program with 3 separate computers so theoretically it is scalable and it works flawlessly on those 3 computers. All 3 were running windows 10, on 3 different versions of PyCharm (2018.1.3, 2019.1, 2020.1) and 2 different versions of python (3.7 and 3.8).

Specific cases I’ve tested:

|  |  |  |
| --- | --- | --- |
| Test Case | Expected Outcome | Actual Outcome |
| All 3 pcs go to update | All 3 display update page | |
| All 3 pcs update their status | All 3 update their status.xml file with the new status and the page is reloaded | |
| All 3 pcs go to friends | All 3 display both other friends and all their information | |
| 1 pc updates status while other 2 reload friends | 1st pc updates fine, other 2 load update on refresh | |
| 2 pcs update while 3rd refresh friends | 2 update fine, 3rd loads both updates | |
| All 3 update and then all refresh | All 3 update and load all on refresh | |
| Pc 1 likes pc 2’s status | Pc 1 likes the status then page reloads to show the updated count and disabled like button, pc 3 sees updated like count on refresh | |
| A pc is offline | Connect in get\_friends timesout and unreachable displayed | |
| A pc is not on one of their friends friends list | Response in get\_friends is 403 and “You’re not on their friends list” displayed | |
| Pc already liked friends post | Like button is disabled | |
| Friend has no picture | Has no picture displayed | |
| No friends | Displays “You have no friends” | |
| No statuses | Displays “No statuses” when friends go to friends.html | |

Exceptions tested:

|  |  |  |
| --- | --- | --- |
| Exception | Expected Outcome | Actual Outcome |
| FileNotFound in send\_data | This is called everything as chrome always requests a favicon even though there isn’t one, also correctly calls when requesting a page that doesn’t exist | |
| FNF in get\_friends | If there is no friends.xml FNF is correctly called and “You have no friends” is displayed | |
| IndexError in get\_friends | Calls when there are no statuses in status.xml | |
| ParseError in get\_friends | Called when the xml file sent from friend server is broken somehow, correctly displays Unreachable on friends page | |
| Timeout in get\_friends | Correctly calls when other server is offline, displays unreachable | |
| Timeout in submit\_likes | Called when friend server was online when friends page requested but when host tries to like friends post the friend is now offline, calls correctly and page is reloaded, which will update friends and might display unreachable if the friend is still offline | |
| FNF in parse\_get | Calls fine, just pass’s | |
| ConnectionAbortedError in parse\_get | This was an exception I kept getting when the connectionSocket would hang on recv in the main while loop, I have since fixed that issue with the timeout and so I haven’t had the CAE error since, it caught it correctly back then and I don’t want to remove it in case it could still come up again so ill just leave it | |
| CAE in parse\_post | Same as above | |
| Timeout in main while loop | As explained above this is necessary to stop hanging on connectionSocket.recv, works as the program doesn’t hang anymore | |

Http Error (403/404)

|  |  |  |
| --- | --- | --- |
| Http header | Expected Outcome | Actual Outcome |
| 404 in send\_data | Correctly calls and displays html in response | |
| 403 in parse\_get | Correctly calls, if other pc is trying to access hosts html page via eg 192.168.86.\*\*:8080/update.html and isn’t on friends.xml, displays forbidden html, if just trying to access status.xml correctly displays “You are not on NAME’s friend list” on friends.xml. At the moment this could be exploited if you are friends with someone, you can actually update their status and like comments from their server via the link above. | |