Team Members:

Rowen Loucks Austin Hollis Jason Boulware Jeffery Williams

Tardigrades: Deliverable Three

Introduction:

Our team has begun work on building a testing framework for the Amara project we selected. We've had a fair number of setbacks, from the project's constant updates causing our VM to fail to build the project to the poor documentation for basically any part of the project, but we've found a fair number of boolean methods that should be easily testable given the current state of the project.

Test Cases:

Test ID: 01

Requirement tested: This method should prevent the same video from being uploaded

twice.

Component being tested: model.py

Method being tested: preventduplicate(video)

Test input: this url twice https://www.youtube.com/watch?v=8N5B0DQ2eDo

Expected Outcome: Failure to upload the second video

Test ID: 02

Requirement tested: This method should state whether the given user is allowed to

view the subtitles on a given video.

Component being tested: permissions.py

Method being tested: user_can_view_private_subtitles(user, video, language_code)

Test input: williamsjd2, https://www.youtube.com/watch?v=8N5B0DQ2eDo, en

Expected outcome: True

Test ID: 03

Requirement tested: This method should state whether the given user is allowed to edit

the subtitles on a given video.

Component being tested: permissions.py

Method being tested: user_can_edit_subtitles(user, video, language_code) **Test input:** williamsid2, https://www.youtube.com/watch?v=8N5B0DQ2eDo, en

Expected outcome: True

Test ID: 04

Requirement tested: This method should state whether the given user is allowed to

change the subtitle language on a given video.

Component being tested: permissions.py

Method being tested: user_can_change_subtitle_language(user, video) **Test input:** williamsjd2, https://www.youtube.com/watch?v=8N5B0DQ2eDo

Expected outcome: True

Test ID: 05

Requirement tested: This method should state whether the given user is allowed to

view the subtitle edit history of a given video. **Component being tested:** permissions.py

Method being tested: can_view_activity(user, video)

Test input: williamsjd2, https://www.youtube.com/watch?v=8N5B0DQ2eDo

Expected output: True

Report:

To start our testing, we are mainly focusing on permissions.py in order to determine whether a user can fully access a given video. This, obviously, requires a user to first upload a video. We uploaded a short YouTube video on an account under Jeffery's name before testing began; since Jeffery's account uploaded the video to our project build, we know it should have all the permissions we've picked out. In order to test each method, his account username and the URL to the video will be passed to each method as parameters. This means that the tests will ultimately fail if the video is taken down from the webpage at the other end of the URL, but a URL is required by the program to identify a specific video.

To test whether the same video can be uploaded multiple times, we will feed the preventduplicate(video) method a length 2 array containing the same URL as each entry in successive calls. After the first call, the method should report a failure to upload. Again, this relies on an external URL where a video can be found, so the test will fail if the video cannot be found. For that issue, we can simply alter the URL to point to another video if the need arises.

Overall, our tests are relatively simple given the scope of the project we selected, but such tests are still useful for big projects like this. These smaller methods are incredibly important to the overall function and security of the complete project. We were skeptical about choosing these methods, but now we are confident that we have chosen tests that will be easy to verify and useful to the project.