2022/06/03

- Began reviewing the previous capstone team's work on the Jenkins based CI/CD framework.
- First I'll look into the carla-capstone repository made by the previous capstone team on the Windows side of the machine. I'll see if it still runs and how it works.
- The repository for the CI/CD framework can be found here: https://github.com/Tahaa17/capstone-CICD-framework
- After doing some extensive searching through the existing files and directories, no source files relating to the previous capstone team's Jenkins framework can be found. Both the CARLA-master, the carla-capstone, and the CICD-Capstone folder inside the CARLA-master folder were searched. All their previous test cases are present and have been run against the previous capstone team's version of the Carla simulator, which have worked successfully.
- I'll download the zip file of another directory from the google drive that Rezwana had sent me to see if any files related to the Jenkins framework exist in there. If not, I'll email the supervisor and until then, modify the existing test cases to work with the updated, newest version of the Carla bench.
- No Jenkins related files were found in the Google Drive either, as such, I have emailed the supervisor with my next steps and our possible course of actions:
 - In the meantime, I will work on modifying the previous capstone team's tests to work with the updated version of the Carla bench and perhaps create some new test cases for all the additional functionality I've implemented
 - In the future, we could perhaps build a Jenkins-based framework of our own for the new Carla bench and add it to our slew of existing updates.
- Transferred all the existing test cases from the Windows side to the Linux side of the lab computer. The first test case I'll tackle is **Reverse_Test.py**.
- Was able to modify 'testbed.py' and '**Reverse_Test.py**' to be able to run, however, it runs for far too long before checking the assert statement.
- Changed tick timer for the test to 60 to end the test much sooner. The reason the test ran for far too long could be because the old Carla bench used a different tick.
- The issue now is that since I modified the **get_speed** function to use the game world to help obtain engine rpms, I now need to be able to import the world into the test case.
- In 'testbedy.py', I exported the world object to a global variable upon instantiation, such that it is easily accessible by an external module, in this case, the test case.

- After successfully passing the world object to the external call of get_speed, there was an error such that the actor (vehicle) was destroyed so the test was not able to measure its speed. In order to remedy this, I removed the statement that destroys the world in the game_loop function once the ticks stop. Doing so allowed the test case to pass successfully. The next step is to have the remaining tests working with the updated Carla simulator one by one.
- **Tests now working with new Carla bench** (each one required some rework, some little, some a lot):

Test Case	Pass	Fail
Reverse_Test	✓	
gearshifter_park_test	✓	
Brake_Test	✓	
ADBInstallAPKTest (lots of rework, check file for details)	✓	
ADBConnectionCreationTest (lots of rework, check file for details)	1	

- The next step is to get the remaining test cases working with the updated Carla bench as well as make some new test cases for the additional features I implemented.