

2022/05/31

- Was able to successfully launch the soundcloud app using the ADB interface and a python script. Next step is to export this functionality to the Carla simulator in the form of a module and map it to a button on the steering wheel for convenience.
- Was able to import all the ADB functions into the Carla simulator running in 'testbed.py' and mapped the functionality to open the soundcloud app to the right paddle on the steering wheel. Next step is to implement a slew of other functions to control the head unit using the ADB interface.
- **Note:** After extensive testing, it was discovered that the arrow controls on the steering wheel do not work, however, all other buttons work

- **Added ADB functions:**

ADB Functionality	Button Mapped To
Launch the Soundcloud Application	Right Paddle
Return to home menu	Home Button (bottom-most button)
Volume Up	Upper Right Thumb Control
Volume Down	Lower Right Thumb Control
Play/Pause	Right Circular Button on right hand side cluster
Play Next Track	Upper Left Thumb Control
Play Previous Track	Lower Left Thumb Control
Back	Upper-left Diagonal Button from Home
Open the Recent Applications Menu	Upper-right Diagonal Button from Home
Launch the Google Maps Application	Left Paddle

- Next step is to begin integrating the previous capstone group's Jenkins elements and CI/CD framework with the currently existing rebuilt version of the Carla bench on the Linux machine. After integrating it, I can also use their existing test cases as well as make my own for the new functionality I have added.
The supervisor has also stated that he will set up a meeting with Joelma so that she can discuss her CAN work with me, and then I may work on slowly integrating that side into the Carla bench, as well as make some test cases for that.