Our goal is to design a Robot that detects tennis balls and travels to it. To accomplish this goal, we implemented an object tracking algorithm using a computer and camera hooked up onto an RC car.

When the Robot detects a tennis ball, it will locate the location and travel to it.

We assembled the camera module, Raspberry Pi 4, and a battery onto an RC chassis. We have two electric motors in the front and back. The back moves the car forward/backward and the front motor steers the car.

We programmed the Raspberry Pi 4 using the Python Coding Library. We used Python libraries of TensorFlow Lite and Flask to get the object detecting working.