This is a personal hobby project done by me to better understand how does microcontrollers and the sensors works together. No official documentation is done for this project.

The car receives GPS coordinates from user and immediately calculates the distance between its current position and the target position. Then it calculates the angle between the target position and its current position. By using the compass, it turns itself to the desired angle and keeps going forward until the distance between its current position and target position becomes <1 meter.

Component used in this project: -

1. Arduino mega.
2. Motor. (4x)
3. Motor shield.
4. GPS module. (Neo 6M)
5. Ultrasonic sensor.
6. Bluetooth.
7. Compass.
8. Battery.
9. Chassis.
10. Jumper wires.
11. Soldering iron.

**Current status:** Car is able to avoid any obstacle. It can receive GPS coordinates and calculate desired angle and distance to the desired location. It can also turn itself to a certain angle.

**Current issue**: Compass reading not stable.