**Carefully watch the lesson videos and follow the manual (mobile\_robot\_manual.docx) to learn how to implement everything and where to place the files.**

Included files are:

**robot.xacro** - this is the URDF and Xacro file defining the robot geometry.

**robot.gazebo** – this is the additional Gazebo file defining the plugins and additional simulation parameters.

**bridge\_parameters.yaml –** this is the yaml file defining the parameters for establishing ROS2 – Gazebo Harmonic bridge.

**gazebo\_model.launch.py –** this is the Python launch file that defines the nodes that need to be launched.

**mobile\_robot\_manual.docx** – manual file explaining how to build everything. **Start from here.**

**robot\_geometry\_formulas.pdf –** document describing the robot geometry, frames, and formulas for implementing mass and moment of inertia parameters.

**ws\_mobile\_final.zip** - complete workspace directory with all files that are build. Do not try to run the files from here. You have to build your own workspace and a package. This is only included for the reference and to double check your implementation.