Guide to these Notes:

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These notes have accompanying code in: https://github.com/wsnewman/ros_class.git (referred to herein as the "class repository").

All documents (including this roadmap) are contained in the "Documents" folder of the above repository. Clone this repository to your catkin subdirectory, "/src" to compile the examples.

In addition, to use catkin_simple and publish-selected-points, also clone the repository: https://github.com/wsnewman/ros_helper_packages.git.

ROADMAP:

1. Start with "Introduction to ROS (v4)", and accompanying code in repository package "minimal_nodes."
2. ROS messages are further explored in "How to Define Custom Messages", and the corresponding code in package "example_ros_msg."
3. Services are introduced in "Introduction to ROS Services", with accompanying code in "example_ros_service"
4. An example of how to use classes in ROS is provided in "Cplusplus_classes_in_ROS" with accompanying code in the package "example_ros_class."
5. Action servers are introduced in "Introduction to Action Servers", with accompanying code in the package "example_action_server"
6. The notes "intro_to_rviz" introduces visualization and interaction using Rviz, with code examples of using Markers and InteractiveMarkers in rviz from the packages example_rviz_marker and example_interactive_marker.
7. The notes "robot_model_visualization" introduce how to define a robot model and how to display it in rviz. These notes reference the package "minimal_robot_description."
8. Robot modelling is extended to dynamic simulation using Gazebo, as introduced in "Intro_to_gazebo." These notes references the packages minimal_robot_description and minimal_joint_controller.