# Software Architectures for Robotics

Lab Session 6
SLAM in Gazebo and Python ROS nodes







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### SLAM in gazebo

#### TurtleBot Setup for ROS Kinetic:

http://ros-developer.com/2017/05/09/slam-using-gmapping-with-turtlebot-robot-and-gazbo/

#### **Demos**:

https://www.sauravag.com/2016/10/how-to-setup-turtlebot-simulator-in-ros-with-gazebo/

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### Publish-Subscribe using python nodes



Building the nodes:

http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28python%29

Running the nodes:

http://wiki.ros.org/ROS/Tutorials/ExaminingPublisher
Subscriber

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## Service-Client using python nodes



Building the nodes:

http://wiki.ros.org/ROS/Tutorials/WritingServiceClien t%28python%29

Running the nodes:

http://wiki.ros.org/ROS/Tutorials/ExaminingServiceClient

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