Gazebo Robotic Simulation Environment

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May 20, 2014
Summer Term

Homework 1

Create individual repository account. (Bitbucket, Github etc.)

- gz_sim-ss14:
  - Homework1
  - Homework2
  - etc.

Send repository link with your full name as a message on stud.ip or to a.haidu@gmail.
Due date 27.05.2014.

Code Style Guide

- Gazebo Code Style Guide
- Gazebo API
- World files in `pkg_name/worlds` folder
- Models in the `pkg_name/models` folder
- Source code in the `pkg_name/src` folder
- Headers in the `pkg_name/include` folder

Homework 1

- Create server side System Plugin (`$ gazebo -s libMyPlugin.so`)
- Create a box and a sphere in a world file (homework1.world, box1, sphere1)
- Get access to the world (search in the API for `get_world` method)
- In the Load() method type out the physics engine type and the worlds name (search for `GetPhysicsEngine()`, `GetType()` methods)
- In the update loop apply a velocity for both objects (search for `GetModel()`/`GetModels()`)

If help needed

- Check the tutorials
- Check gazebo answers
- Office 1.60 or email me at a.haidu@gmail.com

Possible issues

- .so library might not be found:
  set your GAZEBO_PLUGIN_PATH or use absolute path:
  ```
  $ gazebo -s absolute_path/libMyPlugin.so
  ```