rosmariokart

A"mariokart" clone, but made for real robots.



ROS driver node

To launch the game:

```
1 $ roslaunch rosmariokart rosmariokart.launch
```

Node parameters

• ~player_1_name, ~player_2_name, ~player_3_name, ~player_4_name [string, default: ""]

The name of each player. Leave empty for no player. At least fields player_1_name and player_2_name must be set. As documented below, these names will be used as namespaces to access various topics and parameters.

• ~curse_XXX_timeout [double, seconds, default: 2 seconds]

The duration of each curse. XXX is among the following: boo, goldenmushroom, lightning, mirror, mushroom, redshell_coming, redshell_hit, star, timebomb_hit.

• ~axis 180turn [int, default: 4]

The joystick axis to perform 180° turns.

• ~axis 90turn [int, default: 3]

The joystick axis to perform 90° turns.

• ~axis_angular [int, default: 2]

The joystick axis to control angular speed.

• ~axis_linear [int, default: 2]

The joystick axis to control linear speed.

• ~button item [int, default: 3]

The joystick button for throwing an item.

• /ROBOT/scale_angular, for ex: /mip/scale_angular [int, rad.s-1/joy_unit, default: 1]

The multiplication factor that converts an axis value into an angular speed.

• /ROBOT/scale linear, for ex: /mip/scale linar [int, rad.s-1/joy_unit, default: 1]

The multiplication factor that converts an axis value into a linear speed.

Subscriptions

• /ROBOT/joy, for ex: /mip/joy [sensor_msgs::Joy]

The joystick commands.

Publications

• /ROBOT/cmd vel, for ex: /mip/scale linar [geometry_msgs::Twist]

The speed orders.

• /ROBOT/animation, for ex: /mip/animation [std msgs::String]

Predefined animations that can be specific to each robot. Among hit, lose, mock, win.

• /ROBOT/sharp_turn, for ex: /mip/sharp_turn [std_msgs::Float32]

The on-the-spot speed orders, for sharp turns like 90°.

Credits

Fonts

• fonts/LCD2U .TTF: myfontfree.com

Images

- doc/ori-robot-mip-noir-wowwee-1280.jpg: robot-advance.com
- data/items/BooCurse.png: nocookie.net
- data/items/jumping_sumo_brown.jpg:amain.com
- data/items/joypad.png: myiconfinder.com
- data/items/TimeBomb.png: isthisabomb.com
- data/items/RocketStartCurse.png: isthisabomb.com
- data/items/TimeBombCurse.png: mariowiki.com
- data/lakitu/*.png: press-select.fr mariofusion.free.fr deviantart.net
- data/robots/random_robot.png:openclipart.org
- data/robots/stage_black_bg.png:playerstage.org
- data/robots/white_mip_black_bg.png: wowwee.com
- data/robots/white_sumo_black_bg.png: parrot.com

Sounds

- battle-mode.mp3, begin-race.mp3, last-lap.mp3, you-win.mp3: khinsider.com
- boost.wav, boosteal.wav, cpuspin.wav, cputhrow.wav, gotitem.wav, itemreel.wav, racestart.wav, spinout.wav: superluigibros.com
- lightning.wav: youtube.com
- mk64_countdown.wav: themushroomkingdom.net
- quartz.wav: freesound.org
- starman.wav: <u>superluigibros.com</u>
- timebomb.wav: soundbible.com

Tracks

• config/bitmaps/Mariocircuit1.* mariokart.wikia.com

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