Open-RMF Web - Exercises: create tasks and record videos

Exercise 1

Simulate the hotel world

Terminal 1 - Open RMF demo

```
Unset
rocker --nvidia --x11 --name rmf_demos \
   -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
   --network host \
   ghcr.io/open-rmf/rmf/rmf_demos:latest \
     ros2 launch rmf_demos_gz hotel.launch.xml \
     server_uri:="ws://localhost:8000/_internal"
```

- Terminal 2 - API Server

```
Unset
docker run --network host -it \
  -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
  -e RMW_IMPLEMENTATION=rmw_cyclonedds_cpp \
      ghcr.io/open-rmf/rmf-web/api-server:latest
```

- Terminal 3 - Dashboard

```
Unset
docker run --network host -it \
  -e RMF_SERVER_URL=http://localhost:8000 \
  -e TRAJECTORY_SERVER_URL=ws://localhost:8006 \
     ghcr.io/open-rmf/rmf-web/dashboard:latest
```

WEB: http://localhost:3000

<u>Dispatch two tasks with Open RMF web and record a screenshot of RMF Dashboard, RViz and Gazebo</u>

- Patrol once from "restaurant" to "L3_master_suite"
- Clean the zone "clean_lobby"

Exercise 2

Simulate the airport terminal world

- Terminal 1 - Open RMF demo

```
Unset
rocker --nvidia --x11 --name rmf_demos \
   -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
   --network host \
   ghcr.io/open-rmf/rmf/rmf_demos:latest \
     ros2 launch rmf_demos_gz airport_terminal.launch.xml \
     server_uri:="ws://localhost:8000/_internal"
```

- Terminal 2 - API Server

```
Unset
docker run --network host -it \
  -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
  -e RMW_IMPLEMENTATION=rmw_cyclonedds_cpp \
      ghcr.io/open-rmf/rmf-web/api-server:latest
```

- Terminal 3 - Dashboard

```
Unset
docker run --network host -it \
  -e RMF_SERVER_URL=http://localhost:8000 \
  -e TRAJECTORY_SERVER_URL=ws://localhost:8006 \
      ghcr.io/open-rmf/rmf-web/dashboard:latest
```

WEB: http://localhost:3000

<u>Dispatch two tasks with Open RMF web and record a screenshot of RMF Dashboard, RViz</u> and Gazebo

- Patrol once from "n22": "NAT_TASK2_patrol"
- Delivery "mopcart_pickup": "mopcart_dispenser" "spill": mopcart_collector
- Clean the zone "zone 1"

Exercise 3

Simulate the clinic world

Terminal 1 - Open RMF demo

```
Unset
rocker --nvidia --x11 --name rmf_demos \
   -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
   --network host \
   ghcr.io/open-rmf/rmf/rmf_demos:latest \
     ros2 launch rmf_demos_gz clinic.launch.xml
\
   server_uri:="ws://localhost:8000/_internal"
```

- Terminal 2 - API Server

```
Unset
docker run --network host -it \
  -e ROS_AUTOMATIC_DISCOVERY_RANGE=LOCALHOST \
  -e RMW_IMPLEMENTATION=rmw_cyclonedds_cpp \
      ghcr.io/open-rmf/rmf-web/api-server:latest
```

- Terminal 3 - dashboard

```
Unset
docker run --network host -it \
  -e RMF_SERVER_URL=http://localhost:8000 \
  -e TRAJECTORY_SERVER_URL=ws://localhost:8006 \
      ghcr.io/open-rmf/rmf-web/dashboard:latest
```

WEB: http://localhost:3000

<u>Dispatch two tasks with Open RMF web and record a screenshot of RMF Dashboard, RViz</u> and Gazebo

- Patrol once from "L1_left_nurse_center" to "L2_right_nurse_center"
- Patrol once from "L1_left_nurse_center" to "L1_right_nurse_center"