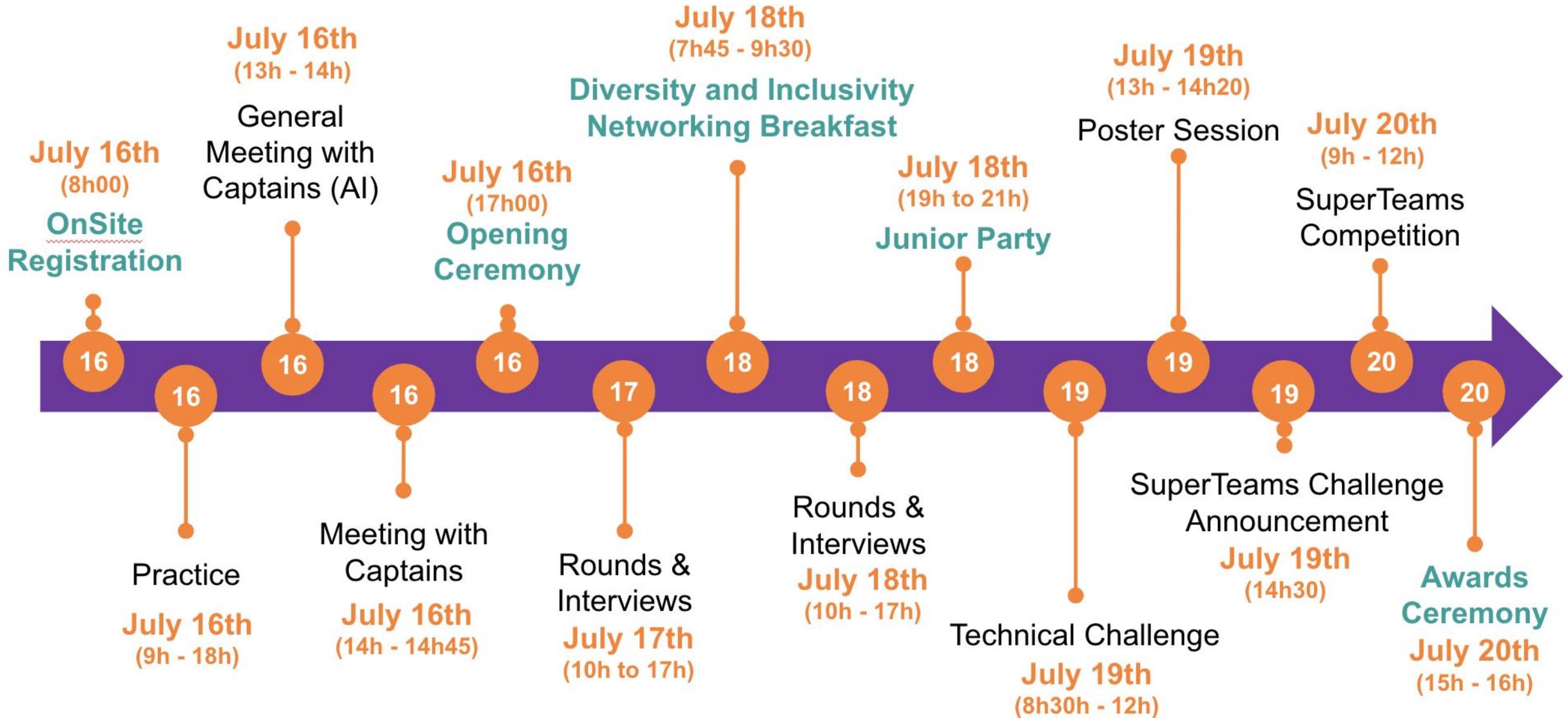
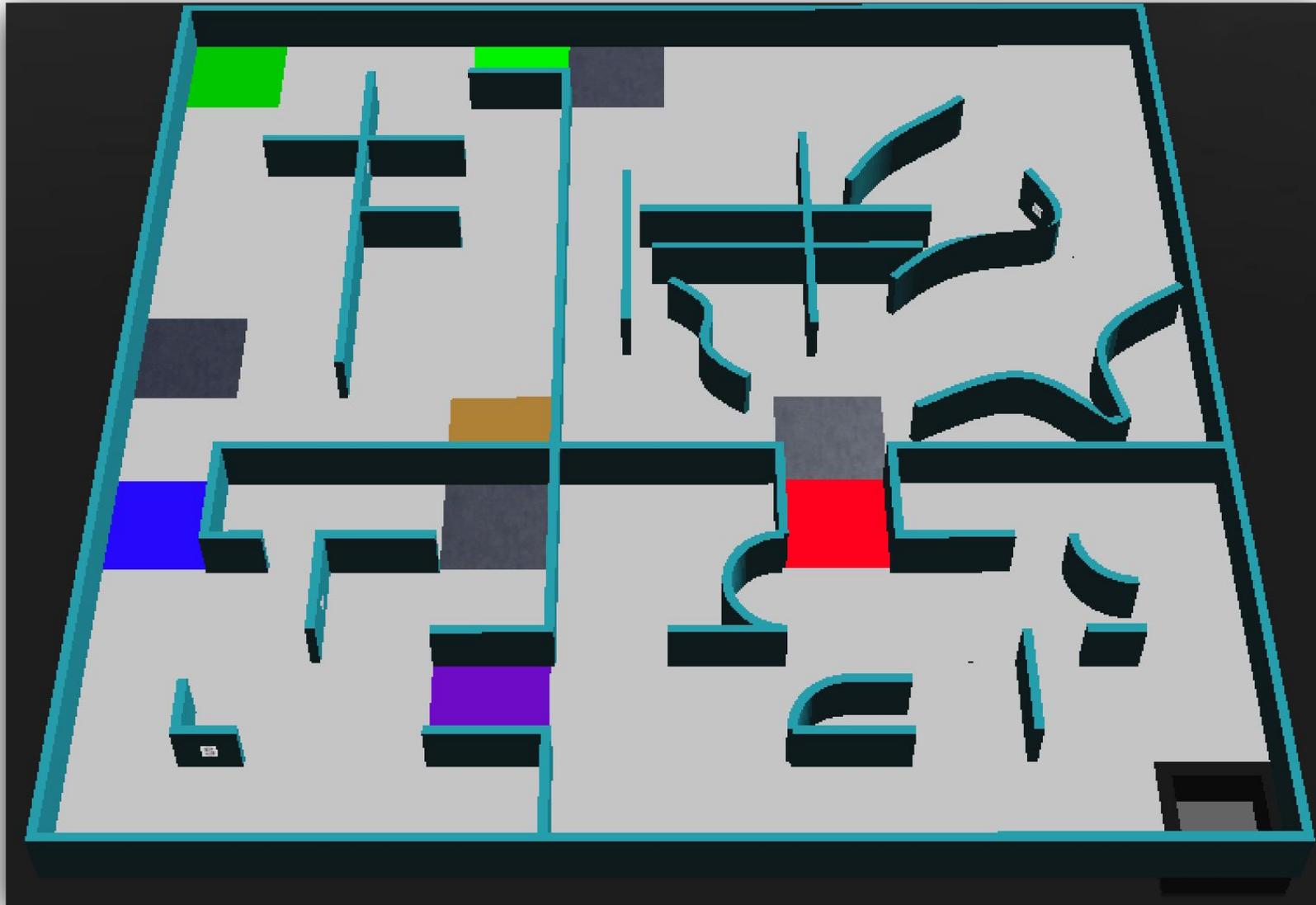


Schedule



Simulation Field and Controller



Simulation Field and Controller

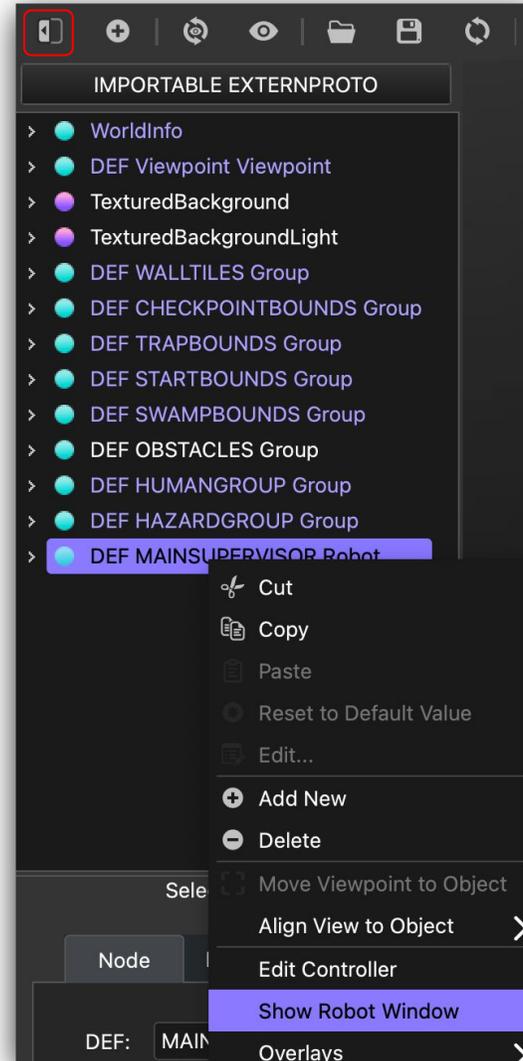


The image shows two overlapping windows from the Erebus simulation environment. The left window, titled 'Erebus Simulation Controls', is a web-based interface for the 'Erebus Rescue Simulator 2024' (version 24.0.0). It features several control buttons: 'LOAD' (two instances), 'TOGGLE REMOTE', a 'Docker path' input field, 'Settings', 'Worlds', 'Reset', and 'Give up!'. At the bottom, there are play, stop, and refresh icons, along with a timer showing '08:00' (with a '(10:00)' limit) and a score of '0'. The right window, titled 'Simulation View', displays a 3D perspective of a maze-like simulation field. The field is bounded by a cyan wall and contains various obstacles and colored platforms (green, blue, purple, red, orange, grey). The window's toolbar includes icons for file operations (Open, Save, Reload) and playback controls. Red arrows point from the text 'Open world file' to the file icon and 'Reload world file' to the reload icon. The address bar shows the file path: '/Users/ajeddeloh/Documents/Privat/RoboCup/2024/sim/Erebus-v24_0_0/game/worlds/room4.wbt (game) - Webots R2023b'. The time in the toolbar is '0:01:39:424' at '0.96x' speed. At the bottom of the right window, a console window shows the command: 'INFO: MainSupervisor: Starting controller: /Library/Frameworks/Python.framework/Versions/3.11/bin/python3.11 -u MainSupervisor.py'.

Show missing Robot Window



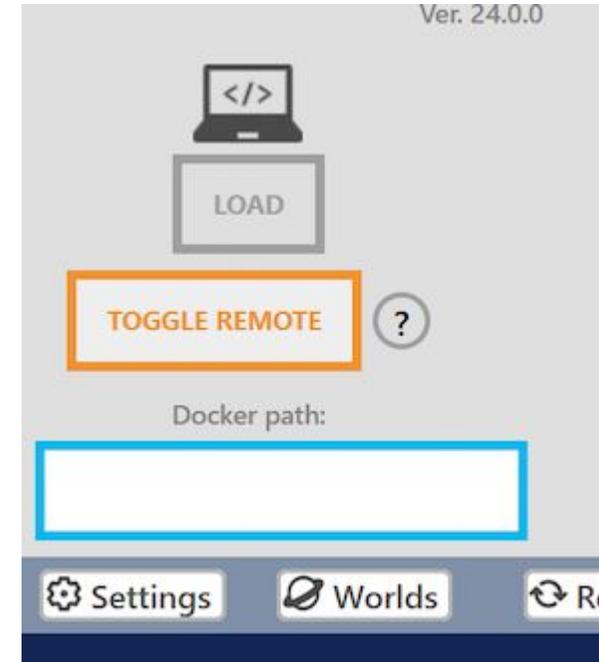
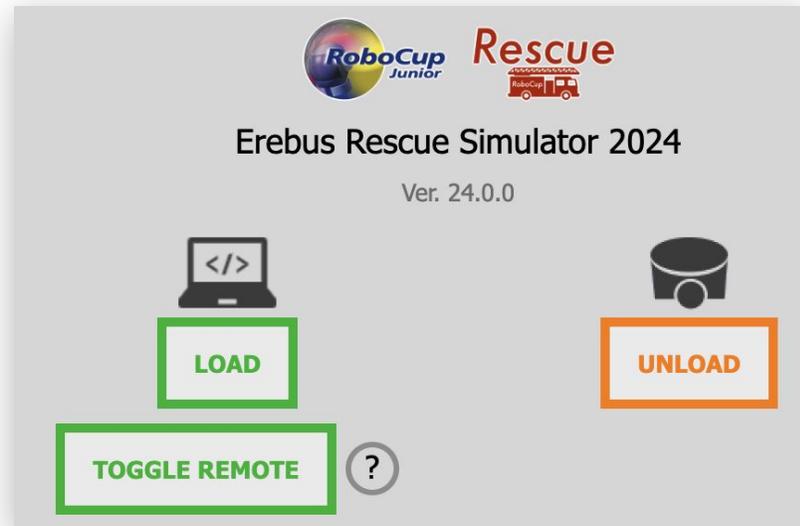
In case the robot window is not showing



Remote Setup

- Click on “Load” beneath the robot symbol, if the team is using a custom robot controller
- Custom robot controllers will be uploaded to the CMS before the rounds

- Click on “Toggle Remote” to enable the remote controller





Execute the remote controller

- (Client) Controller will be executed on the command line of the participant's computer.

Windows example

- (Client) `<Webots Controller Path>/webots-controller.exe --protocol=tcp --ip-address=<Server IP Address> <Controller Path>`
 - The standard installation path is ***C:\Program Files\Webots***
 - ***C:\Program Files\Webots\msys64\mingw64\bin***
 - The IP address will be individual for each competition computer - is written on the field sign
 - The controller path is the path to the participants' controller file
- After executing the command, the client should output an info message every 5 seconds:
No robot name provided, exactly one robot should be set with an <extern> controller in the Webots simulation, retrying for another 50 seconds...
- (Server) Press the start button to start the simulation

Linux and macOS

- On Linux and macOS you also have to set the WEBOTS_HOME environment variable which should point to the installation folder:
Client) `$WEBOTS_HOME/webots-controller --protocol=tcp --ip-address=<Server IP Address> <Controller Path>`



Handling the run in general

- There is only one team member (captain) allowed at the competition field
 - All other members have to watch from the grand stand
- All actions on the game server will be performed by the judge
 - Loading the Maps
 - Starting the run
 - Pausing the simulation
 - Executing a LoP
 - etc.
- In case of any unexpected events, write a comment when putting in the scores into the CMS
 - This goes for judges as well as team captains
-

Handling during a run



The screenshot shows the RoboCup Junior control interface. At the top, there are buttons for Settings, Worlds, Reset, and Give up!. Below these are three large circular buttons: a play button, a pause button, and a refresh button. The interface also displays a stopwatch icon, a calculator icon, and two large numbers: 06:55 and 20. At the bottom, there are two lines of text: 00:56 and 00:44 on the left, and Found checkpoint +20 and Lack of Progress (via robot) -5 on the right. Red arrows point from text labels to specific elements in the interface.

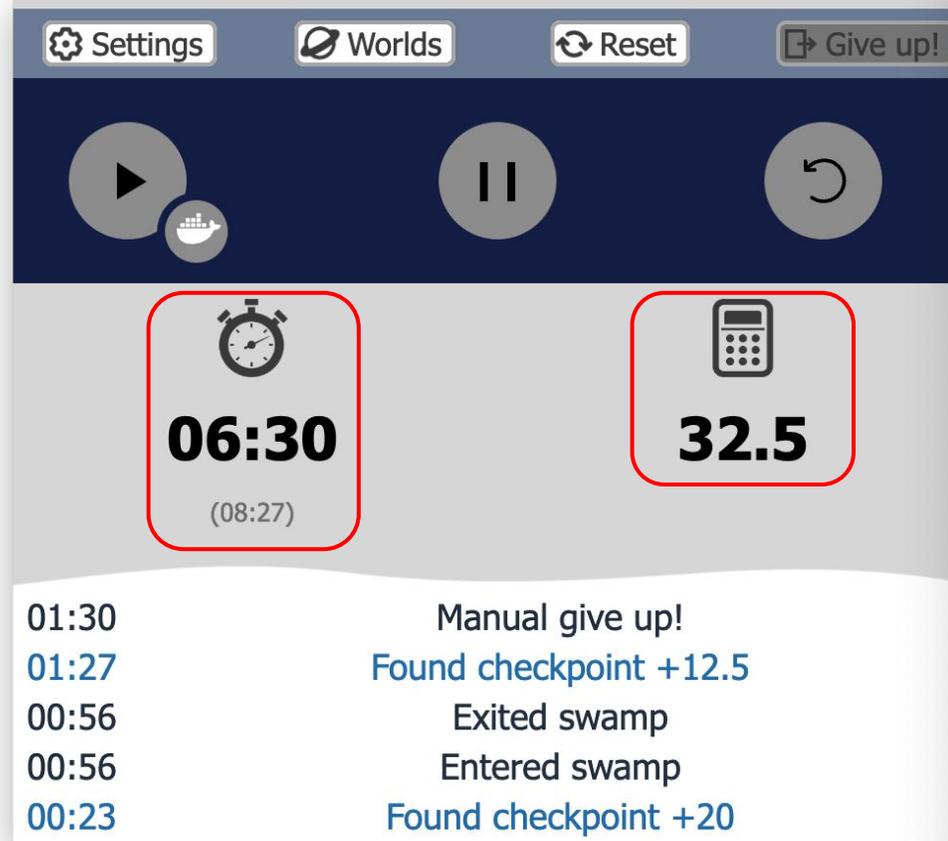
Annotations:

- End the round (points to Give up! button)
- LoP (points to refresh button)
- Pause (points to pause button)
- Simulation runtime (points to 06:55)
- Real life runtime (points to (08:53))

00:56	Found checkpoint +20
00:44	Lack of Progress (via robot) -5

After the run

- The round ends when the team captain calls the game end
- The robot sends the exit message on its own
- **Write down the duration and score**



The screenshot shows the RoboCup Junior control interface. At the top, there are buttons for Settings, Worlds, Reset, and Give up!. Below these are play, pause, and refresh buttons. The main display area shows a timer at 06:30 (with 08:27 remaining) and a score of 32.5. Below the main display is a log of events:

Time	Event
01:30	Manual give up!
01:27	Found checkpoint +12.5
00:56	Exited swamp
00:56	Entered swamp
00:23	Found checkpoint +20

Enter into CMS

- Go to <https://intl.rcj.cloud/home>
- Login with simjudge account - password will be handed out separately
- Click on the RoboCup2025 Competition



- Click on “Rescue Simulation (Erebus)”



Live Demo



The rest is kinda self-explanatory...
We will do a live demo.