CODECO

IRCEP CHALLENGES

Field	Details
1. **Name of Challenge**	Scalability testing of fine tune training for MARL agents
2. **Partners**	I2CAT (Contact Person is Risk Touma at rizkallah.touma@i2cat.net)
3. **Submission Specifications**	Test scenario where re-training (fine-tuning for custom metric) is triggered. The test should focus on improvement for all agents across MARL neighbourhoods, measuring model performance both in terms of training time and overall accumulated reward. Actions to be conducted are the following: - Changing optimization objective to custom metric, triggering retraining process. - Studying the effect of training multiple agents in the same ecosystem simultaneously, including the scalability of this approach and whether it leads to a deterioration in performance. - Analyse training times and performance obtained. Create a metric which measures worthiness of training, being computed as Δperformance / time_spent
4. **Platforms to be used**	Instructions on which repositories and components to clone will be provided through a repository dedicated to this challenge in this gitlab project. Users are free to use any tool, programming language or visualization they see fit to conduct the experiments and implement the modifications they see needed.

	All submissions will be done through the same gitlab project. Each group should create a branch in the challenge repository and upload its submission. This submission must include all code, experimentation, graphics and visualizations executed. A main README file with explanations of how to navigate the submission and of the main analysis results obtained is also mandatory. A backup of the submission, in Zip, to be included in the application, if possible.