Escola Tècnica Superior d'Enginyeria
Universitat Rovira i Virgili

[DEIM]

Multi-Agent Systems

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Course labs introduction

MESIIA – Master's Degree in Computer Security Engineering and Artificial Intelligence
MAI - Master's Degree in Artificial Intelligence

Outline

1. Course labs objective
2. URV Virtual Campus
3. Course timing and evaluation
4. Software requirements

1. Course labs objective

Design and develop a multi-agent system using the JADE and Dedale frameworks

2. URV Virtual Campus

- All the material for the course will be available at the **URV Virtual Campus** (https://campusvirtual.urv.cat/)

2023-2024 MULTI-AGENT SYSTEMS (17635101, 17685104) PRESENCIAL.

- In the **Practical part** section, you will find all the materials related to the practical part of the course

3. Course timing and evaluation

		Lab/Practise	Comments
1	27/09/2023	Presentation of the lab sessions	
2	4/10/2023	Maven, Git and OSM	
3	11/10/2023	Introduction to JADE	
4	18/10/2023	JADE agents and behaviours	
5	25/10/2023	JADE messaging and special agents	
6	1/11/2023		
7	8/11/2023	Design activity presentation	10%
8	15/11/2023	Introduction to Dedale (1/2)	
9	22/11/2023	Introduction to Dedale (2/2)	
10	29/11/2023	Implementation - preliminary revision	5%
11	6/12/2023		
12	13/12/2023	Coordination design delivery / Interaction protocols	10%
13	20/12/2023	Follow-up of practical work	
14	10/01/2024	Follow-up of practical work	
15	17/01/2024	Practical work presentation	30%

4. Software requirements

- IntelliJ IDEA Community as the IDE. Other JAVA IDEs are allowed. IntelliJ is recommended for its bundled version of Maven
- Maven to add dependencies, build and execute the projects. If IntelliJ is used, it does not need to be installed separately
- JAVA as the programming language. In IntelliJ it can be downloaded automatically
- JOSM as an editor for OpenStreetMap
- Git as the source control system

4. Software requirements

- To install the JAVA JDK through IntelliJ
  1. Create a blank JAVA project or open an existing one
  2. File -> Project Structure (*Ctrl + Alt + Shift + S*)
  3. Add SDK -> Download JDK
  4. Select any version of **JDK 18** and download it