**Practical exercise 2012-2013**

There are 3 main packages in the Multi Agents practice. The most basic classes for each package are detailed based on their function:

* **Package: Sma**
  + Central Agent: Is the agent that contains the information related to the interface by the instance of the GraphicInterface class. Initially it loads the practice parameters for the game and set this information in the InfoGame class. This information is located in the game.txt file.
  + Coordinator Agent: Is the agent that knows the changes that dynamically happen in the map by using the AuxInfo class. Initially this information is sent from the Central Agent.
  + UtilsAgent: Utility class for search and create agents (dynamically).
* **Package: Sma gui**
  + GraphicInterface: Main class for the UI. It loads the MapVisualizer (Map cells) and the GraphicAgentPanelInfo (right panel with info about agents).
  + MapVisualizer: Class used to create and paint the map cells. It extends from a JPanel.
    - When the paintComponent method is called, based on the information of the cell, a boat or sea is painted by the drawAgent & drawSea methods.
    - The initial state of the map are obtained from the AuxInfo class, specifically the method getMap() which contains the cells.
  + GraphicAgentInfoPanel: Contains the information about the boats and ports agents (kilograms allowed in each deposit, kilograms filled in each deposit and money available for each port). Each GraphicAgentInfoPanel object represents an agent.
* **Package: Sma ontology**
  + InfoGame: Contains the information of the game (encapsulated in the AuxInfo variable). Initially, the boats agents are defined randomly on the readGameFile method.
  + AuxInfo: Contains the map cells and information of the agents. It’s send from the Central Agent to the Coordinator Agent when the game is initialized. This information may be used for the agents to determine next movements or actions, coordinations, etc.
  + InfoAgent: Represents the information of a specific agent in the practice (boat or port). The properties of each kind are encapsulated in this class (type of agent, max quantity of seafood group allowed, etc).