| **Functional Requirement** | **Class Name** | **Function** | **Method Name** |
| --- | --- | --- | --- |
| R1: Register a Wetland | Main | Read inputs | createWetland() |
| Dagma | Check if there are clones | SameNameWetland() |
| Dagma | Add wetland to the array | addWetland() |
| Dagma | Get an empty index in the array | EmptyIndexWetland() |
| WetLand | Create an object of WetLand type | WetLand() |
| R2: Register a Specie | Main | Read inputs | createSpecie() |
| **Option 1** | | |
| Dagma | Get an empty index in the array of dagma | EmptyIndexSpecie() |
| Dagma | Check if there are clones | SameNameSpecie() |
| Dagma | Check if there are clones | SameScientificNameSpecie() |
| Dagma | Add wetland to the array of Dagma | addSpecie() |
| Specie | Create an object of Specie type | Specie() |
| **Option 2** | | |
| Dagma | Shows the registered wetlands | WetlandsAvailable() |
| Dagma | Search the index of a wetland by their name | FindWetland() |
| Dagma | Shows the species registered in the array from dagma | SpeciesAvailable() |
| Dagma | Search the index of a specie by their name | FindSpecie() |
| Dagma | Get an empty index in the array of dagma | EmptyIndexSpecie |
| Dagma | Add the Specie to the array of species of Wetland, and add the Wetland to the array of habitats from Specie | addSpecieToWetland() |
| R3: Register an event in a Wetland | Main | Read the inputs | addEvent() |
| Dagma | Sents an object of Event type as parameter to addEvent() from WetLand class | addEvent() |
| Date | Creates an object of date type | Date() |
| Event | Creates an object of event type | Event() |
| WetLand | Get an empty index in the array of WetLand | EmptyIndexEvent() |
| WetLand | Adds the event to the selected Wetland | addEvent() |
| WetLand | Sum 1 to the attribute numOfMaintenance if the event is form maintenance type | addNumOfMaintenance |
| R4: Show the quantity of maintenance that a Wetland has | Main | Read the inputs and prints the return of getMaintenanceFromWetland | NumOfMaintenanceForWetland |
| Dagma | Shows the registered wetlands | WetlandsAvailable() |
| Dagma | Search the index of a wetland by their name | FindWetland() |
| Dagma | Returns the number of maintenance that the selected Wetland has | getMaintenanceFromWetland |
| Wetland | Returns the number of maintenance from the Wetland | getNumOfMaintenance |
| R5: Show the Wetland with less flora | Main | Prints the return of WetLandLessFlora from dagma | WetLandLessFlora() |
| Dagma | Compares the number of lora of each WetLand looking for the one with the less flora | WetLandLessFlora() |
| WetLand | Returns the number of flora from a WetLand | FloraCount() |
| R6: Show the habitats from a specie | Main | Read the inputs and prints the return of SpecieHabitatSearcher() | HabitatSearcher |
| Dagma | Shows the species registered in the array from dagma | SpeciesAvailable() |
| Dagma | Search the index of a specie by their name | FindSpecie() |
| Dagma | Returns the name of the WetLands were a specie is located | SpecieHabitatSearcher() |
| Specie | Returns the name of the WetLands were the specie is located | HabitatSearcher() |
| R7: Show the info of all Wetlands | Main | Prints the return of toString from dagma | AllWetlandsInfo() |
| Dagma | Returns a String with the information from all the registered wetlands | toString() |
| R8: Show the Wetland with most fauna | Main | Prints the return of WetLandMostFauna from dagma | WetLandMostFauna |
| Dagma | Compares the number of fauna of each WetLand looking for the one with the most fauna | WetLandMostFauna |
| WetLand | Returns the number of fauna from a WetLand | FaunaCount |