Synthesis

We both have a great experience with the project, we have developed more knowledge in Java. It was great to develop with the method of pair programming. We exchange our point of views with the functions/method. In our project, we use the abstract class, sort some list of elements, use interfaces, many conditions (if, else, switch case, etc.) and throw some error.

In the beginning, we were lost by how to do the enclosure with the aviary and aquarium but after some time we find a way to do a good quality of the code. We also have this problem with animals because we have the species but their group too with sea, terrestrial and flying animals. So, we came up with the use of interface for the group sea, terrestrial and flying and different class which all extends to Animals.

After we complete all the functions/methods that we need in the project zoo. The functions for the zoo are the animals to be able to eat, to be heal, to make a sound, for the enclosure to add or remove animals and for the employee to feed the animals, heal them, transfer them to one enclosure from another and to examine the state of an enclosure.

For the test part of our project, we didn't use the Junit on eclipse (an integrated development environment IDE) because it didn't recognize the @Test and we didn't configure our eclipse correctly. So, we use un file where we just create some animals and try their functions/methods.

Finally, we had to create all the menu of the different actions in the zoo. This part was very long and repetitive because the structure of the code where almost the same. This was the summary of our way of thinking, the things we didn't do and our conception model.

Technical assessment

we chose to adopt a rather intuitive structure for the arrangement of the classes for example all the class animals are in a folder animal, the species of the animals which are represented in the form of interfaces are arranged in a folder Animals. Especes etc.

The class implements the different interfaces, and this idea is reused for the simulation part of the wolf.

A class animal was thus created with the various corresponding methods and each class (whales, eagles, etc.) extend of this class animals.

Keeping the Javadoc, it was necessary to pay attention concerning the errors of comment like @param and encoding UTF-8 it was necessary to add a line of specific code at the time of the generation of the Javadoc to avoid the problems concerning the characters.

Problems encountered

The problem with encountered are most of them for the enclosure and especially the menu because we had to configure to take the input of the user to do some functionality. It ends, that we found more problem as we develop the menu like if there is not an enclosure of aquarium then if the user selects this enclosure, then he will be in a loop because there is no enclosure of this type.

The Penguin blocked us because being at the same time a flying animal, marine, and terrestrial it was necessary to find a solution to join the 3 interfaces in only one, the problem being solved but late.

Differences with forecasts

For the forecasts, there is not such great changes with what we expect of our application maybe there are problems we encountered during this project that block one or two functionalities of our program and this is something that we didn't expect.

There is maybe, the folder Game that we didn't thing at the beginning of the project but now it make senses that we have to initialize the game.

Improvement measures

Now that we finish the project, we can see many things that can be improve like the architecture of our project but also the utilization of a design pattern in our project. In our project they are many functionalities like the menu that repeat in many files.

We didn't have time to optimize our project, because there are things, we didn't check like the different combine actions for the zoo.

There is also the case of the penguin that were hard to handle because he is a flying and sea animal. Normally for a flying and sea animal but also a terrestrial animal (this was not asked in our project) we must create a special enclosure with a mix of an aviary and an aquarium, but we didn't have time to implement that.