

# Object Oriented Programming

## Report Lab 3:

The aim of this lab session was to implement the design of Seminar 3 that partially modeled an online store. In order to do so we had to create a new class called `OnlineStore`. In the main method of the online store, we had to declare a list of users, items and packages. And create instances for each one of them, buy items, sell items, expel users, and calculate the total price and benefit of the application.

Overall, this lab has been a real challenge for the team. Yet, it was not because of the overall complexity of the exercise; but because we were mostly lost when it came to find the right approach to the work we needed to do. Was it so that we had to resort to communication with the teacher on more than one occasion since we were unable to understand or refine a strategy from the lab's instructions.

Nonetheless, we did face some minor problems that were relatively easy to overcome, such as the one with the class `Item`. Again, those were mostly because we needed a more in depth explanation of the contents of the class. Basically, we didn't know how to calculate the "TotalProfit" method and the "GetPrice". In general, we needed to know more about how to calculate said total profit, since we didn't know if it referred to every unit sold or the overall amount of units sold. In order to fix that we assumed that it was referring to the general amount of units sold and went with that approach.

In addition, we also had trouble with the class `Package` and its function "IsSuitable" since we were unable to calculate if the package was suitable for every different function, having always a positive answer no matter the content of said package. In order to fix that we went to check the fix values of envelope and use as decision criteria a comparison between `ItemSize` and `Package`.

Parallely, we also were having trouble with the attribute `Deadline` since before it was declared as a string and that forced us into a ton of errors. Instead, we decided that it was wiser to create a class "Date" and work from there. In addition, we also did the function frozen using this as a base.

Last but not least it must be noted that we also encountered problems with the functions `IsSuitable` and `AssignsBestPackage`. but those were some minor coding errors that we had done and were solved with the help of some tweaking and redesigning said parts of the code.

In conclusion we must say that we had quite some extensive troubles when understanding the information that the lab supposedly gave to us since we found out that many times we were totally lost and no clue or specification given either about the format of items that we needed to be used as base components from which upon we should create methods or establish relationships between classes. Thanks to the exhaustive inquiring we did to teachers we were somewhat able to come to a solution.

Jordi Alfonso Poza  
Eric Navarro López

Overall, we believe that the difficulty of this lab was not in the coding skill needed but rather in understanding or being able to compensate for the lack of specification given about what was needed to be used in it.