## Introduction

The purpose of this document is give a explanation of each decisition in the project relationed to code of the solution.

## **Design pattern**

Singleton → it was used, I saw the purpose of a piece called "Calculator", it should manage the logic to manage the process of choosing of the articles, so the calculator can be used in different pieces code, it mean "no depend of others to work"

Validator  $\rightarrow$  This pattern allow to separate the conditionals and purposes of each validation, so each conditional could be used in another piece code without create blocks of the same condition in other sides of the code, this help "re-usability".

## A future pattern

Factory  $\rightarrow$  Factory can used, the idea is leaving the purpose of the code could be scaled or adapted depend on needs of the situation, so IFileReader can help us, the piece of analizing of each file may be adapted for all kinds of file in the future could appear in the process.

## **SOLUTION**

Each piece code is working with the main focus "unique responsability" according the needs of every process should be accomplishing the purpose of the problem, where the validators are software component to validate the information of some main components (File, Articles), the FileReader is focusing in read and transform the information of each file and get the bag's list to work in the algorithm to choose the articles of every bag.