

Unit Test

| Method | Input | Output | Test case |
|--------------------------------------|--|---------------------|-----------------------------|
| AddProductController | | | |
| addProduct() | "101" "hola" "3.5" "4,5" "Guido" | true | Valid product, new ID |
| | "" "Collar" "10" "3.5" | false | Empty ID field |
| | "ab" "hola" "3.5" "10" | false | Id invalid |
| | "ab" "hola" "" "/%" | false | Invalid price |
| | id | false | duplicate |
| | "-5" "- 2.5" | false | positive values |
| | "@pulser@" | false | Invalid product |
| AttendanceController | | | |
| registerAttendance() | "Louredes" "3/08/2025" "03/08/2025" | success=true | Successful registration |
| | Null "3-08-2025" | false | Name null |
| | "louredes" "" | false | Empty date |
| | "Luis" "2025-08-03" "3/8/2025" true | false | Incorrect format date |
| | " " | false | empty list |
| AttendanceHistoryController | | | |
| getArtisanAttendanceHistory() | "Lourdes" "lourdes" | List with documents | Returns the artisan history |

| | | | |
|--------------------------|---------------------------------|--|-------------------------------------|
| printAttendanceHistory() | " " | false | Artisan inexistent |
| | "" | true | Printing method runs correctly |
| MonthlyReportController | | | |
| calcularTotalMensual() | 10.0 20.5 0,5 | 31.0F | Total correct |
| | () | 0.0F | no sales |
| | 0 10.0 | 10.0F | Ignore void |
| PenaltyController | | | |
| calculatePenalty() | "Guido" "guido" | Days absent, total days, total fine calculated | Fine based on incomplete attendance |
| | Artisan 100% attendance | Days =0 Penalty=0 | No absences |
| | Artisan non-existent | non-existent | non-existent |
| UserController | | | |
| processLogin() | "guido" "1234" | success=true | Login correct |
| | "guido" "password incorrect" | false | Incorrect password |
| | "" "" | false | void |
| getArtisanName() | "guido" "1234" | "guido" o name expected | Return name |
| | User not found | Artisan unknown | The user does not exist |
| | "guido" "1234" | true | welcome message |
| ProductManager | | | |
| updateProductName() | 101 "Name" | true | Name valid |
| | "COLLAR" | true | Name valid |
| updateProductPrice() | 101 3.5 | true | Price valid |

| | | | |
|-------------------------|-----------------------|---------|------------------|
| | "" | false | void |
| updateProductStock() | 20 | true | Valid stock |
| | 3.5 | false | Invalid stock |
| ProductValidator | | | |
| isValidName() | "collar" "pulsera" | true | Valid product |
| isValidPrice() | -3.5 | false | Invalid price |
| | 0 | false | Invalid price |
| isValidStock() | 0 | true | Valid stock |
| | -5 | false | Invalid stock |
| SaleCalculator | | | |
| calculateTotal() | 0.6 | true | Total price |
| | -1.5 | false | invalid |
| | 0.6+0.3 | 0.99999 | validate total |
| StockManager | | | |
| updateStockAfterSale() | 8 | true | Stock sufficient |
| | 0 | true | Upadte stock |
| | -1 | false | Invalid stock |