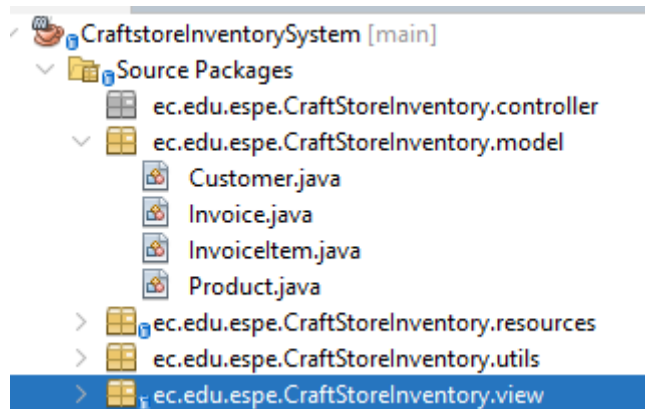**Alvarado Grefa Frank**

HW22 - Pitfalls Fixed

Pitfall 1. –

Pitfall 2.-

```
public boolean IdentityCardValidation(String IdentityCard) {
    if (IdentityCard.length() !=10){
        return false;
    }
```

Pitfall 3.-

```java
package ec.edu.espe.CraftStoreInventory.controller;

/**
 *
 * @author Alfonso Arroyo <As-Byte Wizards> DDCC ESPE
 */
public class CustomerController {
    public boolean IdentityCardValidation(String IdentityCard) {
        if (IdentityCard.length() !=10){
            return false;
        }

        int provincia = Integer.parseInt(IdentityCard.substring(0,2));
        if (provincia < 1 || provincia > 24) {
            return false;
        }

        int tercerDigito = Integer.parseInt(IdentityCard.substring(2, 3));
        if (tercerDigito < 0 || tercerDigito > 6) {
            return false;
        }

        int suma = 0;
        int[] coeficientes = {2, 1, 2, 1, 2, 1, 2, 1, 2};
        for (int i = 0; i < 9; i++) {
            int digito = Integer.parseInt(IdentityCard.substring(i, i + 1));
            int producto = digito * coeficientes[i];
            suma += (producto > 9) ? producto - 9 : producto;
        }

        int ultimoDigito = Integer.parseInt(IdentityCard.substring(9, 10));
        int decenaSuperior = ((suma + 9) / 10) * 10;
        int digitoVerificador = decenaSuperior - suma;

        return digitoVerificador == ultimoDigito;
    }
}
```

Pitfall 4. –

```java
    }
    public void addCustomerToDB(Customer customer){
        cloudDB.uploadCustomerData(customer);
        JOptionPane.showMessageDialog(null, "Customer added successfully!");
    }


    Customer customerr = new Customer(id, name, address, email, phone);
    customerController.addCustomerToDB(customerr);
} catch (Exception e) {
        JOptionPane.showMessageDialog(this, "Error adding customer: " + e.getMes
}
```