

Systems Integration - Assignment #2

João Moreira - 2015230374

João Soares - 2009113071

2019/2020

1 Introduction

The intent of this assignment is to develop a web application to manage an online store of secondhand items, called MyBay and deploy it using WildFly Application Server. In order to develop this application, we build a Maven architecture and used Java Enterprise Edition (Java EE) and divided the system into three layers: presentation, business and data.

2 Presentation layer

To develop the presentation layer we used JavaServer Faces (JSF).

- structure of the webpage -¿ layout and templates

- details that were most complex to implement in the interface

- password storage

3 Business layer

This layer interacts with the data layer, built with Enterprise JavaBeans (EJB).

- describe the time of ejbs (stateless, interface types, transaction management)

- what data is being transferred from the business layer to the presentation (how)

- what data do we collect from the data layer to the business layer

4 Data layer

This layer works atop a database (postgres) and exposes CRUD functionalities using EJBs

- Include ER

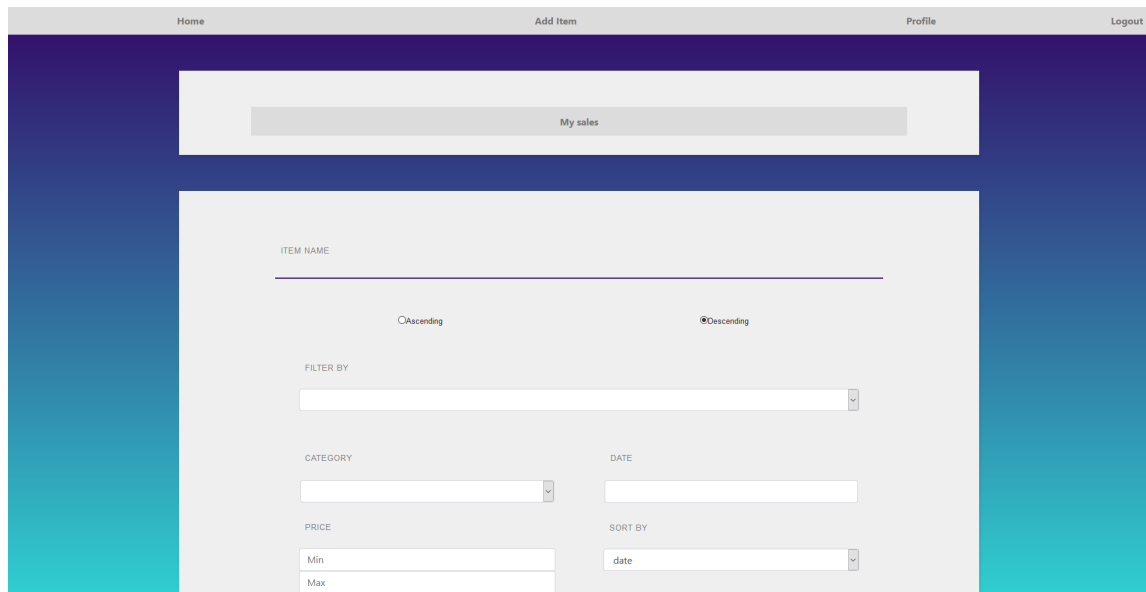


Figure 1: Home page layout

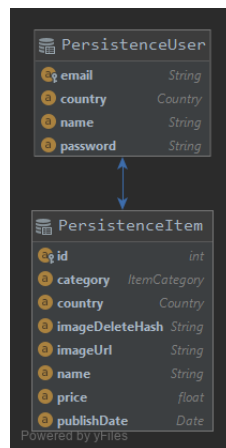


Figure 2: MyBay EJB Entity-Relationship (ER) diagram

listing of entities

5 Project management and packaging

The logging tool used was Simple Logging Facade for Java (SLF4J)

description of poms and structure of the project
Acronym list:

Java EE Java Enterprise Edition

JSF JavaServer Faces

EJB Enterprise JavaBeans

JPA Java Persistence API

JPQL Java Persistence Query Language

ORM Object/Relational Mapping

SLF4J Simple Logging Facade for Java

ER Entity-Relationship