# **ER: Requirements Specification Component**

# A1: Project Presentation - Online Auctions

#### Context & Motivation

- The purpose of this project is the development of an information system with web interface to support online
  auctions. With today's importance of internet in our lives, transferring physical auctions to online auctions
  marks a huge step into the online market, which makes this project challenging and interesting. Any
  registered user will be able to place items up for auction or to participate in auctions. For that, the system
  should manage bidding deadlines and determinate the winner and many more features;
- This platform is dedicated to everyone over the age of 17, family, friends, groups of people and whoever is interested in Online Auctions.

## **Goals & Objectives**

The main goals for this project are to create a platform able to automatically manage auctions with a smooth
and clean interface, thinking about the user's needs and comfort. Also with the system managers, we want to
ensure that the environment is safe and scam free, protecting our users.

#### **Features**

- The application allows users to create a catalog of items for auction and to see the current bidding, as well as the corresponding bidder. In addiction, bidders can watch the auctioneer catalog and decide which items to bid, according to the current bid.
- The interface will be designed to help users having a pleasant experience, adapted to all devices and focused
  on its safety.
- Once authenticated, users will have a profile with name, address, country and profile picture, as well as a
  review section where other users can comment their experience with past auctions.
- Regarding our search features, users will be able to search by categories, filter certain content and search by keywords.

### Access Groups

- Users are separated into groups with different permissions, featuring system managers, bidders and auctioneers:
  - o Managers will be able to stop auctions, block users and delete content on the platform.
  - Bidders will be able to participate in auctions.
  - o Auctioneers will be able to place items for auction.
  - There is also the possibility of having guests, which are unauthenticated users who will be able to watch catalogs and currents bids but will not be able to participate in with bidding or auctions.

## A2: Actors and User stories

This artifact contains the specification of the actors and their user stories.

#### 1. Actors

Users are represented in this diagram:

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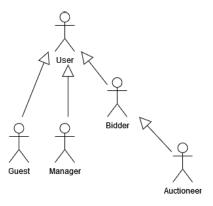


Figure 1: The Actors

| Identifier | Description                                       |
|------------|---|
| User       | Generic user who has access to public information |
| Auctioneer | Can put an item for auction.                      |
| Bidder     | Can bid on a auction.                             |
| Guest      | Can be able to browse and to sign-up or sign-in.  |
| Manager    | Can be able to manage auctions and users.         |

Table 1: Actors Identification

## 2. User Stories

This section includes each user stories by each type of actors.

### 2.1. Guest

| Identifier | Name        | Priority | Description   |
|------------|-------------|----------|---|
| US01       | Sign-in     | High     | As a Guest, I want to authenticate into the system so that I can access privileged information.   |
| US02       | Sing-<br>up | High     | As a Guest, I want to register into the system so that I can authenticate myself into the system. |

Table 2: Guest User Stories

### 2.2. User

| Identifier | Name                 | Priority | Description   |
|------------|----------------------|----------|---|
| US11       | See Home             | High     | As a User, I want to access the home page, so that I can see<br>a brief presentation of the website.                  |
| US12       | Search               | High     | As a User, I want to be able to search for items being auctioned, so I can find them easily.                          |
| US13       | Check Current<br>Bid | High     | As a User I want to check the current bid of the auction, so I can check the price.                                   |
| US14       | View Auction         | High     | As a User I want to see the auction page, to see all the information about the auction.                               |
| US15       | See About            | Medium   | As a User, I want to access the about page, so that I can see a complete description of the website and its creators. |
| US16       | Check FAQs           | Medium   | As a User, I want to access the FAQs, so that I can get quick answers to common questions.                            |

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| Identifier | Name                | Priority | Description   |
|------------|---------------------|----------|---|
| US17       | Consult<br>Contacts | Medium   | As a User, I want to access contacts, so that I can come in touch with the platform creators.             |
| US18       | View<br>Description | Medium   | As a User I want to check a full description of the product, so I can check all the information about it. |

Table 3: User User Stories

### 2.3 Auctioneer

| Identifier | Name                  | Priority | Description  |
|------------|-----------------------|----------|--|
| US21       | Start Auction         | High     | As an Auctioneer I want to be able to start auctions, so I can put up items for auction.             |
| US22       | Monitor               | High     | As an Auctioneer I want to be able to monitor auction, so I can see its progress.                    |
| US23       | Statistics            | High     | As an Auctioneer I want to be able to check the statistics, so<br>I can view and review the ratings. |
| US24       | Remove<br>Auction     | High     | As an Auctioneer I want to be able to remove an auction if I don't want to sell the product anymore. |
| US25       | Manage<br>Winning Bid | High     | As an Auctioneer I want to be able to manage the winning bid.  |

Table 4: Auctioneer User Stories

## 2.4 Bidder

| Identifier | Name               | Priority | Description  |
|------------|--------------------|----------|--|
| US31       | Bidding            | High     | As a Bidder I want to bid in auctions if I'm interested in buying a product.                     |
| US32       | Cancel bid         | High     | As a Bidder I want to cancel my bids if I'm not interested in the product anymore.               |
| US33       | Review             | High     | As a Bidder I want to leave review, so that I can give feedback to auctioneers.                  |
| US34       | View<br>Statistics | High     | As a Bidder I want to see the Statistics of the auctioneer, so that I can check its information. |
| US35       | View Profile       | High     | As a Bidder I want to be able to check my own profile, so I can see my personal information.     |
| US36       | Edit Profile       | High     | As a Bidder I want to be able to edit my profile, so I can keep it updated.                      |
| US37       | Watch-list         | Medium   | As a Bidder I want to add items to the watch-list if I'm interested in them.                     |

Table 5: Bidder User Stories

# 2.5 Manager

| Identifier | Name              | Priority | Description   |
|------------|-------------------|----------|---|
| US41       | Cancel<br>Auction | High     | As a Manager I want to cancel inappropriate auctions, so that it doesn't disrespect the rules.          |
| US42       | Ban User          | High     | As a Manager I want to ban users who disrespect the rules, so that I can keep a respectful environment. |

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| Identifier | Name                | Priority | Description   |
|------------|---------------------|----------|---|
| US43       | Moderate<br>Auction | High     | As a Manager I want to be able to moderate the auctions, so that I can check if everything is going as it should, and change it, if needed. |

Table 6: Manager User Stories

## 3. Supplementary Requirements

This section contains business rules, technical requirements and restrictions on the project.

## 3.1. Business rules

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| Identifier | Name              | Description   |
|------------|-------------------|---|
| BR01       | Deleted Client    | When a Client(Auctioneer/Bidder) deletes his account, his actions will be also deleted.   |
| BR02       | Completed auction | When the auction is marked as complete future bids are closed.                            |
| BR03       | Bidding           | An item is only available for bidding if the user is logged.                              |
| BR04       | Auction           | An Auction is visible by logged and non logged users.                                     |
| BR05       | Review            | A Bidder can review an auctioneer and vice-versa.   |
| BR06       | Date expiration   | The auction will stop being visible to all users after an end date set by the Auctioneer. |

Table 7: Business rules

## 3.2. Technical requirements

| Identifier | Name               | Description  |
|------------|--------------------|--|
| TR01       | Availability       | The website must be available 99 percent of the time in each 24-hour period.   |
| TR02       | Accessibility      | The website must ensure that everyone can access the pages, regardless of the Web browser they use.  |
| TR03       | Portability        | The server-side system should work across multiple platforms (Linux, macOS, etc.).  The Online Auction system is designed for all kind of users, so it must be important to work across multiple platforms increasing the user base.                 |
| TR04       | Security           | The system shall protect information from unauthorized access through the use of an authentication and verification system.  |
| TR05       | Usability          | The website should be simple and easy to use.  The Online Auction system must be designed for all kinds of users,  even the ones without digital literacy.   |
| TR06       | Web<br>Application | The website should be implemented as a Web application with dynamic pages (HTML, JavaScript, CSS and PHP).  The Online Auction system must be acessible without the need of installing any specific application, adopting standard web technologies. |
| TR07       | Scalability        | The system must be prepared to deal with the growth in the number of users and their actions.  |
| TR08       | Database           | The PostgreSQL database management system must be used.  |

Table 8: Technical requirements

### 3.3. Restrictions

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| Identifier | Name            | Description   |
|------------|-----------------|---|
| C01        | Deadline        | The system should be ready to use at the end of the semester. |
| C02        | Age Restriction | The registered users must be over 17 years old.               |

Table 9: Restrictions

# A3: Information Architecture

This artifact's main goals are: previewing the user interface of the web app, specify multiple interactions between the user and the interface and identify the previously described user requirements.

### 1. Sitemap

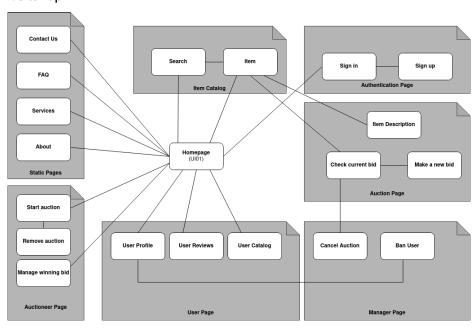
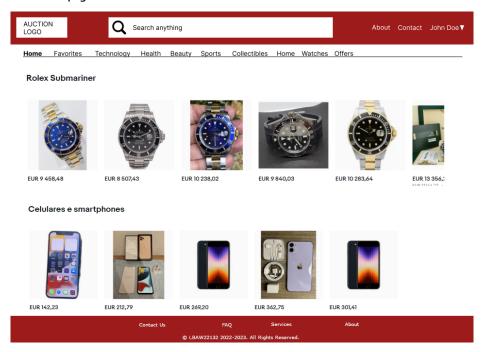


Figure 2: Sitemap

#### 2. Wireframes

### UI01: Homepage



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Figure 3: Homepage

### UI02: User Profile

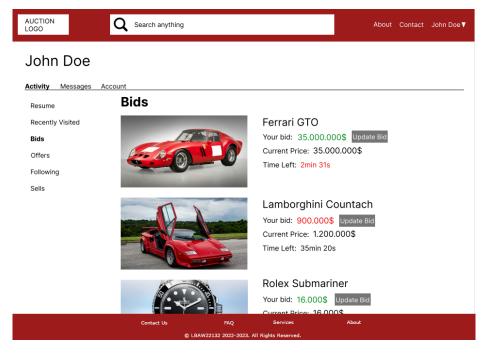


Figure 4: User Profile

## **Revision history**

Changes made to the first submission:

1. ...

2. ...

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