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:
 - Managers will be able to stop auctions, block users and delete content on the platform.
 - Bidders will be able to participate in auctions.
 - 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:

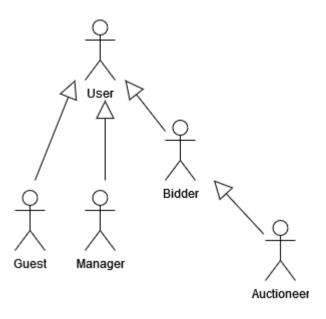


Figure 1: The Actors

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- 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 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 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.
US17	Consult Contacts	Medium	As a User, I want to access contacts, so that I can come in touch with the platform creators.

Identifier	Name	Priority	Description
US18	View 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 I can view and review the ratings.
US24	Remove 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 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 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 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.
US43	Moderate 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.

3. Supplementary Requirements

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

3.1. Business rules

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 Application	The website should be implemented as a Web application with dynamic pages (HTML, JavaScript, CSS and PHP). The Online Auction system must be accessible 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

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

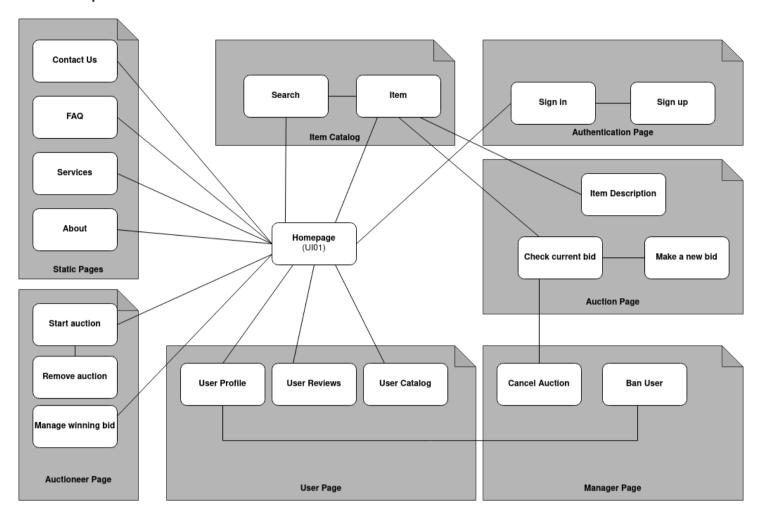


Figure 2: Sitemap

2. Wireframes

UI01: Homepage

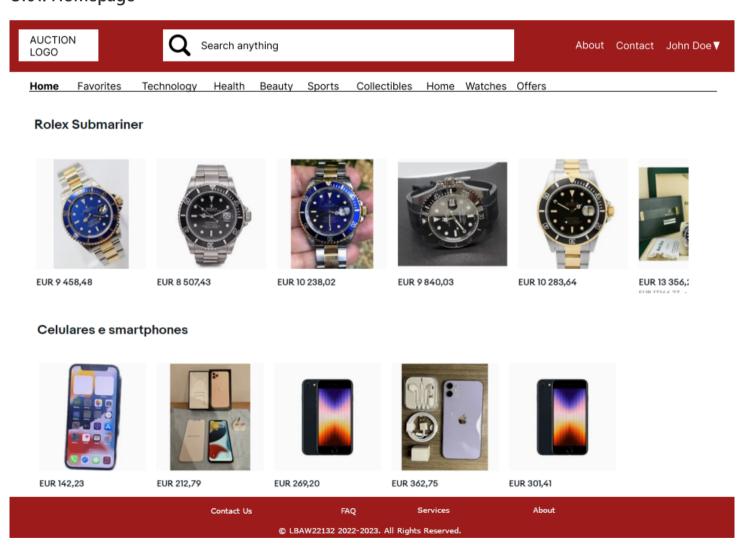


Figure 3: Homepage

UI02: User Profile

John Doe

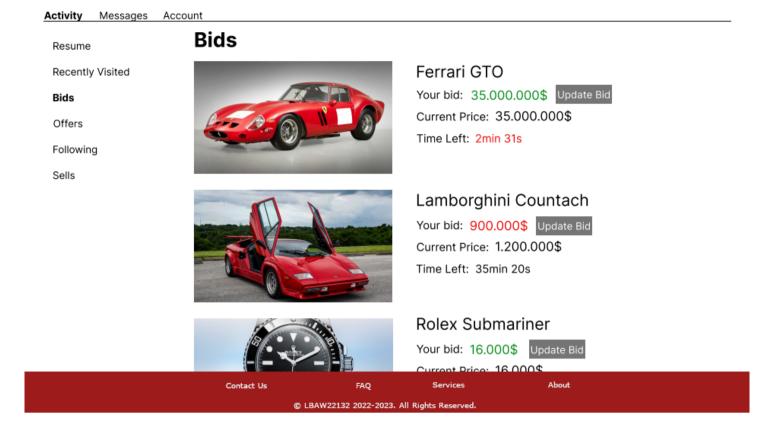


Figure 4: User Profile

Revision history

Changes made to the first submission:

1. ...

2. ...

GROUP22132, 26/09/2022

- Miguel Tavares, <u>up202002811@up.pt</u> (Editor)
- Gonçalo Ferreira, <u>up202004761@up.pt</u>
- Domingos Santos, <u>up201906680@up.pt</u>
- João Félix , <u>up202008867@up.pt</u>