ER: Requirements Specification Component

Project vision.

A1: Hand Of Midas

The main goal of the Hand of Midas project is to provide a web based service, where its users are able to buy and/or sell a variety of items of rare characteristics, through online auctions, namely art pieces, decór items, books and jewelry. As the name states, this website encourages the community to increase the added value of such items. The market of rare artifacts is not usually easy to enter, you must know how each community works and lose a lot of time searching for the right item or the right seller, and sometimes the auctions can be private or invitation-only. Hand of Midas seeks to create a more democratic process for interested parties, allowing them to bid on and sell in online auctions for exclusive artifacts in an easy and simple way.

This website can be used by collectors, enthusiasts and sellers to find and sell unique items. The users need to be authenticated in order to bid on an existing auction, put up an item for sale and manage its auction or even follow auctions they are interested in. An Authenticated User has access to a private dashboard, where they are able to see their bidding and selling history. Authenticated users can be bidders and also sellers. The bidder bids on the seller's item and buys it, if their bid is the highest.

There's also an Administrator user group with broader permissions so they can manage all auctions and reports but also edit the categories in which the items are divided in. However, any Non-Authenticated User is able to see the active auctions, view other user profiles and search products by category, starting price, auction ending time and others. Visitors are able to login into the system, register themselves into the system and recover their password, if necessary.

The website will have a responsive design, which allows users to access it from a different range of devices such as smartphones, computers and tablets. Its main goal is to provide an easy and enjoyable experience for both bidders or sellers, and especially regarding browsing auctions and products.

A2: Actors and User stories

This artifact contains the specification of the actors involved and their user stories, serving as agile documentation of the projects requirements.

1. Actors

For the Hand Of Midas system, the actors are represented in Figure 1 and described in Table 1.

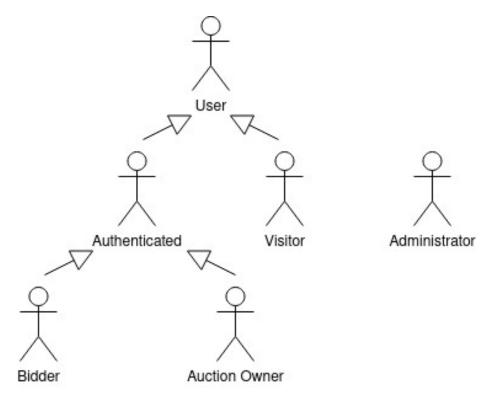


Figure 1: Hand Of Midas Actors.

Identifier	Description
User	Generic user that has access to
	public information, such as available
	auctions.
Visitor	Unauthenticated user that can
	register itself (sign-up) or sign-in in
	the system to participate in bidding
	or to create auctions.
Authenticated	Authenticated user that can search
	available auctions and manage their
	list of interests.
Bidder	Authenticated user that is able to
	bid in auctions.
Auction owner	Authenticated user that is able to
	create auctions of their own.

Identifier	Description
Administrator	Authenticated user that is responsible for the management of users and for some specific supervisory and moderation functions.

Table 1: Hand Of Midas actors description.

2. User Stories

For the Hand Of Midas system, please refer to the user stories presented below:

2.1. User

Identifier	Name	Priority	Description
US01	View active auctions	high	As a User, I must be able to view all active auctions, so that I'm able to find the ones that interest me.
US02	Browse auctions by category	high	As a User, I must be able to search auctions by their specific categories, so that it's easier to find items I'm interested in.
US03	Search auctions	high	As a User, I must be able to search an active auction, so that I can access a chosen auction at any given time.
US04	See Home	high	As a User, I want to access the home page, so that I can see a brief presentation of the website.

Identifier	Name	Priority	Description
US05	See About	high	As a User, I want to access the about page, so that I can see a complete description of the website and its creators.
US06	Consult Services	high	As a User, I want to access the services information, so that I can see the website's services.
US07	Consult FAQ	high	As a User, I want to access the FAQ, so that I can get quick answers to common questions.
US08	Consult Contacts	high	As a User, I want to access contacts, so that I can come in touch with the platform creators.
US09	View/Search user profiles	medium	As a User, I want to be able to search and see other user's profiles, so that i can access information that might interest me.

Table 2: User user stories.

2.2. Visitor

Identifier	Name	Priority	Description
US11	Login	high	As a Visitor, I want to login into the system, so that I may access more information.
US12	Registration	high	As a Visitor, I want to be able to register into the system, so that I may access information.
US13	Recover password	high	As a Visitor, I want to be able to recover my password by the registered email, so that I don't lose my account permanently.

Table 3: Visitor stories.

2.3. Administrator

Identifier	Name	Priority	Description
US21	Administer user accounts	high	As an Admin, I must to be able to search, view, edit and create user accounts.
US22	Block and unblock user accounts	high	As an Admin, I must have the ability to block and unblock accounts, so that I can manage the type of users on the website.

Identifier	Name	Priority	Description
US23	Manage auction	high	As an Admin, I must be able to view, edit and supervise any auction occurring at any time, so that I can make sure things run smoothly.
US24	Cancel auction	high	As an Admin, I must be able to cancel any auction, so that I can manage the type of auctions occurring on the website.
US25	Delete user account	low	As an Admin, I want to be able to delete accounts at will, so that I can remove unwanted users from the website.

Table 4: Administrator user stories.

2.4. Authenticated user

Identifier	Name	Priority	Description
US31	View/Edit Profile	high	As an authenticated user, I want to be able to view and edit my own profile, so that I can present myself in a way that I identify with.

Identifier	Name	Priority	Description
US32	Create Auction	high	As an authenticated user, I want to auction a new item, so that other users can bid on it and eventually buy
US32	Edit/Delete Auction	high	it. As an authenticated user, I want to be able to edit and/or delete any of my auctions, so that I can decide exactly what my auctions say and if I want them on the platform.
US32	Edit/Delete Comment	high	As an authenticated user, I want to be able to edit and/or delete any of my post on other user's auctions, so that my comments are not
US33	View My Auctions	high	permanent. As an authenticated user, I want to access the auctions I own, and all the information attached to them, so that it's easier to run those auctions.

Identifier	Name	Priority	Description
US34	Bid on Auction	high	As an authenticated user, I want to choose the amount of money to be placed, so that I can bid on an item.
US35	Logout	high	As an authenticated user, I want to logout of the system, so that the next person using the browser doesn't see my info.
US36	Follow Auction	medium	As an authenticated user, I want to follow an auction, so that I have a quicker access to the auctions I'm most interested in.
US37	View Followed Auctions	medium	As an authenticated user, I want to access my followed auctions, so that I can unfollowed them, or visit them more easily.
US38	View My Bidding History	medium	As an authenticated user, I want to see all the bids I made, so that I can see their value and to what auction they refer to.

Identifier	Name	Priority	Description
US39	Add Credit to Account	medium	As an authenticated user, I want to be able to transfer money into my account wallet, so that I can place bids on auctions
US310	Report Auction	low	As an authenticated user, I want to signal inappropriate content in an auction, so that administrators can review and deal with the problem as they see fit.

Table 5: Authenticated user stories.

2.5. Bidder

Identifier	Name	Priority	Description
US41	View Auction Bidding History	high	As a bidder, I want to access all the bids placed on an auction, so that I can keep track of everyone who has placed bids

Identifier	Name	Priority	Description
US42	Rate Seller	medium	As a bidder, I want to classify a seller, by leaving a 1 to 5 rating and/or a comment on their profile, so that other users have a better idea of that seller's reliability.

Table 6: Bidder user stories.

2.6. Auction Owner

Identifier	Name	Priority	Description
US51	Edit Auction	high	As an auction owner, I want to change the information of one of my auctions, so that it's up-to-date.
US52	Cancel Auction	high	As an auction owner, I want to completely remove an auction from the platform, so no one is able to see it.
US53	Manage Auction Status	medium	As an auction owner, I want to be able to change the auction status, so that it's visible (or not) to all users.

Table 7: Auction owner user stories.

3. Supplementary Requirements

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

3.1. Business rules

A business rule defines or constrains one aspect of the business, with the intention of asserting business structure or influencing business behaviour. Business rules often supplement usage or user interface requirements.

Identifier	Name	Description
BR01	Private Data Storage	Upon account deletion, shared user data is kept but is made anonymous
BR02	Independent Accounts	Administrator accounts are independent of the user accounts, i.e. they cannot create or
BR03	Auction Cancellation	participate in auctions. An auction can only be canceled if there are no bids.
BR04	Valid Bidding	A user cannot bid if his bid is the current highest.
BR05	Auction (Deadline) Extension	When a bid is made in the last 15 minutes of the auction, the auction deadline is extended by 30 minutes.
BR06	Vote/comment/review own auctions	A user cannot vote, comment nor review their own auctions.
BR07	Auction Dates	The sale date must be greater than the auction start date.
BR08	Minimum opening bid and raise	An auction owner has to set a minimum opening bid and minimum raise to their auction.

Table 8: Hand Of Midas business rules.

3.2. Technical requirements

Technical requirements are concerned with the technical aspects that the system must meet, such as performance-related issues, reliability issues and availability issues.

Identifier	Name	Description
TR01	Availability	The system must be available at all times.
TR02	Accessibility	The system must ensure that everyone can access the pages, regardless of whether they have any handicar or not, or the Web browser they use.
TR03	Usability	The system should be simple and easy to use. The Hand Of Midas system is designed to be used by collectors and enthusiasts with or without technical experience, so good usability is an important requirement.
TR04	Performance	The system should have response times shorter than 2s to ensure the user's attention.
TR05	Web application	The system should be implemented as a web application with dynamic pages (HTML5, JavaScript, CSS3 and PHP). It is critical that the Hand Of Midas system is easily accessible from anywhere without the need to install specific applications or software, adopting standard web technologies.

Identifier	Name	Description
TR06	Security	The system shall protect information from unauthorized access through the use of an authentication and verification system.
TR07	Robustness	The system must be prepared to handle and continue operating when runtime errors occur.
TR08	Scalability	The system must be prepared to deal with the growth in the number of users and their actions.
TR09	Ethics	The system must respect the ethical principles in software development (for example, personal user details, or usage data, should not be collected nor shared without full acknowledgement and authorization from its owner).

Table 9: Hand Of Midas technical requirements.

3.3. Restrictions

A restriction on the design limits the degree of freedom in the search for a solution.

Identifier	Name	Description
C01	Deadline	The project should be ready to be delivered by the end of the first half of the month of January, limiting creativity and the site's usability.

Identifier	Name	Description
C02	Technological Barrier	The project must be developed under a strict technology stack.
C03	Vertical prototype	The project's vertical prototype must be based on the example provided.

Table 10: Hand Of Midas project restrictions.

A3: Information Architecture

The Information Architecture artefact presents a brief overview of the information architecture of the system to be developed. It has the following goals:

- Help to identify and describe the user requirements, and raise new ones;
- Preview and empirically test the user interface of the product to be developed;
- Enable quick and multiple iterations on the design of the user interface.

It includes two elements:

- 1. Overview of the information architecture from the viewpoint of the users (sitemap)
- 2. Description and prioritization of the functionally and content of, at least two, main individual screens (wireframes):
 - Homepage
 - Auction Details

1. Sitemap

The User will be able to view categories and tags by using the Homepage search bar.

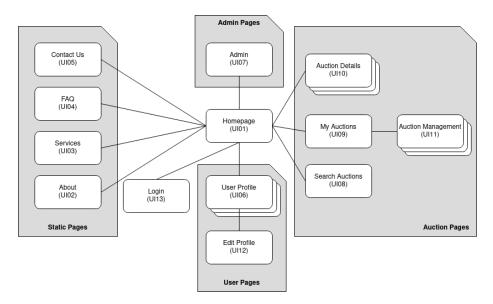


Figure 2: Hand Of Midas Sitemap.

2. Wireframes

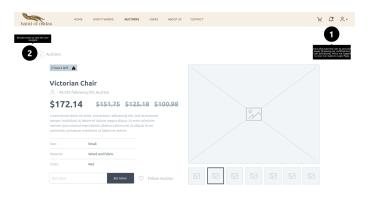
Wireframes for, at least, two main pages of the web application. Do not include trivial use cases.

UI01: Homepage

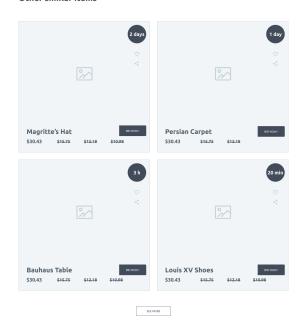


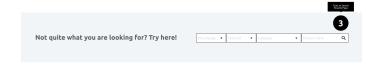
Figure 3: Hand Of Midas Homepage.

UIxx: Auction Page



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