A2: Actors and User stories

1. Actors

For the PC Auctions system, the actors are represented in Figure 1 and described in Table 1.
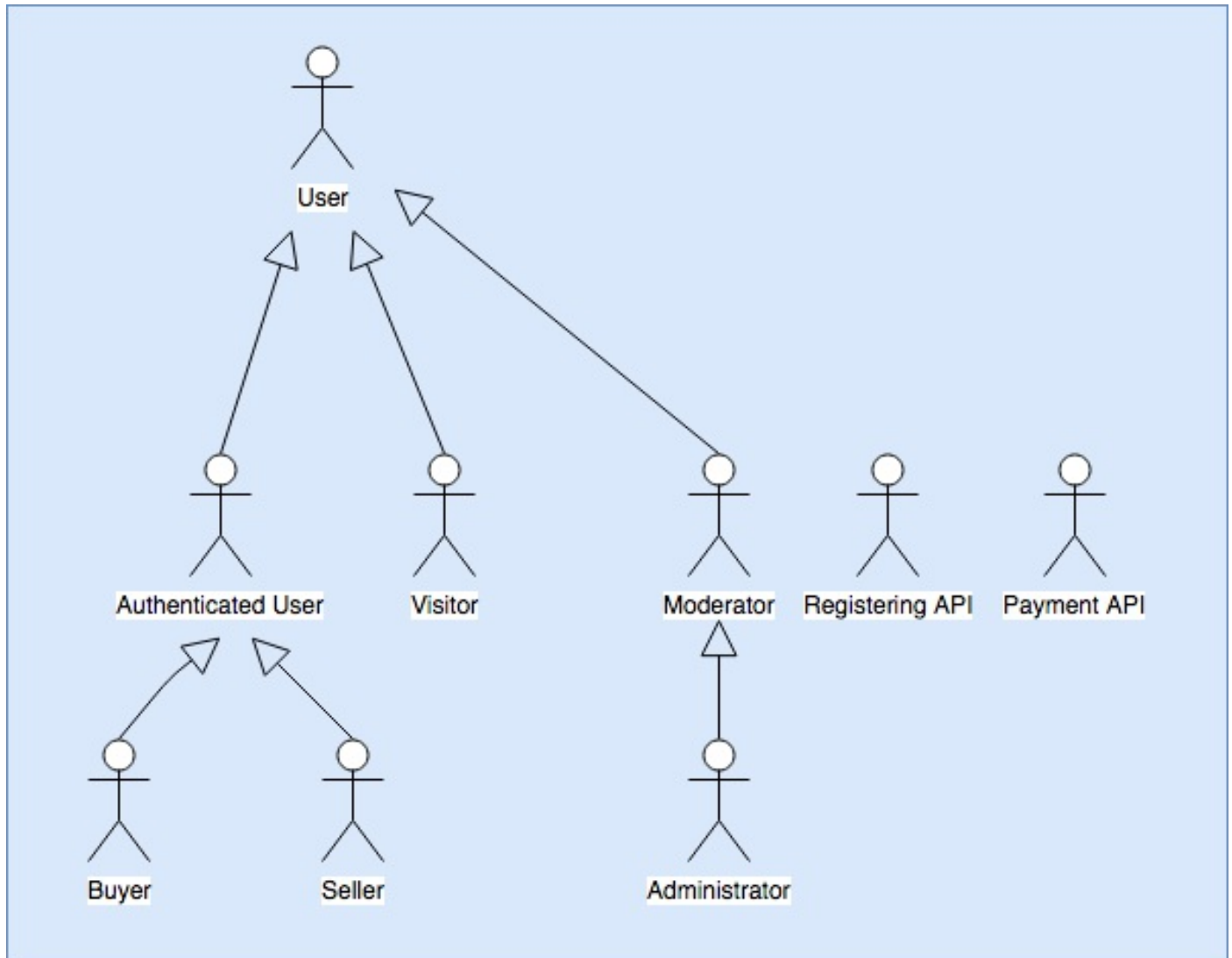

Figure 1: Actors.

Identifier	Description	Examples
User	Generic user. Has access to public information, such as collection's items.	n/a
Visitor	Unauthenticated user; Can register itself or authenticate in the system.	n/a
Authenticated user	Authenticated user; Can consult information and modify profile information.	jlopes
Buyer	Authenticated user; Can bid for an item and comment on the item record to sell the items.	jlopes
Seller	Authenticated user that belongs to the same location as the creator of an item; Can change the existing information or lend and record to sell the items.	jlopes
Administrator	Authenticated user; Responsible for approval and modification of auctions' data and also to prepare and manage the auctions themselves, including blocking users or auctions as necessary. Cannot sell or buy items for auction.	admin
Moderator	Administrator without permission to block users and/or stop ongoing auctions	moder
Registering API	External API that can be used to register or authenticate into the system.	Google
Payment API	External API that can be used to pay the value of the final bid.	Paypal

Table 1: Actor's description

2. User Stories

For the PC Auctions system, consider the user stories that are presented in the following sections.

2.1. Visitor

Identifier	Name	Priority	Description
US01	Log in	high	As a *Visitor*, I want to authenticate into the system, so that I can access privileged information.
US02	Register	high	As a *Visitor*, I want to register myself into the system, so that I can authenticate myself into the system.
US03	Register using external API	low	As a *Visitor*, I want to use register a new account linked to my Google account, so that I can access privileged information.
US04	Log in using external API	low	As a Visitor, I want to log in through my Google account, so that I can authenticate myself into the system.

Table 2: Visitor's user stories.

2.2. User

Identifier	Name	Priority	Description
US11	Search	high	As an *User*, I want to consult all the public information about the auctions, so that I can be informed.
US12	Rate of User	medium	As an *User*, I want to check users' rate.
US13	Auctions with more bids	medium	As an *User*, I want to check the active auctions with more bids.
US14	Latest Auctions	medium	As an *User*, I want to see the latest auctions.
US15	Home page	high	As an *User*, I want to access home page, so that I can see a brief website's description.
US16	About page	high	As an *User*, I want to access about page, so that I can see a complete website's description.
US17	FAQ page	high	As an *User*, I want to access FAQ page, so that I can see Frequently Asked Questions.
US18	Contact page	high	As an *User*, I want to access contact page, so that I can see every contacts.

Table 3: User's user stories.

2.3. Authenticated User

Identifier	Name	Priority	Description
US21	Edit Profile	medium	As an *Authenticated User*, I want to change my username, password, profile image, email and cellphone contacts and address so that I can keep my profile updated.
US22	History of bids	medium	As an *Authenticated User*, I want to see my history of auctions in which I bade and are completely finished.
US22	History of auctions	medium	As an *Authenticated User*, I want to see my history of auctions I created and are already finished.
US24	Active Bids	high	As an *Authenticated User*, I want to see the auctions in which I bade and are still active.
US25	Active Auctions	high	As an *Authenticated User*, I want to see the auctions I created that are active.
US26	Pendent Negotiation	high	As an *Authenticated User*, I want to see the negotiations that have finished but in which the product is not sent/received.
US27	Buy Credits	high	As an *Authenticated User*, I want to buy credits for bidding using Paypal.
US28	Log out	high	As an *Authenticated User*, I want to log out of the system so I can no longer access privileged information.

Table 4: Authenticated User's user stories.

2.4. Seller

Identifier	Name	Priority	Description
US31	Create Auction	high	As a *Seller*, I want to place an item (PC, motherboard, etc) for auction indicating its attributes (the corresponding work) and usage, so that it can be consulted and sold on auction.
US32	Update Minimum Bid Value	high	As a *Seller*, I want to change the optional minimum bid value.
US33	Update Buy Now Value	medium	As a *Seller*, I want to change the optional Buy Now value.
US34	Item sent	high	As a *Seller*, I want to mark the item as sent to the winner of the auction.
US35	Notifications of Auction	low	As a *Seller*, I want to receive a notification for each bid done on my auction on the last half hour.

Table 5: Seller's user stories.

2.5. Buyer

Identifier	Name	Priority	Description
US41	Bid on an item	high	As a *Buyer*, I want to bid on an item that I'm interested on buying in order to advance the auction.
US42	Complain	high	As a *Buyer*, I want to complain about an item bought because of product malfunction.
US43	Rate	medium	As a *Buyer*, I want to give a rating to the person that owned the item I bought, so that the Seller has his rating updated.
US44	Comment the auction	medium	As a *Buyer*, I want to register a commentary, so that I can manifest my opinion on an auction.
US45	Buy Now	medium	As a *Buyer*, I want to pay the price set by the Seller to immediately buy the item.
US46	Item Received	high	As a *Buyer*, I want to mark the item as received.
US47	Notifications of bid surpassed	medium	As a *Buyer*, I want to receive a notification when my bid is no longer the highest bid.
US48	Notifications of Auction Winning	high	As a *Buyer*, I want to receive a notification when I win an auction.

Table 6: Buyer's user stories.

2.6. Moderator

Identifier	Name	Priority	Description
US51	Approve of Auction	high	As a *Moderator*, I want to approve an auction requested by a seller.
US52	Modify a Category	high	As a *Moderator*, I want to modify the category information of an auction, in order to better inform the *Buyer*.
US53	Remove comments	medium	As a *Moderator*, I want to remove a comment, so that I remove inappropriate comments
US54	Block user	medium	As a *Moderator*, I want to record the inactivity of a system user, so that he can no longer access restricted contents of the site
US55	Stop ongoing Auction	high	As a *Moderator*, I want to stop an ongoing Auction.
US56	Accept user	medium	As a *Moderator*, I want to accept the registration of a new system user, so that he can access restricted content

Table 7: Moderator's user stories.

2.7. Administrator

Identifier	Name	Priority	Description
US61	Edit website categories	high	As an *Administrator*, I want to edit the categories of the auctions present on the website.
US62	Manage Moderators	high	As an *Administrator*, I want to manage moderators.

Table 8: Administrator's user stories.

A1. Annex: Supplementary requirements

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

A1.1. Business rules

A business rule defines or constrains one aspect of the business, intending on asserting business structure or influencing business behaviour.

Identifier	Name	Description
BR01	Ownership	Only a user from the same site that the seller of the item (Seller) can bid on your auction.
BR02	New Bid	If a new bid is made by a Buyer, it has to have a greater value than the previous bid.
BR03	Unblocking	A blocked User can´t create a new account with the profile information of the blocked account.
BR04	Lifetime of Auction	Each auction will have a maximum lifetime of 1 week.

Table 9: Business Rules

A1.2. 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 99 percent of the time in each 24-hour period
TR02	Accessibility	The system must ensure that everyone can access the pages, regardless of whether they have any handicap or not, or the Web browser they use
TR03	Usability	The system should be simple and easy to use
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)
TR06	Portability	The server-side system should work across multiple platforms (Linux, Mac OS, etc.)
TR07	Database	The PostgreSQL 9.4 database management system must be used
TR08	Security	The system shall protect information from unauthorised access through the use of an authentication and privilege verification system
TR09	Robustness	The system must be prepared to handle and continue operating when runtime errors occur
TR10	Scalability	The system must be prepared to deal with the growth in the number of users and corresponding operations
TR11	Ethics	The system must respect the ethical principles in software development (for example, the password must be stored encrypted to ensure that only the owner knows it)
TR12	Multiple Access	The system must be prepared to deal with multiple access and biding of the same item, needing to be always up to date with the current bid.

Table 10: Technical Requirements

A1.3. Restrictions

Identifier	Name	Description
C01	Deadline	The system should be ready to be used at the end of May.
C02	Priorities	If by the end of April the system doesn't have all high priority requirements done, the team won't implement the low priority functionalities.

Table 11: Restrictions

Revision history

Changes made to the first submission:

1. Priorities changed so that high Priorities are only given to user stories necessary to creating and biding on an auction.
2. Changed Reader to Authenticated User
3. Division of some of the user stories in more specific ones, such as statistics, notifications and comments.
4. Added some new user stories for a more coherent system.

GROUP1716, 25/02/2018

- Diogo Peixoto Pereira, diogopeixotopereira@gmail.com
- Igor Bernardo Amorim Silveira, igorasilveira@gmail.com
- Nádia de Sousa Varela de Carvalho, nadiacarvalho118@gmail.com
- Pedro Miguel Ferraz Nogueira da Silva, pedronogueirasilva5@gmail.com