Domain Analysis

CS 4321 - Software Engineering 1

Business Association of Regent Technology Software (BARTS)

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1. **Introduction**

*Name the domain, and give the motivation for performing the analysis. The motivation normally is that you are preparing to solve a particular problem by development or extension of a software system.*

The domain that we are to analyze are auctioneering websites and to understand its terminology. Our motivation is to develop an auction system that utilizes google apps script, and incorporates or extends upon some of the functionalities that we have discovered from this domain.

1. **Glossary**

*Describe the meanings of all terms used in the domain that are either not part of everyday language or else have special meanings. You must master this terminology if you want to be able to communicate with your customers and users. The terminology is likely to appear in the user interface of the software as well as in the documentation. You may be able to refer to an existing glossary in some other document, rather than writing a new glossary.*

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| Ask price | When a bidder places a bid, the [auctioneer](https://www.rbauction.com/buying/common-auction-terms#Auctioneer) then offers the item to the remaining bidders for a slightly higher amount – the ask price. If no more bids are placed, the item is sold to the highest bidder at the [bid price](https://www.rbauction.com/buying/common-auction-terms#Bid_price). |
| Bid | An offer to buy the item at the current [ask price](https://www.rbauction.com/buying/common-auction-terms#Ask_price). You typically signal your bid by raising your hand or your [listing catalog](https://www.rbauction.com/buying/common-auction-terms#Listing_catalog). When you offer a bid, you are agreeing to purchase the item at that price if you remain the highest bidder. |
| Bidder | A person who has registered to bid and is placing bids on the items in the auction. |
| Bid price | The current high bid. If no higher bids are offered, the bid price becomes the sale or purchase price. |
| Bid-in | When an owner offers a bid on their own item to raise the selling price. Should forbid owners and their agents from bidding on their own items, which ensures that only legitimate bidders can raise the [ask price](https://www.rbauction.com/buying/common-auction-terms#Ask_price). |
| Buy back | When an owner offers the highest bid on one of their own items, enabling them to "buy back" that item. |
| Buyer | The person who placed the highest bid on an item becomes the buyer or new owner of that item. Because there are no reserve prices or set minimums, the highest bid offered becomes the sale price. |
| Catalog | See "listing catalog." |
| Choice | A group of similar items are sometimes sold as a "choice group." The winning bidder has the choice of taking any one, two or more of the lots in the choice group, each at the winning bid price. |
| Consignor | Someone who enters into an agreement with an auction company to have equipment or other items sold in an auction. A consignor is sometimes referred to as a "seller." |
| Proxy bid | An implementation of an English second-price auction used on eBay, in which the winning bidder pays the price of the second-highest bid plus a defined increment. |
| Public auction | A public auction is open to the general public; anyone can register and bid. Some auctions are dealer-only events. |
| Unreserved | Unreserved means there are no minimum bids or reserve prices set on the items in the auction. Every item is sold to the highest bidder, regardless of price. Sometimes called an "absolute" auction. |
| Sealed-Bid Auction | A type of auction process in which all bidders simultaneously submit sealed bids to the auctioneer, so that no bidder knows how much the other auction participants have bid. The highest bidder is usually declared the winner of the bidding process.  [Source](http://www.investopedia.com/terms/s/sealed-bid-auction.asp) |
| Snipers (last second bidders) | Someone that bids at the very last moment to try and get the item before another bidder has time to do a follow up bid for the item. Can be viewed as unfair. |

[**Source**](https://www.rbauction.com/buying/common-auction-terms#Listing_catalog) **of some terminology**: **https://www.rbauction.com/buying/common-auction-terms#Listing\_catalog**

Online auction slang

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| [241](http://slangit.com/meaning/241) | Two for one |
| [4sale](http://slangit.com/meaning/4sale) | For sale |
| [BAFO](http://slangit.com/meaning/bafo) | Best and final offer |
| [BC](http://slangit.com/meaning/bc) | Back cover |
| [BIN](http://slangit.com/meaning/bin) | Buy it now |
| [BNIB](http://slangit.com/meaning/bnib) | Brand new in box |
| [BNWT](http://slangit.com/meaning/bnwt) | Brand new with tags |
| [CIP](http://slangit.com/meaning/cip) | Customer initiated payment |
| [DSR](http://slangit.com/meaning/dsr) | Detailed seller rating |
| [EUC](http://slangit.com/meaning/euc) | Excellent used condition |
| [fb](http://slangit.com/meaning/fb) | Feedback |
| [FCFS](http://slangit.com/meaning/fcfs) | First-come, first-served |
| [FS](http://slangit.com/meaning/fs) | For sale |
| [FVF](http://slangit.com/meaning/fvf) | Final value fee |
| [GU](http://slangit.com/meaning/gu) | Gently used |
| [HTF](http://slangit.com/meaning/htf) | Hard to find |
| [ISO](http://slangit.com/meaning/iso) | In search of |
| [MIB](http://slangit.com/meaning/mib) | Mint in box |
| [MSRP](http://slangit.com/meaning/msrp) | Manufacturer's suggested retail price |
| [MST](http://slangit.com/meaning/mst) | Must see today |
| [N/R](http://slangit.com/meaning/n/r) | No reserve |
| [NED](http://slangit.com/meaning/ned) | No expiration date |
| [NIB](http://slangit.com/meaning/nib) | New in box |
| [NIP](http://slangit.com/meaning/nip) | New in package |
| [NLT](http://slangit.com/meaning/nlt) | No later than |
| [NOS](http://slangit.com/meaning/nos) | New old stock |
| [NR](http://slangit.com/meaning/nr) | No reserve |
| [NRFB](http://slangit.com/meaning/nrfb) | Never removed from box |
| [NSA](http://slangit.com/meaning/nsa) | No strings attached |
| [NWOT](http://slangit.com/meaning/nwot) | New without tags |
| [NWT](http://slangit.com/meaning/nwt) | New with tags |
| [OBO](http://slangit.com/meaning/obo) | Or best offer |
| [ONCO](http://slangit.com/meaning/onco) | Or nearest cash offer |
| [ONO](http://slangit.com/meaning/ono) | Or nearest offer |
| [OOAK](http://slangit.com/meaning/ooak) | One of a kind |
| [OOP](http://slangit.com/meaning/oop) | Out of print: An acronym that means a book or other hard copy material is no longer being printed, so no new copies are available from the publisher anymore; used on ecommerce and online auction websites. |
| [OOTB](http://slangit.com/meaning/ootb) | Out of the box |
| [ORP](http://slangit.com/meaning/orp) | Original Retail Price |
| [q](http://slangit.com/meaning/q) | Coupon |
| [RTB](http://slangit.com/meaning/rtb) | Real-time bidding |
| [S/O](http://slangit.com/meaning/s/o) | Sold out |
| [SPPU](http://slangit.com/meaning/sppu) | Sold pending pickup |
| [Tix](http://slangit.com/meaning/tix) | Tickets |
| [VGC](http://slangit.com/meaning/vgc) | Very good condition |
| [WYB](http://slangit.com/meaning/wyb) | When you buy |
| [xc](http://slangit.com/meaning/xc) | Cross country |

**Source for table: http://slangit.com/terms/online\_auctions**

1. **General Knowledge about the Domain**

*Summarize important facts or rules that are widely known by the domain experts and which would normally be learned as part of their education. Such knowledge includes scientific principles, business processes, analysis techniques, and how any technology works. This is an excellent place to use diagrams. This general knowledge will help you acquire an understanding of the data you may have to process and computations you may have to perform.*

**Bidding on items**: You have to be a registered user in order to bid on anything. Whenever someone is to bid, they are saying that they are ready and our willing to purchase the item up for auction, including any shipping charges within the listing. If you are outbid by someone else, or it does not meet the reserved price by the seller, you are no longer obligated to purchase. This is considered like a contract between the two users and both are to meet the time requirements to (1), have the payment sent, and (2), have the item purchase sent and delivered within a certain time. This will help keep the integrity of the transactions in the auction system so that means all bids are final and non-retractable.

**Eligibility:** Anyone who is willing to register for an account has to be at least 18 years of age or older and essentially be checked if they are human. Contact information and billing information should be verified and if proven invalid, they cannot use the system.

**The bid policy**: If there is a tie between a proxy bid and a bidder attempting the live auction, the live bidder will be awarded the item. If tied between two proxy bids, the one to bid first wins. If there is a tie in time, then there will be a sealed-bid auction between them (Refer to definition above of sealed-bid).

**Reserve price auctions**: Sellers have the ability to reserve a price above the minimum starting bid. Bidders have the ability to see if it has a reserved price, and if it has been met or not (Somewhere near the current bid display). The actual amount is not shown to bidders until it has been surpassed. If this price is not met, the seller is not obligated to sell the item, nor is the highest bidder required to purchase the item.

Overtime option: Some auction systems allow overtime if within the last 5 minutes there are successful bids, it will extend it for another 5 minutes. It will keep extending itself until there are no more successful bids. Time may vary. This is a good method to eliminate the "snipers".

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| The Proxy Bidding System: |
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[**Source for table**](http://www.audiogon.com/auction/faqauc.html#The Proxy Bidding System:)**: http://www.audiogon.com/auction/faqauc.html#The%20Proxy%20Bidding%20System:**

1. **Competing Software**

*Describe what software is available to assist the users and customers, including software that is already in use, and software on the market. Discuss its advantages and disadvantages. This information suggests ideas for requirements, and highlights mistakes to avoid. Screen-shots and narrative are useful.*

[**Bidding Owl:**](http://www.biddingowl.com/)

* **Pros**:
* Item Management
  + Track all items/bids/prices
* Bidder history
* Item history
  + Transaction history for specific items
* Item categories
* Existing Bidders
* Featured Auctions
* Bidder Sign Up: Ability to sign up for auction of interest.
* Manger Sign Up: Ex: “I’ll pay you to sell my stuff’”.
* **Cons**:
* Claimed issues with the system have caused users to lose bidders.
  + Does not allow bidders to enter the maximum amount they want to bid and have placed amounts adjusted depending on other participants.
* Visitors don’t find it easy to make a decision on the website.
  + Need to make an account to get more information about specific services.

**eBay:**

* **Pros**
* Advanced searching
  + price range, # of bids, location, specific seller
* Product reviews
* Shopping Cart
* Seller ratings
  + Ratings for sellers to display their legitimacy/product quality/speed of shipment/communication

100m+ standard users

Gives traffic reports

Save sellers

Block bidders

Early cancellation

Best support options: email, phone, live chat, forums

* **Cons**
* Restrictions on what you can sell: Cannot sell digital goods. Example: You are not allowed to sell electronic artwork or eBooks outside of Classified Ads.
* Less flexibility: eBay policies dictate you to take only certain types of payments and limits keywords you can use by putting only certain text in you listings. It also does not allow cross marketing to other platforms.
* Harder to sell items that are not trending: People who are selling something that is not widely searched for do not have an advantage so it will be hard to attract buyers.
* 10% final value fee
* only 20-40 free listings per month

**Auction Software .com**

* **Ability to create the following:**
* Forward Auction
* Reverse Auction
* Penny Auction
* Silent Auction

**Ready Set Auction**

* Guest management
* Donor & Donation Tracking
* Printed Catalog
* Bid Sheet
* Online Ticket & Sponsorship
* Mobile bidding during event

**eBid**

* 2m+ standard users
* 3% final value fee
* items submit on search engines
* feedback options
* automatic bidding
* buy now
* resolution center
* only accepts PayPal