User Story Backlog

SENG365 2022: Web Computing Architectures

Overview

This document summarises the user stories that should be implemented in the course's two assignments. Assignment 1 implements a web server (or API) to provide the 'back-end' for these stories. Assignment 2 implements a web client to provide the 'front-end' for these stories.

Any of these stories may be used to assess Assignment 2. It is likely that only some of these stories will be assessed, but these won't be declared before the assessment takes place.

You are strongly advised to successfully implement the first story for each category of stories **before** you move on to implement other stories in the categories.

A copy of the source code for the reference server will be released so that you have a standard server against which to create your client application. Regardless of when the source code is released, you can still test your client against the reference server available at https://seng365.csse.canterbury.ac.nz/api/v1 (although your final code should assume that there is a server running at http://localhost:4941/api/v1).

Finally, 18 stories may appear to be a lot of work. Remember that much of the computational work is already done for you by the reference server. Assignment 2 is focused on requesting and retrieving information from the server, and then presenting that information effectively to the user.

Assessed stories for the assignment.

Definitions

The following terms are used in the stories:

- **Casual user**: any person using the application to view auctions, whether logged in or not.
- **Registered user**: a person that has registered an account into the system.
- **Seller** (of an auction): the person selling the item in the auction. Required for all auctions.
- **Bidder** (of an auction): a person who has placed a bid on an auction.
- **Image**: an image (JPEG, PNG, or GIF) used to illustrate the item being sold in an auction - or to give context to it - and/or to illustrate the user profile.
- **Date:** means time and date; and should be displayed to the user in NZ time.

Searching auctions

Story		Acceptance criteria
1	**Search** As a casual user, I'd like to be able to see only those auctions whose information (title or description) contains some characters, word(s), or a phrase, so that I can find the ones that are of most interest to me.	The user can type a word or phrase into an appropriate search box to search for specific auctions.
		Only, and all, auctions whose **title or description** contains the provided characters, word(s), or phrase are shown (possibly after using pagination).
		The results should be shown as described in story 2 with the possibility of being filtered as described in story 3.
2	**List of auctions** As a casual user, I'd like to be able to see a list of the existing auctions.	Basic information about each auction should be visible, composed of: ■ Hero image, ■ Title, ■ Number of days till closing (e.g., "closes tomorrow", "closes in 3 days"), ■ Category, ■ Seller (first and last name and hero image), ■ Current Highest Bid, ■ The auction reserve (you may want to make it clear if this has been reached)
		All auctions should be shown (possibly after using pagination).
3	**Filter** As a casual user, I'd like to be able to filter auctions shown to those of that match a set of categories, or by open/closed.	The user can select **one or more** options (e.g., category *cars*) to filter by.
		The user can use no filter, filter by category, filter by open/closed, or both.
		Only auctions that match at least one of the categories should be shown (possibly after using pagination).
		A user can select to view all auctions, open auctions, or closed auctions. Doing so will show only the relevant auctions.
4	**Sort**	By default, auctions must be ordered according to their closing date, from the soonest to close to the latest *(This is the default provided by the server CLOSING_SOON)*

	As a casual user, I'd like to be able to sort the auctions.	The user can choose to sort them one of the following ways: - Ascending **alphabetically**, - Descending by **alphabetically**, - Ascending by **current bid,** - Descending by **current bid,** - Ascending by **reserve price,** - Descending by **reserve price,** - Chronologically by **closing date**, from the first to close to the last, - Reverse chronologically by **closing date**, from the last to be starting to the first.
5	**Pagination** As a casual user, I'd like to see the auctions shown in batches. You may choose a page size between 5-10, or let the user select their own size from this range. We will discuss using 10 as an example.	If there are more than 10 auctions in the list, then the user should only see the first 10 (or chosen page size) to begin with, i.e., auctions 1-10.
		The user can choose to view the next batch of 10 (if there are additional auctions), i.e., auctions 11-20. In this way, the user should be able to look through all the auctions 10 at a time.
		The user can choose to view the previous batch of 10, where the user has progressed beyond the first 10 auctions. For example, if the user is viewing auctions 21-30, they can 'page back' to auctions 11-20.
		The user can choose to progress to the first page (i.e., auctions 1-10), if they are not already on that page.
		The user can choose to progress to the last page if they are not already there.
		The user should be able to see the index of the current page, where the index starts at 1. auctions 1-10 are on page 1, 11-20 on page 2, etc.
		The user should be able to see when there are no more auctions - there should be an indication that the last page has been reached.
		The last batch may contain less than 10 auctions. For example, if there are 25 auctions, the pages should contain auctions 1-10, 11-20, and 21-25.

| 6 | **Combination**
As a casual user, I'd like to be able to combine searching, filtering, and sorting. | The user should be able to select multiple options, and this should result in them all being applied. For example, if the user searches for "Samsung", filters by "smartphone" category, and sorts by "ascending by current bid", then only auctions with "Samsung" in the title or description **and** with the "smartphone" category should be displayed, **sorted** from the lowest current bid to highest. |

auction

Story		Acceptance criteria
7	**Auction details** As a casual user, I'd like to be able to see further details about an auction.	There should be an easy way to reach these details from the list of auctions described in story 1 (such as a link from the list of auctions, this information will not count if it is only displayed in the list).
		All information about the auction should be visible, composed of: ■ End date and time, ■ Hero image, ■ Title, ■ Seller: profile image (or a default, if none exists), first name and last name, ■ Category, ■ Description, ■ Reserve, ■ The number of bids, ■ Current bid, and the bidder who placed it (this must be clearly shown or be at the top of the bid list and must be visible even if the full bid list is not), ■ List of bidders, each one with the bid amount, timestamp and the bidders first and last names, and profile picture displayed.
		The list of bidders should include their profile picture (or a default, if none exists), first name, last name, and bid amount (e.g., $40). The list must be ordered by highest to lowest bid (this should also be most recent to oldest bids). The whole list doesn't need to be initially shown, but if not, there must be some way to easily see the list without leaving the page (e.g., a modal popup, or a hide/show button).
8	**Similar auctions** As a casual user, I'd like to be able to see a list of similar auctions (if any).	A list of similar auctions should also be displayed in the auction detail page. A similar auction is any other auction that has the same category as the currently viewed auction or is made by the same seller.

Registering and logging in

Story		Acceptance criteria
9	**Register** As a casual user, I'd like to register as a user for the application so that I can access features that require me to be authenticated.	Any person who is **not** already logged in can register by providing a first name, last name, email address, and password. Optionally, they can also provide a profile picture (JPEG, PNG, or GIF).
		The email address must not already be used by another user.
		The email address must be syntactically valid *(Must contain an @ and a top-level domain)*.
		The password must be at least 6 characters in length.
		The password must not be displayed in plaintext (i.e., it should be obscured by representing each character as a dot or star). However, users **may** click a button to toggle the ability to view the password field.
		Upon successfully registering, the user is immediately logged in.
10	**Log in** As a registered user, I'd like to be able to log in to the application so that I can complete tasks that require authentication.	A user must be able to log in the application using the email address and password. Any subsequent action they take (e.g., creating a new auction) will be related to their account.
		A user must not be able to log in to an account without providing both the email address and password of that account.
		A logged-in user cannot log in again, without first logging out.
11	**Log out** As a registered user, I'd like to be able to log out, to secure my account or to log in to another account.	A logged-in user may log out, which causes them to no longer be authenticated.
		A user that is not currently logged in cannot log out.

Managing auctions

Story	Acceptance criteria

12	**Create** As a registered user, I'd like to be able to create an auction.	The user must first be logged in.
		The user must provide all this information to create the auction: ■ Title (must not be empty), ■ Category (one or more of the existing categories) ■ End date (must be in the future), ■ Image (JPEG, PNG, or GIF), ■ Description (must not be empty), ■ **(Optional)** Reserve price (this must be $1 or more).
		The auction is included in **Story 2** outcome, when part of its title, or description is used as a search key.
13	**Edit** As the seller of an auction, I'd like to be able to modify the auction's details (as long as there have been no bids), to correct any errors and provide updates.	Only the seller of an auction can edit it.
		Any of the information provided when creating an auction can be edited, and it must follow the same restrictions.
		Once a bid has been placed on an auction, the auction cannot be edited.
14	**Delete** As the seller of an auction, I'd like to be able to delete it (as long as there have been no bids).	Only the seller of an auction can delete it.
		The seller must be prompted to confirm the operation.
		Once a bid has been placed on an auction, the auction cannot be deleted.
15	**My auctions** As a user, I'd like to be able to see all the auctions that I am the seller of or have bid on.	A registered user must have some way of viewing only and all the auctions they are involved with, either as a seller or a bidder.
		Each auction must be shown with the same information that can be seen from the list of auctions in **story 1**. (There are no requirements, however, for searching, sorting, filtering, or pagination.)
		There should be an easy way to view the details of an auction *(story 7)*.

Bidding on an auction

Story		Acceptance criteria
16	**Bidding** As a registered user, I'd like to make a bid on an auction.	Should the user be interested in bidding on an auction – and it hasn't ended – the user should be able to place a bid.
		Only an authenticated user may place a bid on an auction. Casual users should be prompted to register or log in.
		Users can **not** make a bid below or equal to $0.
		Users can **not** make fractional bids (e.g., $10.50)
		A user should not be able to make a bid lower or equal to the current bid (the highest bid so far)
		A seller should not be able to bid on their own auction
		A user cannot bid on an auction that has closed. To bid on an auction the end date must be in the future.
		A user cannot change or delete their bid; however, they may make a new bid that follows the above rules.

Managing user profile

Story		Acceptance criteria
17	**View** As a registered user, I'd like to be able to view my own profile information.	An authenticated user can view their own information, composed of: ■ First name, ■ Last name, ■ Email, ■ Profile picture (or a default, if none exists).
		No one else can view another user's information (except when it is included as part of an auction where they are the seller a bidder, in either case only a user's first and last name and profile picture are displayed).

18	**Edit** As a registered user, I'd like to be able to edit my own profile information.	An authenticated user can edit their own information. This can be any of: - First name, - Last name, - Email, - Profile picture (or a default, if none exists), - Password (they must provide their current password).
		The profile picture can be removed.
		The email address must not already be used by another user.
		The email address must be syntactically valid *(See Story 9)*.
		The password must be 6 characters.
		The password must not be displayed in *(See story 9)*.
		A user should **not** be able to modify another user's information.