SENG365 2018: Web Computing Architectures
Revised user story backlog for the two assignments

Version 1.4; 18 May 2018

Note:

Deletions are struck out ~~thus~~. Additions are highlighted <mark>thus</mark>.

Make sure you download the latest version of the API specification.

1   Overview

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

The stories are organized into two categories: those stories that should be implemented for assessment, ~~and additional stories that can be implemented by keen students as extensions to the assignment/s.~~ The additional stories are not assessed. There is also the opportunity to propose your own additional stories, which again will not be assessed.

2   Required (assessed) stories

<mark>**Note 1**: **Validation** whilst the server validates input, also validating on the client-side improves the user experience and acts as an additional 'defence' against intentional or accidental 'corrupt' data being sent to the server. For example, if the server requires certain parameters (such as an auction start date, a password, or a reserve bid), then it's a good idea for the client-side to check that these have been entered. Consult the API specification for what is required. Therefore, for the following stories you should consider appropriate validation on the client-side and not just relyon the server to perform all the validation.</mark>

<mark>**Note 2: The status field on the auction endpoint:** The new status field on the auctions endpoint has the following states to help you with your GET requests:</mark>

<mark>**all** - all auctions</mark>

<mark>**active** - auctions that have started but have not yet finished</mark>

<mark>**expired** - auctions that have ended without any bids that met the reserve price</mark>

<mark>**won** - auctions that have ended with a bid that has met the reserve price</mark>

<mark>**upcoming** - auctions that have been created but are yet to start</mark>

1.   As a potential Buyer, I'd like to view ~~all of the~~ ~~current~~ Auctions <mark>based on their status e.g. all, active, expired</mark>.

   Acceptance criteria:

   - The Title and *main* Photo (if any) for each Auction must be shown.
   - If there are more Auctions than easily can be shown in a single list or view, then there must be a mechanism to view them in batches.

- ~~Only active Auctions are shown. Active auctions are those where the current DateTime is greater than the Auction's start DateTime but less than its end DateTime.~~

2. As a potential Buyer, I'd like to see only those Auctions whose title contains some characters, words or a phrase so that I can find the Auctions that are of most interest to me.

   Acceptance criteria:

   - The Auctions shown can be restricted to only those whose *title* field contains a provided string of characters, a word or a phrase.

3. As a potential Buyer, I'd like to be able to filter the Auctions shown by category so that I can easily see those Auctions I'm most likely to Bid on.

   Each Auction belongs to one and only one category, set when the Auction is created.

   Acceptance criteria:

   - Auctions can be filtered by Category.
   - Only those Auctions within that Category are shown (otherwise as for Story 1)

   Note: an additional endpoint, `/categories`, has been added to the API specification and to the server implementation to support this user story.

4. As a potential Buyer, I'd like to see the details for an Auction, to help me decide if this is something to bid on.

   This would probably be done by clicking on an Auction in the Overview.

   Acceptance criteria:

   - General Auction information shown must include: Title, Seller, Auction start date, Auction end date, Description, the current Bid and the Bid History.
   - The Auction may also have one photo ~~or more photos; if there are photos, they must be shown. If there are more photos than can easily displayed at the one time, then there must be some simple way to see photos that are not initially shown.~~ The photo should be shown. If there is no auction-specific photo, the generic (default) photo should be shown.
   - The full Bid History does not need to be initially shown, but if not, there must be a hide/show-type of mechanism to easily see the full history without leaving the Auction details page.
   - The Bid History must be in DateTime order, with the most recent bid at the top. For each Bid, the Bid amount, Bid DateTime, and bidder's username must be shown.

5. As a potential Buyer or Seller I'd like to self-register as a User[1] on the app so that I may access features that require me to be authenticated.

   Acceptance criteria:

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[1] In the database schema, the scheme refers to an `auction_user` table to help distinguish between the users in the auction, and the MySQL database users who have credentials to directly access and maintain the database.

- Any unregistered Person can self-register by providing a real name (given name and family name), a unique username, a unique email address and a password.
- The password must not be shown in clear text.
- Any non-empty string is acceptable as a password (no strength checking should be done.)
- The email address must be unique and of a valid form (e.g., according to the [W3C HTML5 spec](#) as used by ajv, or similar)
- The Person will be authenticated (logged on) immediately on submitting a correct registration.

6. As a User, I'd like to be able to login and logout from the app so that I can complete tasks that require authentication and authorization such as buying and selling.

   Acceptance criteria:

   - A User (registered Person) must be able to login to the app using their password and username or email.
   - A logged-in User (and only a logged-in User) may logoff. The User is no longer authenticated when logged-off.
   - You can assume that no more than one User will be logged-in at a time to the app.

7. As a potential Buyer, I want to be able to Bid on an Auction.

   Each Auction will follow the English Auction model where each bid must improve on the last bid, and the highest bid at the end of the Auction wins.

   Acceptance criteria:

   - Each Bid must increase the current Bid. A new Bid cannot be for less than the current Bid.

8. As a User interested in selling at auction, I'd like to be able to create a new Auction.

   Each Auction has a single Seller.

   Acceptance criteria:

   - The (authenticated) User who creates the Auction is the Seller.
   - The following additional information must be provided to create an Auction: Title, Auction start date, Auction end date, Description, and Category ID.
   - An Auction may have zero or ~~more~~ one photos.
   - ~~If there is more than one photo, one specific photo must be identified or determined (perhaps by convention e.g., the first photo in any list) as the main photo to be shown on the Auction Overview.~~

9. As a Seller, I'd like to be able to modify an Auction before the first bid has been placed so I can correct any errors or mistakes, or to adjust pricing (for example.)

   Acceptance criteria:

   - No changes at all are possible to an Auction once the Auction has started ~~after the first bid has been placed on the Auction~~.
   - Before that point, any of the information provided when the Auction was created may be modified. ~~Any~~ The auction's single photo can be added, deleted, or replaced by another image. ~~New photos may be added.~~

10. As a Buyer, I'd like to see the Auctions in which I was the winning bidder so I can track my successes and plan to make payment and collect the items if necessary.

    Acceptance criteria:

    - A Buyer will have the option to view all Auctions, and only those Auctions, in which they were the winning bidder.

11. As a Buyer, I'd like to see the Auctions on which I have bid so that I can plan my bidding strategy.

    Acceptance criteria:

    - A Buyer must have the option to view all in-progress Auctions (and only those Auctions) in which they made a Bid.

12. As a Seller, I'd like to see only the Auctions I've created that are yet to complete so that I can easily track their progress.

    Acceptance criteria:

    - A Seller must have the option to view all in-progress Auctions (and only those Auctions) in which they are the Seller.

13. As a Seller, I'd like to see only the Auctions I've created that have completed with a winning Bid so I can plan to receive payment and arrange for collection or shipping.

    Acceptance criteria:

    - A Seller must have the option to view all completed Auctions (and only those Auctions) in which they were the Seller and which completed with at least one bid.

14. As a Seller, I'd like to see only the Auctions I've created that have completed without a winning Bid, so that I can decide if I wish to relist the item.

    Acceptance criteria:

    - A Seller must have the option to view all completed Auctions (and only those Auctions) in which they were the Seller and which completed without a single bid.

15. As a User, I'd like to be able to view *my own* information.

    Acceptance criteria:

    - The User must be logged in (authenticated).
    - The authenticated User CAN see the following information about themselves: username, given name, family name, email, account balance.

16. As a User, I'd like to be able to edit *my own* information
    Note: this user story is simplified from what might occur in a real system.

    Acceptance criteria:

    - The User must be logged in (authenticated).
    - The authenticated User edit the following information about themselves: given name and family name.

17. As a User, I'd like to be able to view a limited amount of *other Users'* information.
    Note: the GET /users endpoint to get *all* users is not available. As a consequence you

will likely only be able to view other users' information from a returned list of actions e.g. the seller of the auction or a bidder.

Acceptance criteria:

- The User must be logged in (authenticated).
- The authenticated User CAN see only the following information about other Users: username, given name, family name
- The authenticated User CANNOT see the following information about other Users: Email, account balance, and password

3   Additional (and un-assessed) stories

The following stories will *not* be awarded credit in assessment. They may incur penalty however if the implementation of these stories breaks the implementation of any of the required stories.

The following stories may require *amendments* to the database e.g. additional tables. The amendments to the database should extend the database structure but *not* break the existing database structure and scheme.

15.   As a Buyer on an Auction, I'd like to ask the Seller an online question so that I can better understand what I might be bidding on.

Acceptance criteria:

- While on the Auction details page, a Buyer must be able to enter a multiline text question.
- An unanswered question must be shown on the Auction detail page for the Seller and for that Buyer, but not on the Auction detail page for any other viewer of the Auction.
- The Seller must be able to enter a multiline text answer to any unanswered question on their Auction.
- Once answered, the question and associated answer is visible to all viewers of the Auction.

18.   As a Buyer under time-pressure, I want to be able to win an Auction immediately without waiting for an auction to finish.

If a "buy now" option is offered for an Auction, the first User to activate the option under certain conditions immediately wins the Auction at the buy now price.

 Acceptance criteria:

- If the Auction has a reserve price then the current Bid must be less than the reserve price for "buy now" to be available.
- If the Auction doesn't have a reserve price, "buy now" is not possible once the first bid has been placed.
- "Buy now" immediately marks the Buyer as the winner of the Auction, and concludes the Auction.

19. As a Seller, I'd like to know if a Buyer is reliable or not, so I can decide if I am at financial risk accepting their bid.

   Each User has a "reputation" (an integer value, set initially to zero when the Person registers).

   Acceptance criteria:

   - After an Auction is won, the winning Buyer and the Auction's Seller may "rate" each other, where a rating is "poor", "ok" or "good".
   - A "poor" received rating reduces a Person's reputation by 1; "ok" leaves it unchanged, while "good" increases it by 1.
   - The Buyer's reputation is shown alongside each Bid in the Bid History.
   - When an Auction is created, the Seller may establish a minimum acceptable reputation to bid on the Auction. A Buyer, at the time of bidding, must have that reputation or better to place a Bid on the Auction.

4   Opportunity to propose further (un-assessed) stories

There are many opportunities for further stories. As examples: whilst items for auction are categorised in the database there is no story to maintain those categories; similarly, there is no administrator rights and functionality, or stories relating to an Administrator; and there are different ways in which security could be implemented.