

# SW Engineering CSC 648/848 Fall 2018

## **Milestone 2**

**Project/application Title and Name:** GatorList

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# 1. Data Definitions V2

1. **Permission** - The amount of access that is given to each tier of account (unregistered user, user or admin)
2. **Unregistered User** - An unregistered user can browse, search and create an items post but when submitting the items post, the unregistered user needs to create an account before submission is complete. The items post then goes to Admin where the post status is either in review, approved or denied by Admin.
3. **Registered User** - A registered user that can browse, post an item and be able to talk to other registered users through messages on where to meet to purchase items posted.
4. **Admins** - The admin oversees users and can change the status of an items post by accepting, denying or reviewing items posts based on appropriateness.
5. **Message** - A message is a communication system for a registered user who would like to buy an item and registered user who is selling the item to communicate between one another and set up safe locations for exchange of items being purchased.
6. **Log-in/Register** - The Login and register page is for the registered user to have the ability to choose to log in to their existing account or to register if they are an unregistered user that would like to create an account.
7. **Favorite** - A favorite is for registered users to add an items post to a list for future easy access if they would like to come back to that specific item.
8. **Items** - A post of items being sold by a registered user that contains attributes title, picture, price, description, category, a registered user who owns the post, and a status.
9. **Category** - A category separates items based on a specific category that is provided by the Admin. The category makes the browsing process for looking for a specific item easier for both registered users and unregistered users.
10. **Status** - The status is the state of an item posted by a registered user that is for the Admin to change upon review. The three possible states are 'being reviewed', 'accepted', or 'denied'.
11. **Price** - A price is an amount set by the registered user who is selling the item that represents the cost of an item that was posted.
12. **Title** - The title is the head of an item being sold that describes the items posted that is created by the registered user who is selling.
13. **Picture** - A picture is a graphical representation of the item being sold that is uploaded by the registered user who created the items post.
14. **Description** - A description is a few lines of text that describe the characteristics of the item being sold. The description is provided by the registered user selling the item.
15. **Search Bar** - The search bar allows registered users and unregistered users to search for keywords for items posted for a narrowed down search of a specific item the user would like to purchase or search for.

16. **User Record** - The user record is a list of items posts that the registered user has posted. This can be found on the user dashboard.

## 2. Functional Requirements V2

### Priority 1

1. Unregistered users shall be able to register providing name, surname, username, password and optionally with contact details (phone number, email...)
2. Unregistered users shall be able to see the list of items.
3. Unregistered users shall be able to filter postings by categories.
4. Unregistered users shall be able to search for items.
5. Unregistered users shall be able to fill up information for a new item, such as 1 to 4 images, price and description of no more than 500 characters.
6. Registered users shall be able to login to existing accounts using his/her username and password.
7. Registered users shall be able to see the list of items.
8. Registered users shall be able to filter postings by categories.
9. Registered users shall be able to search for items.
10. Registered users shall be able to fill up information for a new item, such as 1 to 4 images, price and description of no more than 500 characters.
11. Registered users shall be able to submit an item for reviewing to Admin.
12. Registered users shall not be able to revise live posts; must be deleted first then submit new post.
13. Registered users shall be able to send a message to another user.
14. Admin shall be able to approve or deny an item.
15. Admin shall be able to see a list of all the items on the site.
16. Admin shall be able to see details about individual items.
17. Admin shall be able to see a list of all the registered users.
18. Admin shall be able to delete an item.
19. Admin shall be able to delete a user's account.

## Priority 2

- 20. Registered and unregistered users shall be able to see information about the team that has created the website as well as information about each of the team members.
- 21. Registered users shall be able to see their account information.
- 22. Registered users shall be able to keep items in a list of "Favorites".

## Priority 3

- 22. Registered users shall be able to see a list of all the items from an individual seller.

### 3. UI Mockups and Storyboards (high level only)

**Use Case 1** Storyboard of the Login page that has a link to if not a Register, click to next Register screen. The Home screen highlights recent posts. The Registered User then searches for an item and the items found page is shown with a narrowed down list of items.

GatorList

Category ▼ Search Bar

Home About Team Sell Register Login

Login:

New User?  
[Register Here](#)

Username:

Password:

[Forgot Password?](#)

Login

GatorList

Category ▼ Search Bar

Home About Team Sell Register Login

Register:

Name:

Username:

Password:

☐ Agree to [terms of Use](#)

CAPTCHA

Register

Recent Posts

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

Items found

Back

# out of # Items

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

Item 1 Title

Thumbnail →

Text Description

Price

Seller

Contact Seller

**Use Case 2:** Registered user logs in and sees user's dashboard where he/she can view posts and see messages between other users interested in his/her items.

GatorList

Category ▼ Search Bar

Home About Team Sell Register Login

Login:

New User?  
[Register Here](#)

Username:

Password:

[Forgot Password?](#)

Login

Gatorlist

My Dashboard

User Posts

Image

Item Description

✕

Edit Post

Image

Item Description

✕

Edit Post

User Messages

Username


I would like to buy this item:

Username

I'm interested in this item...

**Use Case 3** Registered user wants to sell an item, he clicks on the sell button and he is prompted to fill up all the information about the item. After clicking confirm, page now shows seller name

GatorList

Category  Search Bar

Home About Team Sell Register Login


Post

Item Details

Item Name:

Description:

Price:


Category:  

Upload Item Image

Note: It will take up to 24 hours for Admin to review and approve Post.

Cancel Submit for Review

GatorList

Category  Search Bar

Home About Team Sell Register Login


Post

Item Details

Item Name:

Description:

Price:

Category:  

Seller Name:

Upload Item Image

Note: It will take up to 24 hours for Admin to review and approve Post.

Cancel Submit for Review



**Use Case 4** Admin Dashboard and clicks a post from the Posts to Review column, that takes the Admin to review a single post where the Admin May approve or deny the post.

GatorList

Admin Dashboard

HomeUser ModeExit Admin Mode

Registered Users:

Profile PhotoUsername

Profile PhotoUsername

Profile PhotoUsername

# out of # ->

Posts to review:

Item 1 TitleText DescriptionThumbnailPrice SellerContact Seller

Item 1 TitleText DescriptionThumbnailPrice SellerContact Seller

# out of # ->

GatorList

Admin Post Review

Back to Dashboard

Post to Review:

TitlePicture

Name:

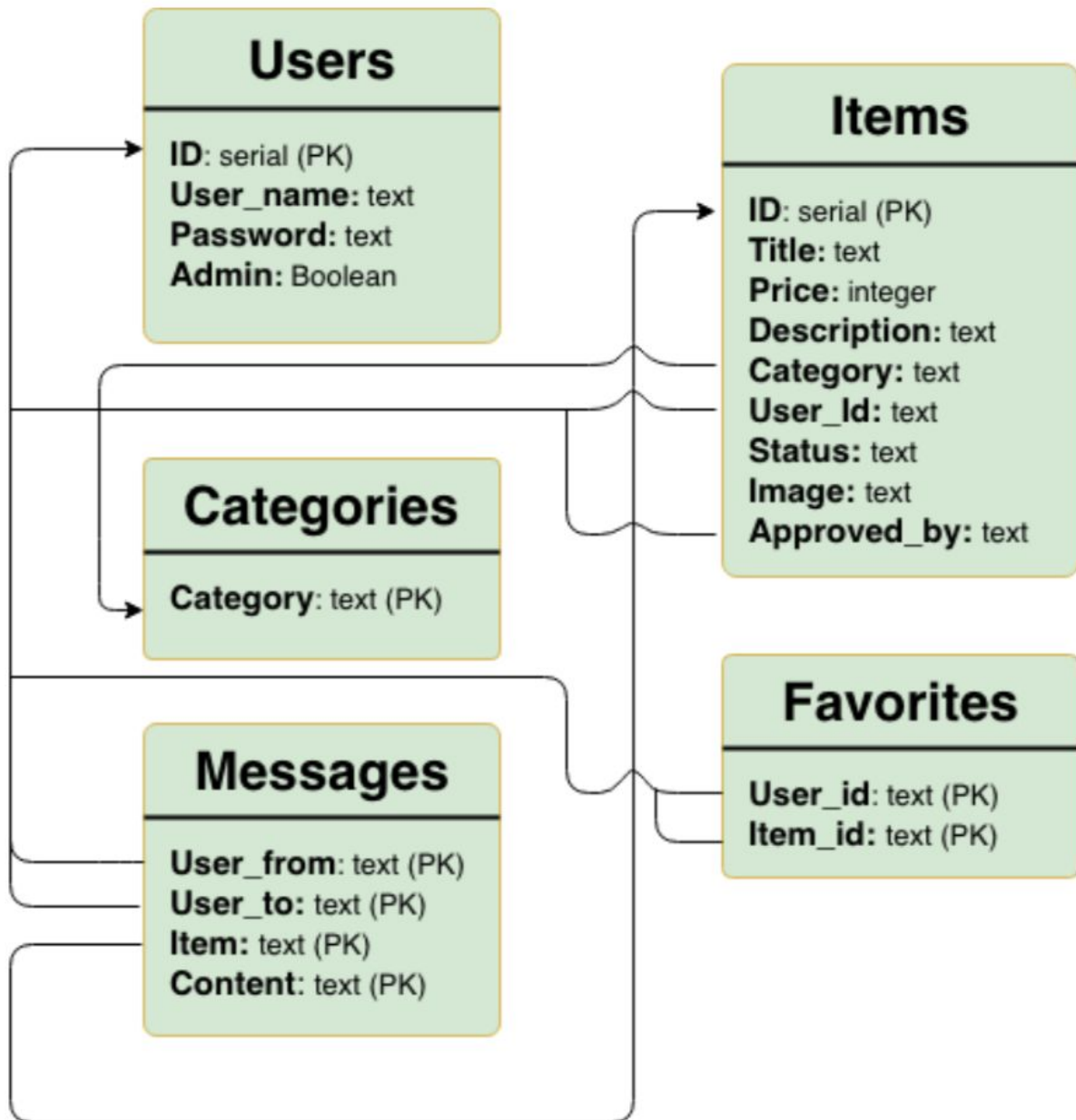
Description:

Price:

Category:

ApproveDeny

## 4. High level Architecture, Database Organization



## Database Organization

Our database keeps track of 5 essential data tables consisting of: User, Messages, Items, Categories, and Favorites. Some of these tables' data will derive from another table.

### Users

This table holds all of the registered users' basic information, such as their "User\_name", "Password", "User\_ID", and their access level.

- Both the username and password are stored as plain text under "User\_name" and "Password", respectively, with the password being encrypted.
- The access level is stored as a Boolean named "Admin", set to true to indicate that the user has Admin privileges and false for normal registered user privileges.
- Upon account creation, a unique serial ID is generated for the user, stored as the "User\_ID". Users item posts will contain their "User\_ID".
- addNewUser() adds a new entry containing the new user's basic information.
- removeUser() removes the user from the database.
- promoteToAdmin() changes a User's access, setting "Admin" to true
- userExists() returns true whether

### Categories

This table consists of all the different category names available that an Item may be categorized under.

- An "Item" will only contain one category. No more, no less.
- returnAllCategories() returns a list of all stored categories within the table.

### Items

When a seller posts their product, the Item's data is stored within this data table. The table consists of numerous variables, such as its title, price, description, category, the seller's "User\_ID", status of being live, image, and which admin approved the post.

- The "Title" is a must to allow users to search for this item post; stored as regular text.
- The "Seller\_ID" is taken from the "User\_ID" and will allow viewers to know who is selling the product and contact via the messaging system.
- A unique ID for the item is created and stored into "Item\_ID"; used by the **Favorites** data table and **Messages** table
- The "Price" is an integer value that holds the price set by the seller.
- The "Description" text field is optional and holds the product description set by the seller.
- The "Quantity" stores the count of how many of the product is available
- A text link to the image file hosted by AWS is contained in the "Image" variable.
- An "Item" will contain a text data type named "Category" which corresponds to one of the entries in the **Categories** data table.
- The "Status" text field is set to 'Under Review' by default and may be changed to 'Live' only by an Admin after being reviewed.
- Once approved, the "Approved\_by" text field is changed to the "User\_name" of the admin that reviewed the Item.
- "Date" contains a text of the item's creation/approved date

## **Messages**

Messages between Users are stored in this data table. They contain the sender and recipient's names, as well as the "Item\_ID" and body of the message. Having the "Item\_ID" will allow for more

- "User\_from" contains the "User\_name" belonging to the message's sender.
- "User\_to" contains the "User\_name" belonging to the message's recipient.

Both data fields are exported from the **Users** data table.

- "Item\_ID" refers to the **Item** posted by a seller.
- "Content" contains the body of the message conveyed by the message's sender.

## **Favorites**

This data table holds all the items favorited by all users.

- The function makeFavorite() creates and adds an entry based on the User's ID and Item's ID.
- Vice versa, unFavorite() removes the entry.
- "Favorited\_by" is set to the "User\_ID" of the User.
- "Item\_ID" is set to the item's ID.

## *Media storage*

Images, videos, and audio files will be hosted by one of Amazon's AWS storages opposed to using Database BLOBs. The acceptable formats are:

Images - .png, .jpg, .gif

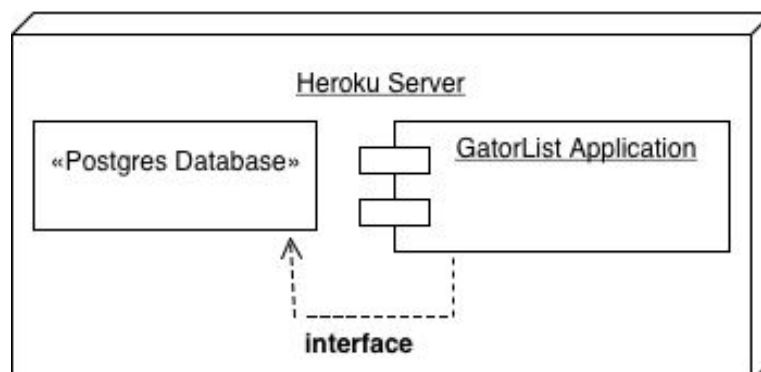
Video - .mp3, .m4a, .wma, .wav, .flac

## *Search/Filter*

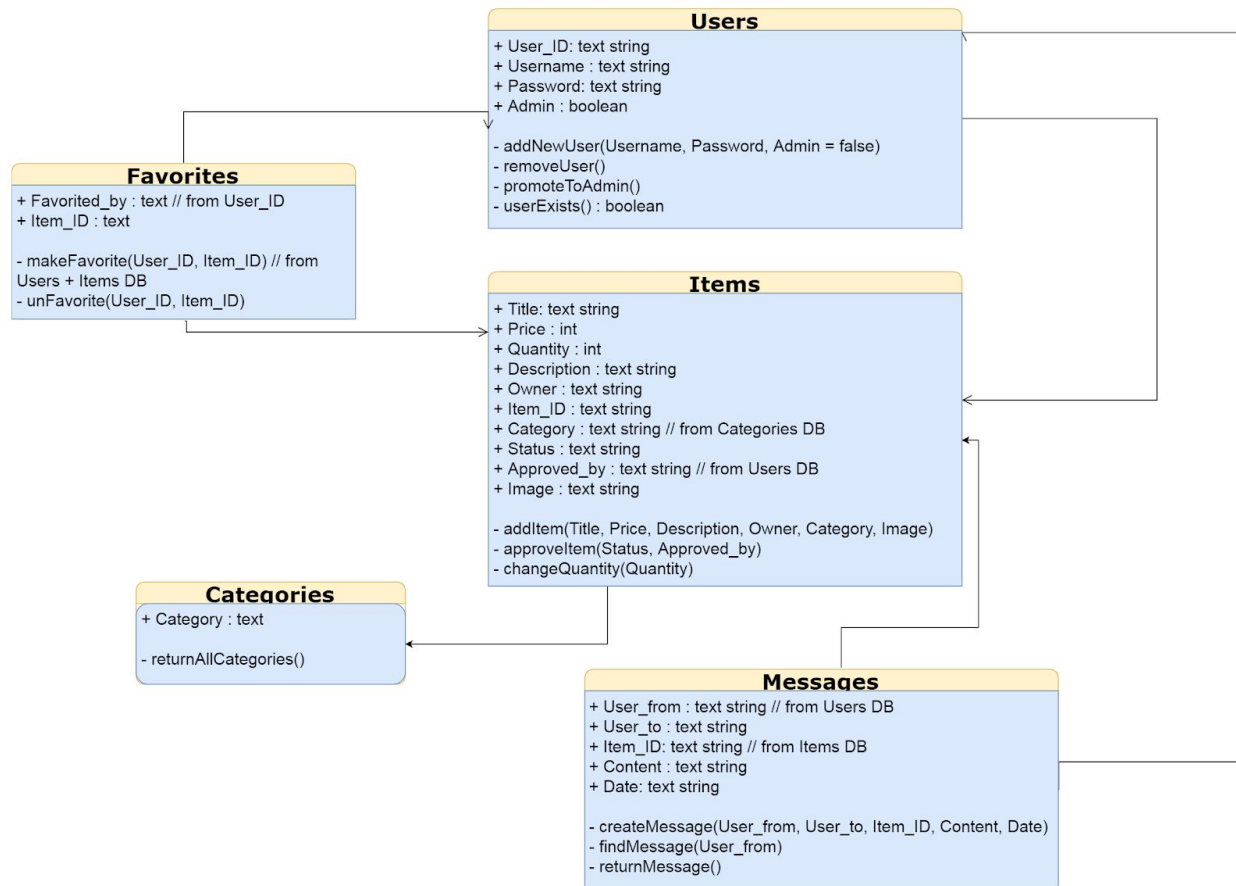
The primary function needed to search for and return results is PostgreSQL's %Like to return a user's search query.

# 5. High Level UML Diagrams

High level class diagram



## High level class diagram



## 6. Identify **actual** key risks for your project at this time

- Skill risks:
  - Team needs to learn how to use javascript.
  - Team needs to get familiarize with heroku tools and functions.
  - Backend team needs to learn how postgres works and integrates with our application.
- Technical risks:
  - We have had some problems with Heroku (github integration)
  - Postgres integration with our application