

Coding Academy by Orange, Jordan

3ard W Talab

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## INTRODUCTION

### **PURPOSE**

3ard W Talab is a mobile application that works as a third party, connects the buyer to the seller. The application is simple to use and requires only the email and phone number to simplify the communication process, as well as the signup process.

#### INTENDED AUDIENCE AND PERTINENT SECTIONS

Everyone who wants to sell and buy products. As 3ard W Talab allows the seller to submit a post that includes details about the listed product as well as a picture of it. Where the buyer can view these products and starts making offers in order to get a hold on that product.

### PROJECT SCOPE

- A mobile application that works as a third party, connects the buyer to the seller. The
  application is simple to use and requires only the email and phone number to simplify
  the communication process, as well as the signup process.
- Allows the seller to submit a post that includes details about the listed product as well as a picture of it. Sellers are required to categorize the item into various categories such as phones, tablets, and cars, ... etc. This breakdown simplifies the search process for customers browsing the platform looking for items in specific departments, making it easier for them to find the desired item.
- Implements a new concept in terms of being the 'middleman' as it offers bidding, allowing customers to place offers and bids on specific items. Nevertheless, the bidding starts from the minimum price set by the seller. With that being done we can assure that the seller ends up getting at least the starting bid in exchange for the item, with a certain timeframe being set by the seller.
- A web platform shall be provided as an administrative dashboard to control and monitor the exchange process and manage products and users.

#### **DOCUMENT CONVENTIONS**

JS	JavaScript
UI	User Interface
CSS	Cascading Style Sheet
MERN	MongoDB, ExpressJS, ReactJS, NodeJS
OS	Operation System

#### REFERENCES

[1]	MDN
	https://developer.mozilla.ora/en-US/

- [2] Dahl,R. 2009, NodeJS
  <a href="https://nodejs.org/en/">https://nodejs.org/en/</a>
- [3] Dwight Merriman, E. H. 2018, MongoDB <a href="https://www.mongodb.com/">https://www.mongodb.com/</a>
- [4] Facebook, 2013, ReactJS
  <a href="https://reactjs.org/">https://reactjs.org/</a>
- [5] Facebook, 2015, React-Native
  <a href="https://facebook.github.io/react-native/">https://facebook.github.io/react-native/</a>
- [6] Holowaychuk, T. 2009, ExpressJS
  <a href="https://expressjs.com/">https://expressjs.com/</a>
- [7] Lee, J. T. 2012, Firebase

  https://firebase.google.com/
- [8] Rebecca Turner, K. M. 2010, Npm <a href="https://docs.npmjs.com/">https://docs.npmjs.com/</a>
- [9] Thornton, M. O. 2011, Bootstrap
  <a href="https://getbootstrap.com/">https://getbootstrap.com/</a>
- [10] VandeHei, J. 2017, Axios

  <a href="https://github.com/axios/axios">https://github.com/axios/axios</a>
- [11] MongoDB Atlas
  <a href="https://www.mongodb.com/cloud/atlas">https://www.mongodb.com/cloud/atlas</a>

## **DESCRIPTION**

#### PRODUCT PERSPECTIVE

Different roles are presented to use the application properly from users' perspective as sellers and buyers. Also, from administrative perspective to control and monitor the exchange process and manage products and users as admins and owners.

### User

The same user is both seller and buyer. User must register and login into their accounts

#### Seller

- Add Product
- Accept Offer
- Reject Offer
- Delete Product

## Buyer

- View Product
- Make Offer

User has the ability to edit their information, logout, and deactivate their account

#### Administration

Administrative dashboard gives access to admins and owners. Both of them must login

### Admin

- Delete User
- View Product
- Delete Product
- View Offer

#### o Owner

Owner has the same authorities as admin and more

- Add Admin/Owner
- Edit Admin/Owner
- Delete Admin/Owner

### **FEATURES**

## • Mobile Application

## Landing Screen

This screen handles registration and logging in process

### Registration

Users must register and provide the following information to access their accounts

- Full Name
- E-mail Address
- Password
- Mobile Number

## Logging In

After registration, Users can access their accounts by E-mail and Password

#### Home Screen

This screen shows all products available in database

## Viewing Products

Users can view all products in the home screen.

### Categorization

Categorization is based on Product Categories. Where users have the ability to view products in a specific category.

## Viewing Product

When selecting a product, a Modal will open showing product's

- Title
- Image
- Category
- Location
- Bid
- Offer form to make an offer

## Making Offer

An offer can be made if

- The user does not own the product
- The user is offering a price greater than the bidding

#### Camera Screen

In the camera screen, the user has two options, either to choose an image from the gallery or to shoot one.

## Adding Product

After choosing the photo, a Modal form will open containing the following fields

- Title
- Category
- Location
- Info
- Starting Price

After submitting the form, user will be redirected to the home screen where they can find their new product post

#### Offers Screen

In the offers screen, there are two tabs. SELLING and BUYING tabs.

### Viewing Selling Products Offers

In the SELLING tab, the user can view all the products that they have received offers on.

## Viewing Selling Product Offer

After selecting a specific offer, A Modal will open showing the following

- Product's Title
- Product's Image
- Product's Category
- Product's Info
- Received Offer
- Status (pending/accepted/rejected)

## Accepting Offer

Offer can be accepted using the same Modal. And that will result in rejecting the remaining offers for the same product.

## Rejecting Offer

Offer can be rejected using the same Modal.

## Viewing Buying Products

In the BUYING tab, the user can view all the products that they have sent offers

## Viewing Buying Product

After selecting a specific offer, A Modal will open showing the following

- Product's Title
- Status (pending/accepted/rejected)
- Product's Image
- Product's Category
- Product's Info
- Sent Offer

#### Profile Screen

Profile Screen shows the account information and all products added by the user. From this screen the user can view and delete their products, edit account information, logout, and deactivate account

## Viewing Selling Products

After selecting a specific product, A Modal will open showing the following

- Product's Title
- Product's Image
- Product's Category
- Product's Info
- Bid

## Deleting Selling Product

Using the same Modal. User can delete specific product

## Viewing Information

At the top of this screen. User can find their information (Full Name, E-mail Address, Phone Number)

## Editing Information

When the user clicks on their information, a Modal will open to give the user an option to edit information

## Logging Out

The Log out button can be found just below user information

## Deactivating Account

The Deactivate button can be found next to the Log out button. Where the user can deactivate account and delete all of their products.

### • Web Dashboard

### Login Page

Admin and Owner must login using their username and password to access the administrative dashboard

## Dashboard Page

In this page, admins and owners, users, and products are shown

## Adding Admins/Owners

At the top of this page, owner can find a form to add an admin or owner

### Editing Admins/Owners

Below the adding form, there is a list of admins and owners where only the owner can edit

## Deleting Admins/Owners

Only owner can delete admins and other owners

### Deleting User

Users using the mobile application can be deleted from this page by admins and owners

## Viewing Products

All products by all users are shown in order to be monitored and controlled by admins and owners.

When a specific product is clicked, owner/admin will be directed to Product Page

## Product Page

In this page, admin/owner can view all product information along with its offers with the ability to delete the product.

## Viewing Product

All information related to the selected product is shown

## Deleting Product

Admin/Owner can delete products using this page or using the Dashboard page

## Viewing Offers

All offers related to a specific product will be listed below its information. When a specific offer is clicked, owner/admin will be directed to Offer Page

### Offer Page

This page shows all the information related to the selected offer along with the related product

## Viewing Offer

All information related to the selected offer is shown

#### **USER OVERVIEW**

Main roles in the system are User (seller/buyer), Admin, and Owner.

### User

User has Full Name, E-mail Address, Password, and Phone Number. Can login and view all the products posted by other users and themselves. Can make offers for any product than theirs. Also, User can add products, receive offers in which they can accept or reject. In addition, User can delete products, edit information, log out and deactivate account

#### Admin

Admin has Username, Password, and Role. The Admin role can log in, log out, and view all products posted by users of the mobile application and delete them. Also, Admin monitors products and offers, and can delete users.

#### Owner

Owner has username, Password, and Role. Owner has the same Admin authorities. Also, owner can add Admins and Owners, edit, and delete them.

#### **OPERATING ENVIRONMENT**

3ard W Talab mobile application is designed to run on smart phones with OS of Android (4.1 and higher) and IOS (10.0 and higher) with an active internet connection.

3ard W Talab Web Dashboard is designed to run on all modern browsers Microsoft Edge, Goggle Chrome, Mozilla Firefox, Safari, Opera with an active internet connection.

#### CONTRAINTS

- Not less than 4 GB RAM.
- 64-bit architecture.

### **DOCUMENTATION**

The code written to deliver 3ard W Talab mobile application and web dashboard is hosted on GitHub

https://github.com/ahmadghzawi/3ard-W-Talab-V2

## **ASSUMPTIONS / DEPENDENCIES**

## Running in development mode

JavaScript thread performance suffers greatly when running in development mode. This is unavoidable, a lot more work needs to be done at runtime to provide good warnings and error messages. The performance must be tested continuously in release builds.

## • Using console.log statements

When running a bundled app, these statements can cause a big bottleneck in the JavaScript thread. This includes calls from debugging libraries.

#### ListView

ListView's initial rendering is too slow

## REQUIREMENTS OF EXTERNAL INTERFACE

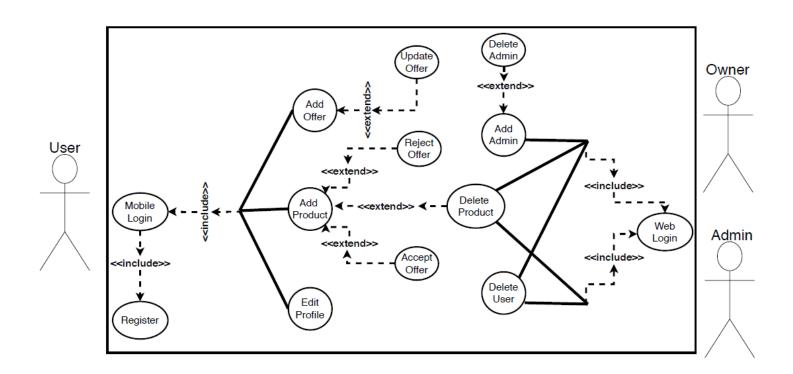
### **USER INTERFACES**

The user interface is kept simple to steer the user's focus for the purpose of the mobile application. White spaces are there to highlight important details.

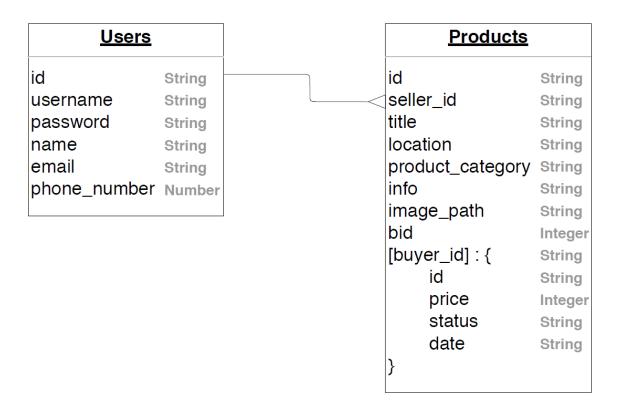
The design is the same for different devices. That is because proportional to the device dimensions.

For the responsive web dashboard. Bootstrap comes in handy. It is built on the bases of grid and columns. Where everything is responsive to the width and height.

# **Use Case Diagram**



# **Database Design**



### **SOFTWARE INTERFACES**

- HTML 5
- CSS 3
- Bootstrap 4.3.1
- React-Native 0.60
- React 16.10.2
- Firebase 7.2.2
- Express 4.17.1
- Mongoose 5.7.6
- NodeJS 12.12.0
- NodemonJS 1.19.4
- Axios 0.19.0
- Cors 2.8.5

## **APPENDICES**

# **APPENDIX A: Wireframe and Mockup**

Login & Registration Screens Home & View Product Screens ° — ° ° ° ° — ° ° ° **♥**,|| **■12:00** Sard W Talab LOGO 0 (1) **?**,|| ■12:00 **?**,∥ ∎12:00 Registration Product Title Product Image Full Name Email Address **₹**|| 12:00 Product Title Product Image

