PROJECT 3 - FINAL
CSC 4370/6370 WEB PROGRAMMING
SUMMER 23
DUE DATE: 07/29/2023@11:59 PM

OBJECTIVE:

Let's assume you have a startup idea for a company, your desires are to bring the **property buyer** and **property sellers** under a single platform. Please use a creative name for your company, for example, I would call my company (**PropertTy-Hub**) be creative and have a spinoff name similar to what I have created.

Business Plan: You are now planning to build a fully functional website. You have teamed up with your members; Secondly, this website will create three working portals. In summary, you will accomplish individual milestones. You MUST apply the implementation of SCRUM methodology.

PROJECT REQUIREMENTS:

You shall choose one team member as a leader for purposes of coordinating the project and reporting to the instructor.

Each team shall make a presentation lasting around 15 to 20 minutes in estimation in which you present your completed project. Created a creators Page -that will display the following:
Team Members: Provide a list of your team members (last and first names) and their project responsibilities.

- ➢ Leader's Name
- ➢ Project Name
- ➢ Supply Test Case for the project especially if you have an extra feature
- ➢ Make sure you have code snippets in your PowerPoint presentation, or you will lose points.
- ➢ Github link for all members.

- ➢ Each member MUST apply a summary of how SCRUM was beneficial to you in terms of solving all the obstacles that you encountered. Also explain how this methodology will be beneficial to you in the future.
- ➢ For group please revert to your project #1 members should you have any grouping issue contact TA(Prakash via discord)

ABOUT THE YOUTUBE CHANNEL

Create a YouTube channel this will be used to a presentation your work
Title Video: i.e., "Name of the task Project3_TeamName "

- This video should range from 15 - to 20 minutes.
- Every team member must participate in this video.
- Create a channel on YouTube and name it your group name

List of links to use and determine your recording presentation software
1. Zoom
2. Microsoft Teams
3. WebEx
4. Additional Software you can consider
5. Discord

REQUIRED: Before the time of the presentation, it is strongly suggested that your team copy the project files to the CODD server. Create a folder and place all containing files for your project and place the code on **GitHub**. Upload all the code work from start to finish on GitHub.

Grading: Meet the requirements (see the Requirements section above), you will receive credit however full credit will be based on the group that used creativity and who went above and beyond my requirements. Your grade will also be determined by the following criteria:

- **All Important Code snippets within your ppt presentation - include a slide to show your (project dialog collaboration) at the very end of your presentations before the demo.**
- **Easy-to-use and logical navigation**
- **Form processing**
- **Logins-- for registration and users**
- **Implementation of logic used**
- **Application of good design principles**
- **Effective use of images, colors, and typefaces**
- **"Everything working"**

Your team must do the presentations to get credit. It will not be sufficient to simply turn in the files to I-College and have them posted on codd. Also, post the URL or Project to your student account.

Please use either the **leader's/Team name** or the **project name** as the folder name (optional).

(Please submit your link to project 4 to iCollege on the assigned due date) …NO Link NO GRADE.

Task to completed you must complete milestones 1 & 2 then choose any one of these (3) milestones #3, #4, or #5

Milestone-1: Home page and User Registration.

Home Page:

Design a generic home page describing: (same concept as an **About** page)

- Description of your project.
- What does your company do?
- What kind of services do you provide?
- Why do they have to choose you over your competitors?
- Anything that you do as a business unit to attract customers.

User Registration

1. Now as a team, you have discussed what kind of users your platform will be having.
2. **Users**: *Buyers and Sellers*. You also wanted to add an **Admin** user to analyze your business.
3. This Portal **must** handle the registrations and login of all the users.

Front End (FE):

- Design a signup page with all the required form fields. For example *first name, last name, email id, username, etc*. Make sure you collect all the form data that is required from the users to run your business effectively.
- Handle all the form validations.

Back-End (BE):
- Design your DB Schema.
- Store the all the required data in the database
- Make sure you are encrypting the passwords when you store them in the DB.

User Registration (option 2) (Optional):
This credit card type detection is a nice addition to the standard payment form because it frees up the user from entering what is redundant information

Use the data structure called an ***inversion map*** from the Google Closure Library. This data structure maps integer ranges to values, a perfect fit for mapping card number prefixes to card types. This card detection code isn't restricted to regular expression syntax, so it's free to declaratively mirror the original card number ranges before being transformed and assembled into the final data structure.

Fields for Card Entry

- The credit card should have
- Your name
- Credit card type
- Credit card number
- Expiration date
- Extra Feature Coupon or discounts

Second Form fields as it relates to the Credit Card
- Address
- Billing Address
- Phone number

What's in a Credit Card Number?

Despite looking somewhat random, credit card numbers are governed by strict conventions. There is a standard called **ISO/IEC 7812** that specifies the format for identification numbers on credit cards as well as other card-based identification numbers. The entire identification number is separated into three parts:

Issuer Identification Number (IIN). The IIN is the first four to six digits of the overall identification number, and it represents the company that issued the card. In the case of credit cards, the IIN represents the issuing bank.

Account Number. The next few numbers are your identification number. For credit cards, this is your account number.

Check Digit. The very last digit is used to verify the overall validity of the identification number. Calculations are used with the preceding numbers to determine that the number format is correct.

Consider the sample MasterCard number 5555-5555-5555-4444 (don't worry, all banks have sample credit card numbers you can use for testing purposes). The first four digits, 5555, is the IIN representing the fake bank issuing the MasterCard. The numbers 5555-5555-444 are the individual account number and the last 4 is the check digit.
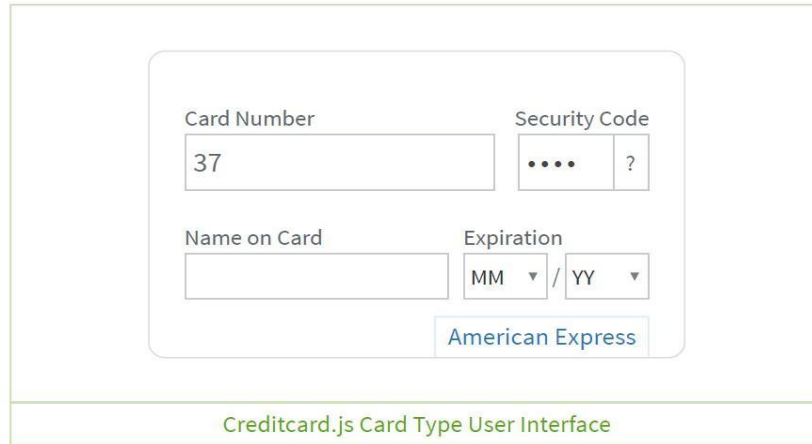
Detecting Credit Card Type

The interesting thing about the IIN is that it also determines the type of credit card.

 Here are some common IIN patterns:
- ➢ MasterCard IINs have the first two digits in the range 51-55
- ➢ Visa always begins with a 4
- ➢ American Expression IINs always begin with 34 or 37

Knowing this, it's possible to write a simple JavaScript function to determine the type of credit card given an account number.

Please implement this approach by displaying the detected card type in the bottom right of the credit card form

Creditcard.js Card Type User Interface

The use of large text instead of small icons creates a more readable interface. The text is styled just enough to be a noticeable experiment with transitioning so when you start typing the Card logo can now be displayed at the bottom of the form.
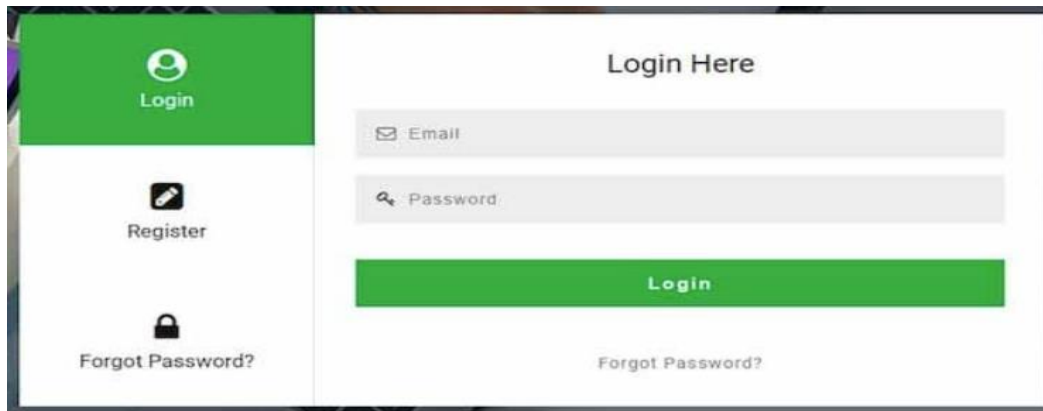
Here are some demo images you can use to display

Milestone -2 User Login:

Once the new user is registered successfully the user must be *redirected* automatically to the login page.

FE + BE:

- Design and develop your login page.
- If the user exits after verification of the password fetched from the DB you should redirect the user to his dashboard to officially sign in.

Redirecting Rules:

- If the user is a seller, redirect the user to the seller dashboard.
- If the user is a buyer, redirect the buyer to the buyer dashboard.
- If the user is an admin, redirect the admin to the admin dashboard.

Make use of the session's concepts for example in the general situation :

1. The session id is sent to the user when his session is created.
2. It will store a cookie (called, by default, PHPSESSID…etc…)
3. The cookie is sent by the browser to the server with each request
4. The server (PHP) uses that cookie, containing the session_id, to know which file corresponds to that user.

IN MILESTONES – 3, 4 & 5, YOU CAN CHOOSE TO CREATE ONLY ONE.
CHOOSE EITHER SELLER/ USER /ADMIN DASHBOARDS FOR THIS PROJECTS

Milestone - 3 Seller Dashboard:

FE :
Once the seller logs into their account the dashboard should list all the properties details also called **card**(s) tied to that user.

For example:

1. The location and age
2. The floor plan (including the site's square footage)

3. The number of bedrooms
4. Additional facilities (such as bathrooms)
5. Presence of a garden
6. Parking availability
7. Proximity to nearby facilities (such as large towns, schools and colleges)
8. Proximity to main roads
9. Property tax records - calculate 7% of value

If the user hasn't registered any property previously there should be a **card** with a **+** Symbol suggesting to add the new property to the platform. Implement some logic to emphasized that they must click the + symbol

- Fetch all the properties from DB.
- List them in the form of cards.

   Card:
   ○ Each card must have an image. The main details like the location, price, etc.
   ○ Once the user clicks on the card. The user must be redirected to the complete details of the property.
   ○ The user should be able to update the property details in the complete video of the property details page.
   ○ The user should be able to delete the listed property.

BE:
Once the seller adds a property to the platform, store all the details in the property table in the DB with the foreign key user owning the property.

Design your DB Schema as per your convenience but the above-mentioned point is just a suggestion and best practice.

We have given a sample of Zillow's seller dashboard; you can be creative and come up with ideas to create your project-based seller's dashboard.
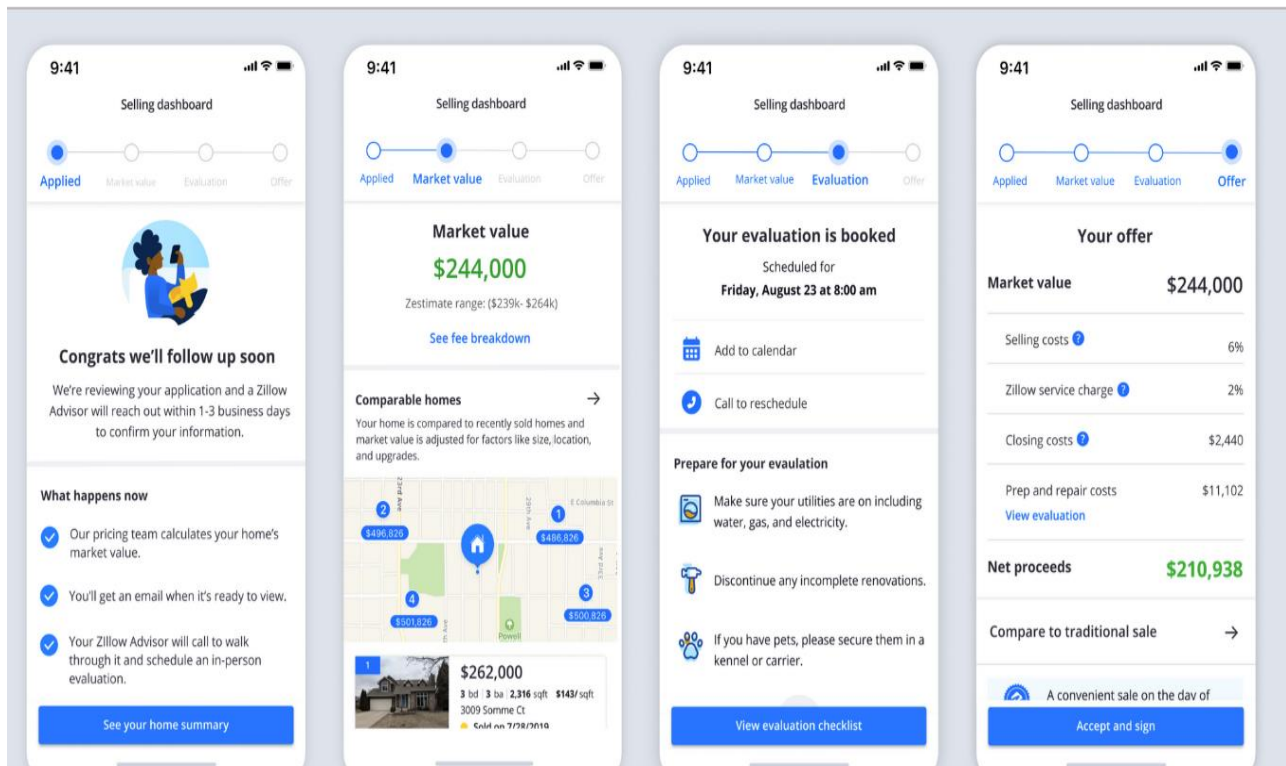
Milestone - 4 Buyer Dashboard:

- If the buyer is logging in for the first time, display a "*creative*" welcome note.
- Thank them for choosing us.
- There should be a **search bar** in the dashboard.
- Based on the terms entered in the search bar, fetch the details from the DB and display them in the dashboard accordingly. Create a search that has two to three embedded queries or use a filter of any sort.
- The display **cards** should be the same as explained above.
- Once the user clicks on the **card** they should be redirected to the page where the user can see the complete details of the property.
- On this dashboard the user cannot see the option to *update/delete* the property as they are not the owners of the property. However, they must have the option to create a Wishlist for that card.

- The buyer's dashboard should then be capable to list all the property cards that he has wish-listed earlier.

Property Cards

Inspirational designs, illustrations, and graphic elements from the world's best designers.
Want more inspiration? Browse our search results...
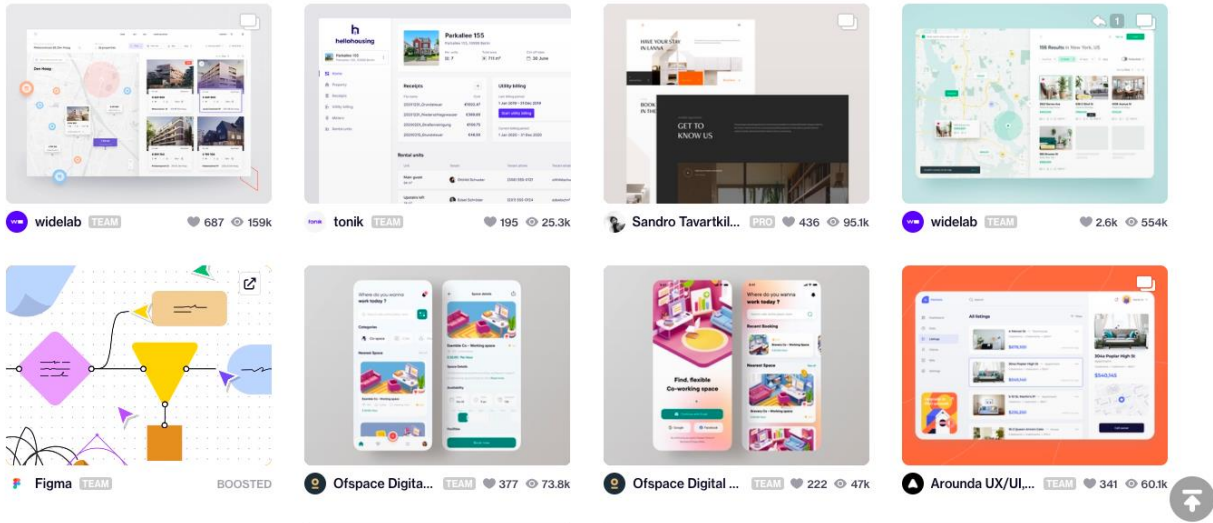
Milestone - 5 Admin Dashboard:

- Design and develop the admin dashboard.
- The admin dashboard is a location wherein all business owners should be able to have a complete understanding of what is going on with this business.
- You should be able to use this data to improve your business.
- Let's say you can list the areas which have the highest properties that are being listed or that are being sold. Therefore, based on these results you can advertise your product more in such areas to show your success.
- Another example is you can list users who are buying or selling a high number of properties etc.
- Brainstorm then apply all or any such data which can help improve your business.
- You can take references from current or existing use cases.
- The below-mentioned image does not relate to our use case.
- This gives you a rough idea what you can include and what you make it look like.

DASHBOARD

APPS

LAYOUTS

WIDGETS

Users Total	Users New	Users Reported/Blocked	Users Top
14,800	541	5	104

Book Train

Orders Confirmed	Enquiry Messages	Paid for Service Fees
917	166	$3477

Orders Confirmed

1. 2018-07-20 11:01:29
2. 2018-07-20 09:36:23
3. 2018-07-19 23:05:14
4. 2018-07-19 21:46:58
5. 2018-07-19 17:00:02
6. 2018-07-19 16:58:00
7. 2018-07-19 11:11:11

John Smith
john.smith@gmail.com
+1 7776655

Booking ID	1234567890
User ID	john.smith
Date of Birth	11 April 1988
Passport No.	JS001122
Hotel Address	23 Hotelroad St., suit 288

PAYMENT DETAILS

Transaction No.	0123456789
Date	20 July 2018, 11:01:29
Booking ID	1234567890
Amount Paid	$77
Amount Received	$70
Service Fees	$7
Service Provider	PayPal
Delivery Address	23 Hotelroad St., suit 288
Process Status	**Success** ⊘

SUBMIT ENQUIRY

User ID	john.smith
Name	John Smith
Email	john.smith@gmail.com
Phone	+1 7776655
Collect options	Self collect

PASSENGER DETAILS

Passenger 1
Passenger 2
Passenger 3
Passenger 4
Passenger 5
Passenger 6

Name	John Lee
DoB	31 Dec 1990
Passport No.	JL776655
Ticket Class	Second Class, Adult

WeChat Credits

Orders Confirmed	Enquiry Messages	Paid for Service Fees
409	36	$2388

Orders Confirmed

1. 2018-07-20 11:01:29
2. 2018-07-20 09:36:23
3. 2018-07-19 23:05:14
4. 2018-07-19 21:46:58
5. 2018-07-19 17:00:02
6. 2018-07-19 16:58:00
7. 2018-07-19 11:11:11

John Wick
john.wick@gmail.com
+1 5551122

WeChat ID	1234567890
User ID	john.wick

PAYMENT DETAILS

Transaction No.	987654321
Date	20 July 2018, 11:01:29
WeChat ID	1234567890
Amount Purchase	$10
Amount Paid	$10
Amount Received	$10
Service Provider	PayPal
Process Status	**Pending** 🕙

Phone Credits

Orders Confirmed	Enquiry Messages	Paid for Service Fees
1,433	304	$7800

Orders Confirmed

1. 2018-07-20 11:01:29
2. 2018-07-20 09:36:23
3. 2018-07-19 23:05:14
4. 2018-07-19 21:46:58
5. 2018-07-19 17:00:02
6. 2018-07-19 16:58:00
7. 2018-07-19 11:11:11

Van Helsing
van.helsing@gmail.com
+1 5550101

User ID	van.helsing
Phone	+1 5550101

PAYMENT DETAILS

Transaction No.	8765432109
Date	20 July 2018, 11:01:29
User ID	van.helsing
Phone	+1 5550101
Amount Paid	$10
Service Provider	PayPal
Process Status	**Declined** ✖

Milestone - 6 Handling business challenges (Bonus):

- Come up with a list of challenges that your business has
- How are you going to face those challenges?

Eg-1: For example, let's say that a buyer cannot always be a buyer. They want to sell properties as well, and the seller sometimes wants to buy a property as well. Now in this case you cannot ask the user to create another account to sell (if buyer) and buy (if its seller).

How are you going to overcome such a situation?

Eg-2: How are you planning to generate revenue for your company? If everything is open to all users, the buyer sees the seller and contacts him, and then the transaction is done. How are you planning to generate revenue from your website?

A simple solution is to allow any user to access the complete details of only 5 properties. From there on you can suggest buying subscriptions

In summary for bonus - **Implement such challenges and solutions mentioned above.**