Evaluating Borrow me Website

Improving in all important aspects

Mohammed Salahadin & Abdulrahman Twafiq & Shakar Abdulrahman

27.10.2020
Computer SCIENCE

INTRODUCTION

Human computer Interaction is one of the most important concepts which helps the users to interact with the content of the applications and help get user attention to keep using the applications and feel more comfortable with it, it also should save user time and efforts. Our role in this project as user experience designers is evaluating and testing borrowme.ml website in order to improve it in terms of Usability, Accessibility and Design. In addition to all that we are going to check for the functional and non-functional requirements of the website in order to evaluate it if it's correct or not. We are going to implement fixing of the above problems in borrowme.ml website and show the results and difference, later one we will contact the website owners in order to inform them about the issues that they had in the website and offer them to solve it for them and provide them with suggested solutions.

BACKGROUND RESEARCH

Through our research we found that borrow me website is a useful website for the community but it has no users, therefore we wanted to discover the issues that make users don't use it and solve the website problems from all aspects considering the design and functionality of the website.

We discovered that the websites in general don't support the user accessibility, usability, user friendly, learnability, flexibility and standards & conventions.

Methodology and Approach

We are using the website as normal users in order to determine the issues related to the design, usability, accessibility, and functionalities. After determining the issues, we as designers are going to discuss them and create different designs using PowerPoint application to choose the best design among them. After choosing the best design related to a specific issue, we will implement it using Sublime Text Editor and by web technologies like CSS, JavaScript, etc. Then, we will try to get the functional and non-functional requirements ready as well. We are inspecting the website using Google Chrome Inspection Tool to get the code of any page to make changes on it. Finally, we will reach the comparison step to compare the previous and current design to discuss whether it needs further improvement or not.

Our Methodology for rebuilding the website

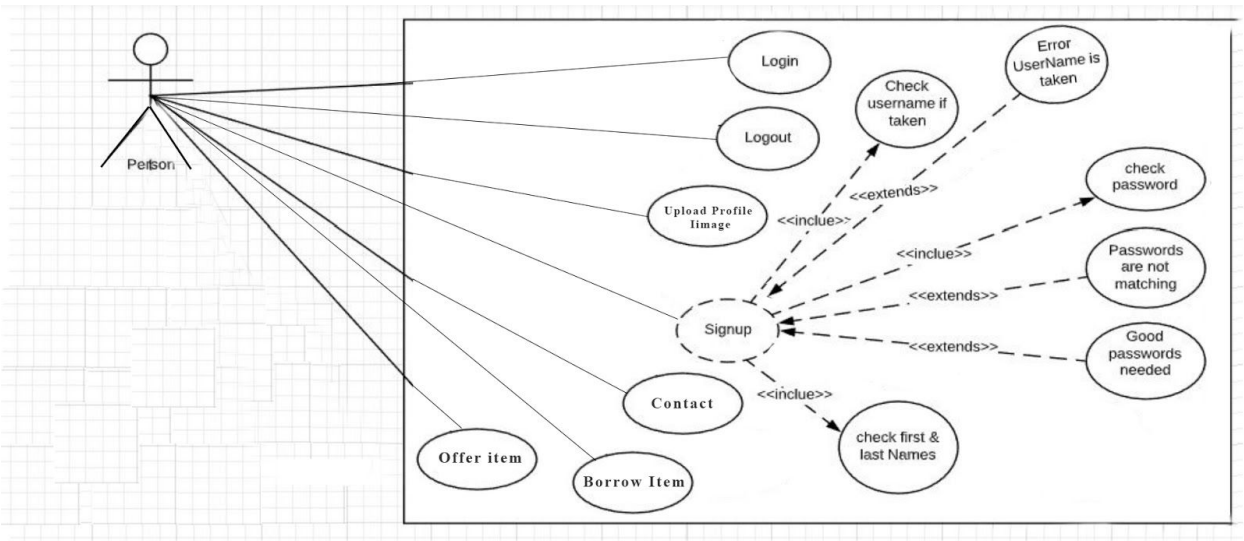
Designing tool: For designing we are using Framer.com website to redesign the pages for both mobile and Desktop versions to be implemented and coded in the next step.

Implementing and coding the design we are using normal html extension file with the following additions:

- Bootstrap: for the main style, elements, sections and grid system
- JavaScript: for designing interactive and responsive pages.

Design

Use Case Diagram:



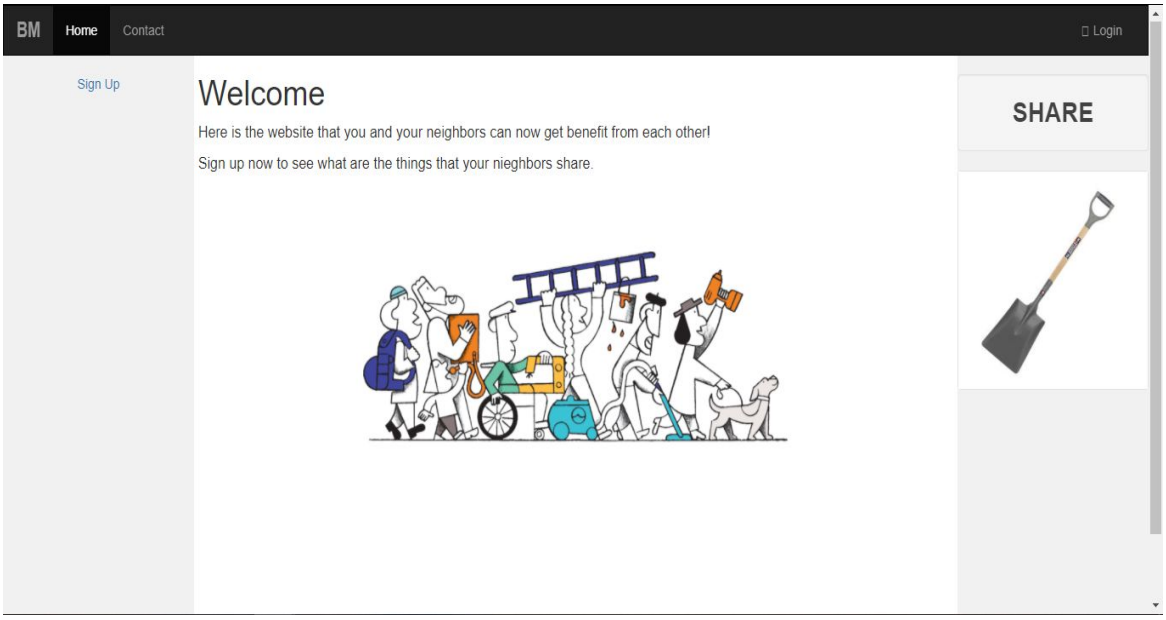
Implementation

Design has been done through Powerpoint and considered all aspects of simplicity of the design. Pages have been designed from scratch and we have used bootstrap to arrange the grid system of the layout to arrange the sections according to the design that we implemented in powerpoint keeping in mind it has to be responsive,attractive and simple.

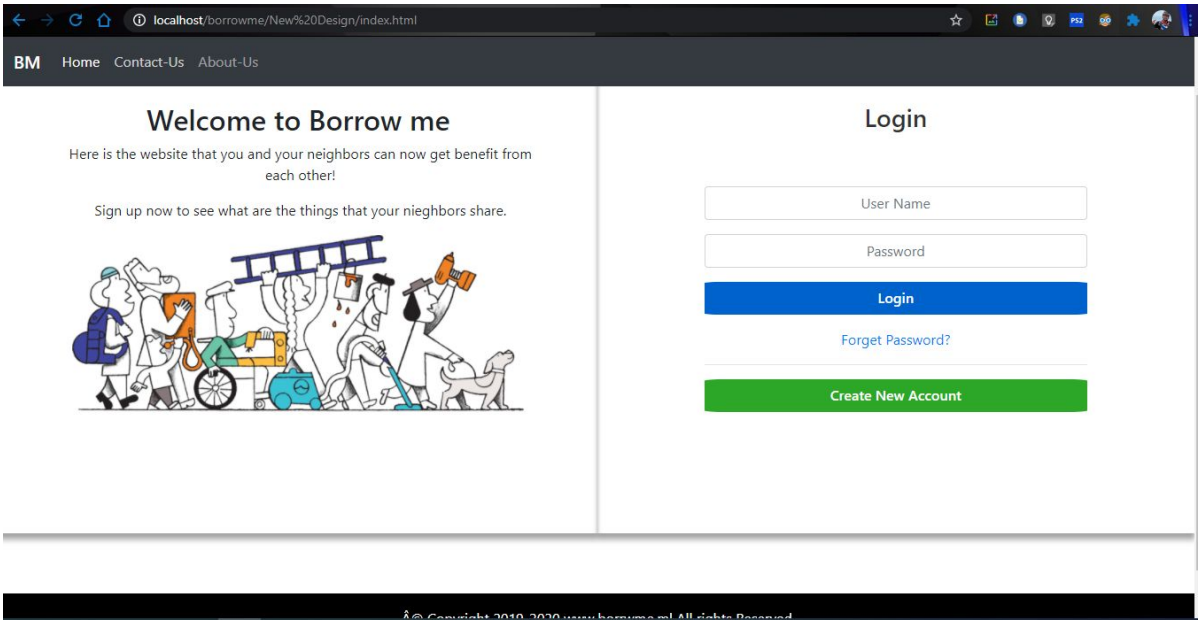
Login page

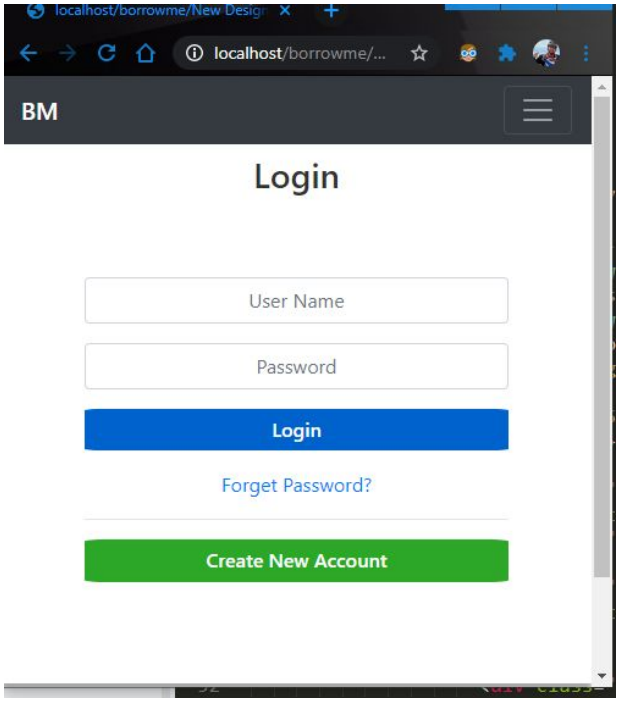
Page Link	Non-functional Requirements (Design)	
http://borrwme.ml (Home Page)	Issue/Mistakes	Solution
	Login link is not very clear for the user and it doesn't have an icon to make it easier to find.	Merging the login panel with the welcome message to reduce steps, and login directly to the website
	Sign up should be a button and should be in suitable color and close to the login panel	Having signup link below the login panel on the home page, including the forgot password link as well.
	Grid system should be improved by removing unnecessary sections to have less crowded page like (Left and right sections)	Removing left and right sections and have to middle sections for targeting the focus of the user to the login and welcome page
	Page is missing About and Social media page.	Adding about link to the header
	Welcome title is small size and located in the wrong position	Rewriting the code in bigger and better font in middle of the screen considering the new grid system
	Added future: Once users visit the main page auto focus will be on the user name	

Page Before



Page after implementation



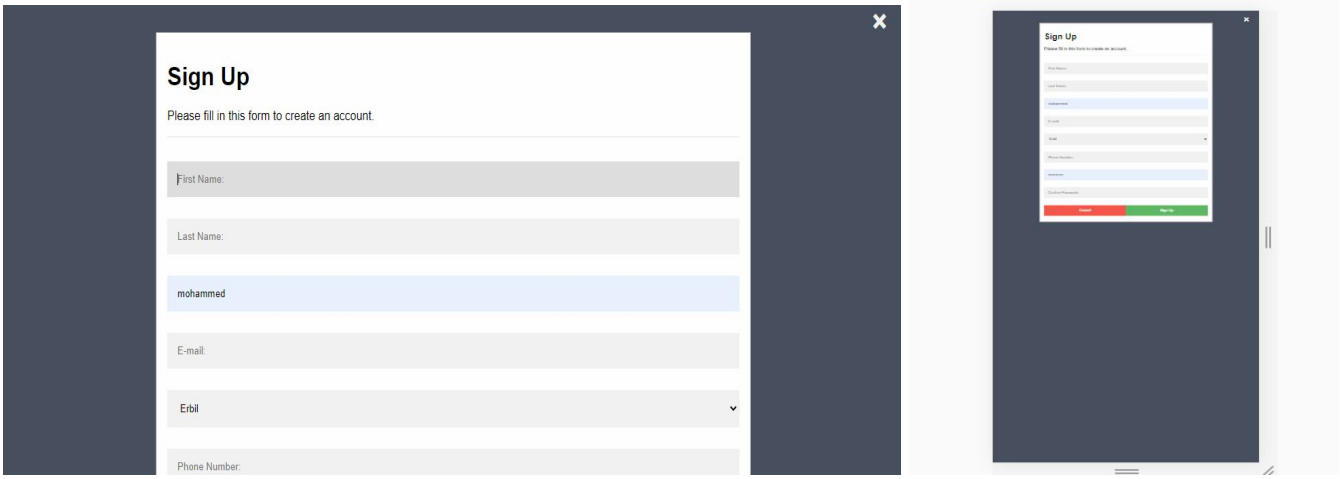
	Below is how it looks like for mobile devices 

We have added the following point to the implementation part of the project:

1. Scanning the whole site and finding the (issues, problems and mistakes) that need to be fixed and redesigned in both Desktop and mobile versions.
2. Redesigning the front-end of the website in a better way that follows the UI design.
3. Final project decision plan is to fully scan borrwme.ml website and redesign it's front end in order to have a responsive, attractive and better performance website.
4. After redesigning the whole website in the correct way that matches the standards for creating UI interfaces systems we will create a proposal in order to offer the website to change their design to the suggested one that we have designed.

The method used for discovering issues, problems and design errors by visiting the website pages and identifying the issues then write them down and find a solution for them to be redesigned in a better way.

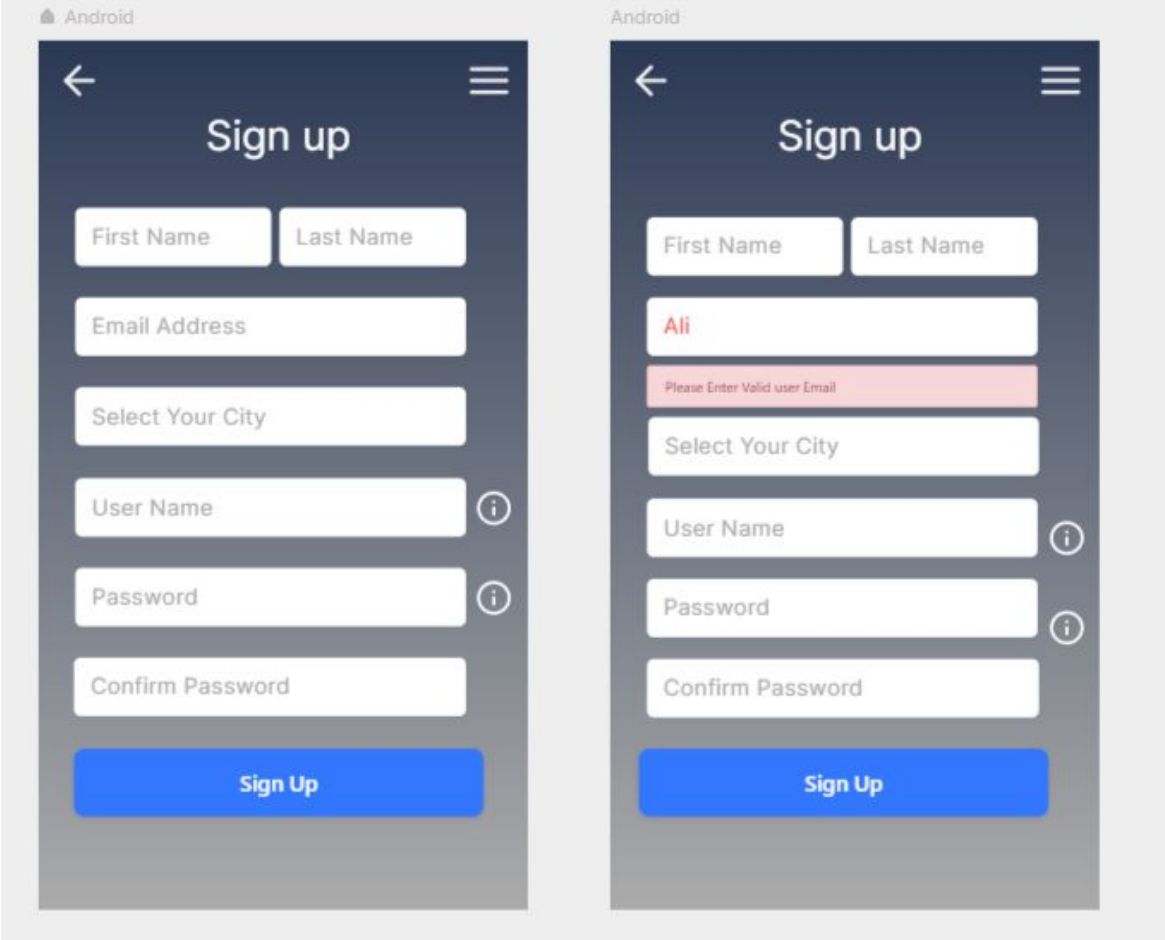
Sign up page

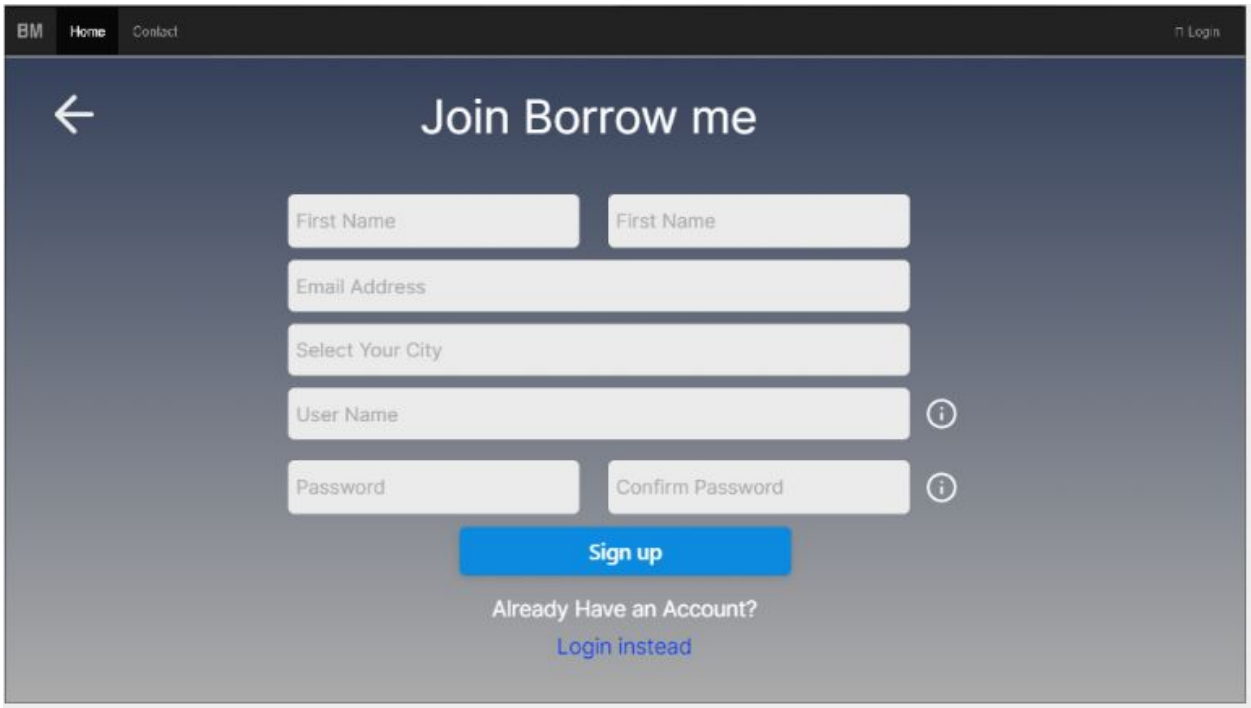
Page overview:


Problems and issues for desktop version:

- Input fields are large and take most of the screen size making the user see the rest of the fields.
- Input fields doesn't have hint that user can hover to view what kind of usernames or passwords are accepted for Username, Password and phone number fields
- Password field should have an icon allows the user optionally to show what he wrote down as password
- Having one button which is sign up instead of two options make it easier for the user to not confuse
- Having an icon for the user to be able to go to the previous page instead of having the close icon which is makes the user confuse
- The style of the page doesn't influence the user attention

Page After redesign


Android
Sign up
First Name
Last Name
Email Address
Select Your City
User Name
Password
Confirm Password
Sign Up
Android
Sign up
First Name
Last Name
Ali
Please Enter Valid user Email
Select Your City
User Name
Password
Confirm Password
Sign Up


BM
Home
Contact
Login
Join Borrow me
First Name
First Name
Email Address
Select Your City
User Name
Password
Confirm Password
Sign up
Already Have an Account?
Login instead

Problems and issues for Mobile version:

Same issue with the desktop version adding to it the following issues:

- User have to zoom in in order to view the page
- Font size and style are not easy to see.

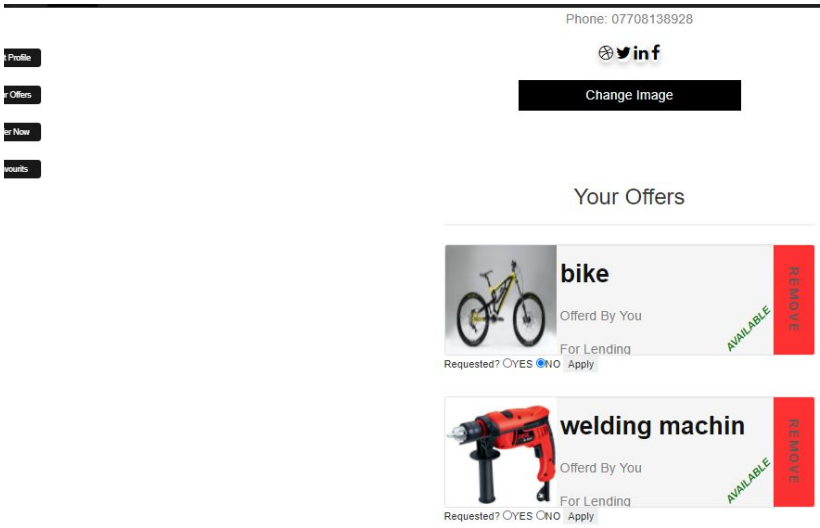
Redesign sign up page in a more interactive way, create the help as a hint to the normal user (phone number pattern, password length.

Issue, problem ...	Solution
Unarranged and extra sections with missy design	Arranging the home page grid system and rebuild it using bootstrap grid system implementation
Difficulties with finding the login button and different location of the sign up button, need more time to learn the website and how to use it.	In order to solve all the previous problems together we have moved the login page into the home page which makes it a lot easier to login directly, keeping in mind making the page much more user friendly and easier to use and have less sections by removing extra sections.
Having a lot of not useful and not clickable advertising which makes the page more crowded and missy	
Inappropriate font style for the main welcoming message and unarranged location	We have chosen a nice font that matches the style of the website and change the location to be centered and clear

We changed the design to support the readability in terms of consistency, font color, font size, brightness and appearance. For non-functional requirements have added info icons to help the user to learn how to import the correct data, for example the user name should not contain specific characters. We have decreased the input fields by removing the phone number field to appear later as a modal dialog for confirmation. We added an Alert message that shows the user where the error message has occurred.

Offers List Page

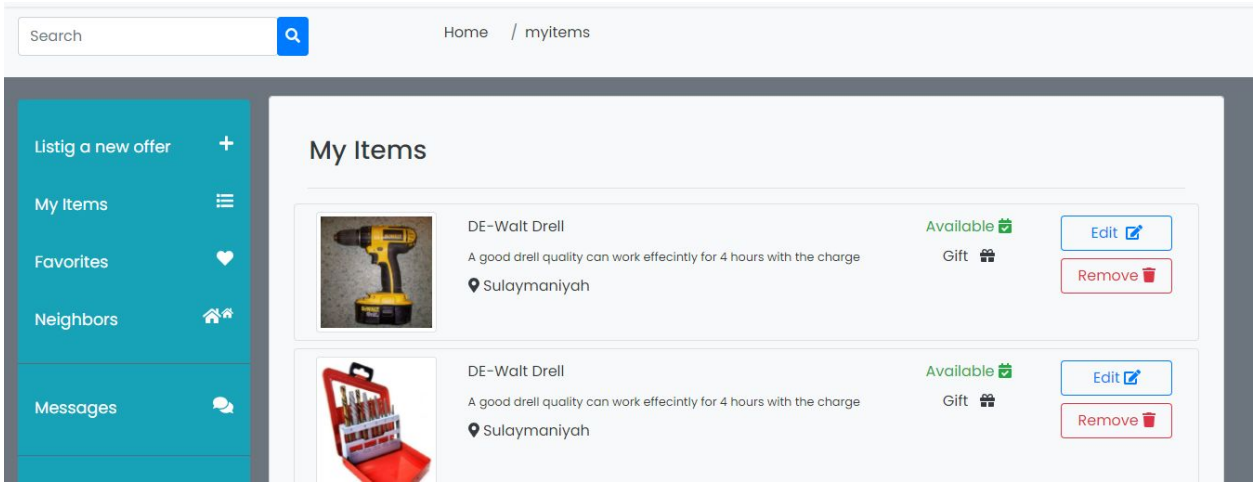
- In the old page it wasn't arrange
- It is in the profile page, long way for the user to show his posts
- The design of the offers is horrible again the same as the main page posts
- The buttons on the left are not clear, not visible,



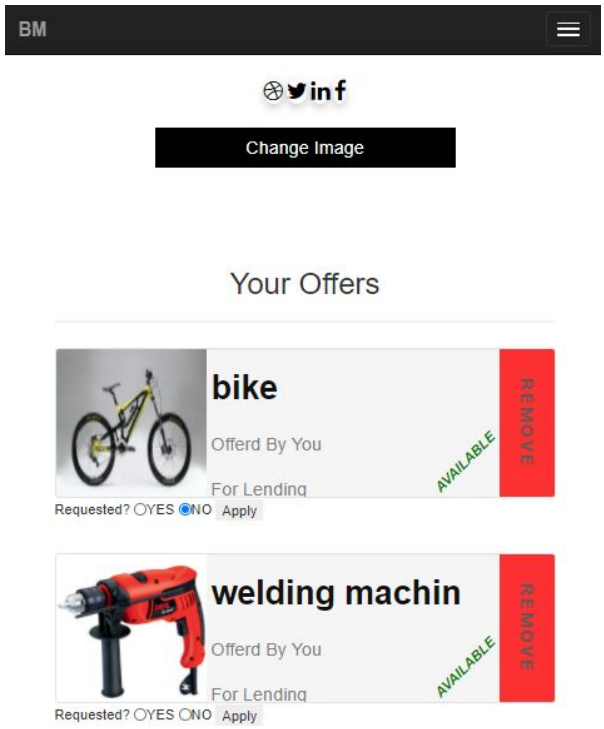
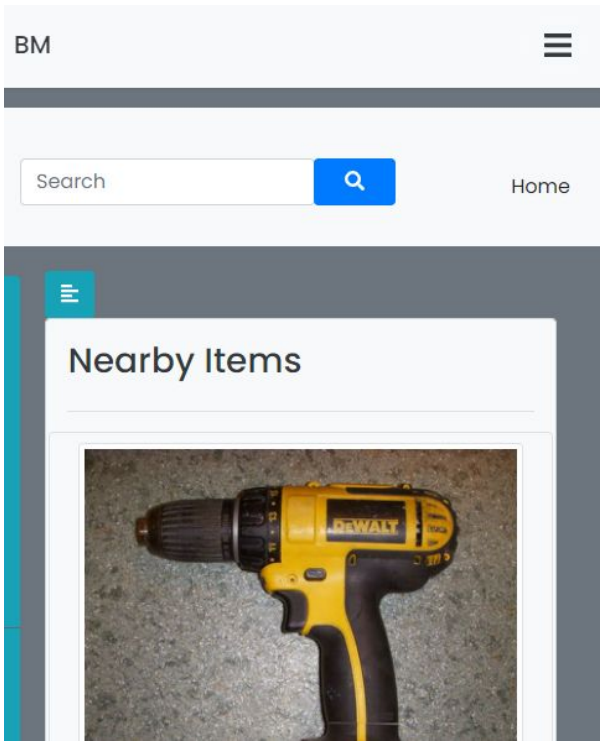
A short way to access all the pages using the sidebar to show the users posts directly with one click.

- Edit and remove buttons are arranged and they have suitable Icons, font size, font color, fixed position.
- The design is much better than the old one and it follows standards and conventions.
- No more white spaces, taking advantage of the space to show more content
- Adding suitable icons matching the real world, available and gift icons.
- Adding description to each item followed by the location.

Note: Before designing and implementing in the old pages my items and faverot list were in the profile page which is extra useless information that users will not need.
We have fixed this issue and removed the profile.
We have added the profile in the nav bar.

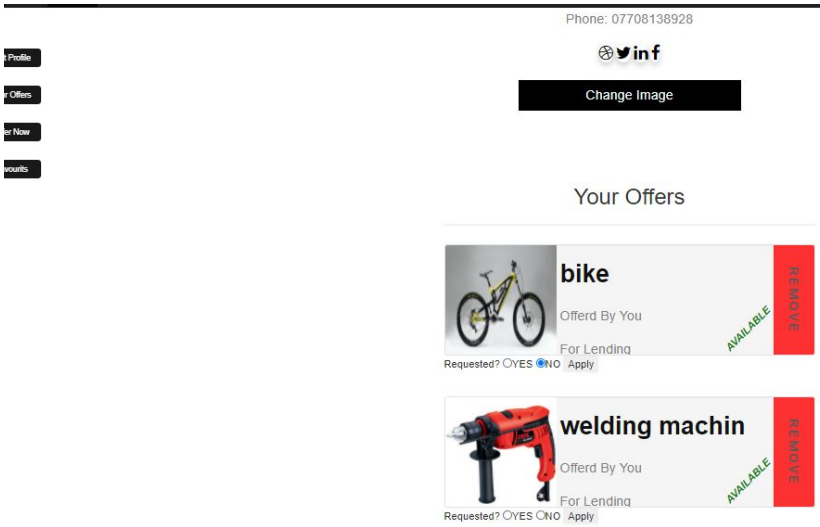


And here is how they look like in the mobile view:

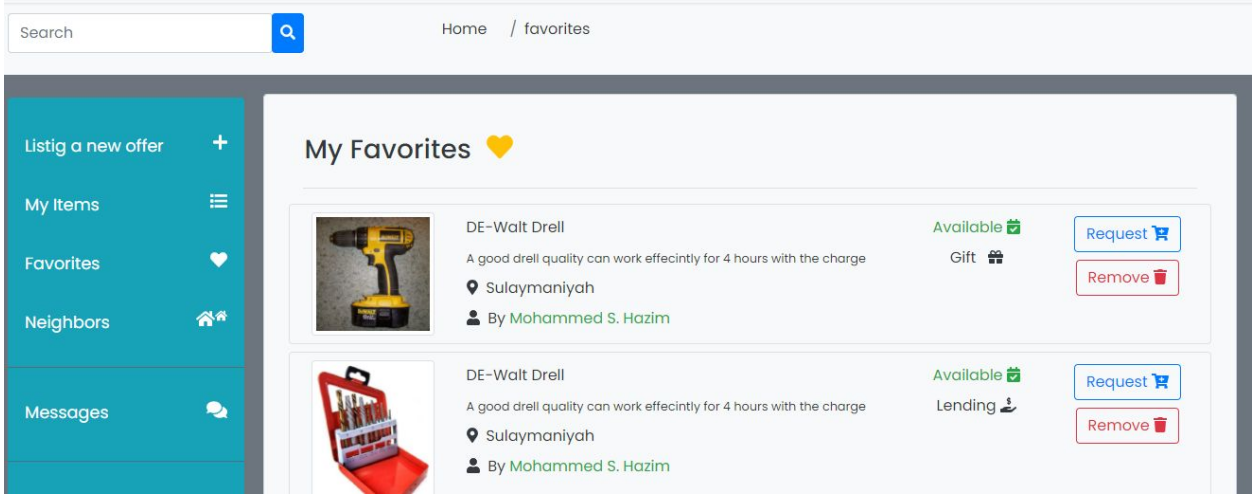
Before	After
	

Favorites page

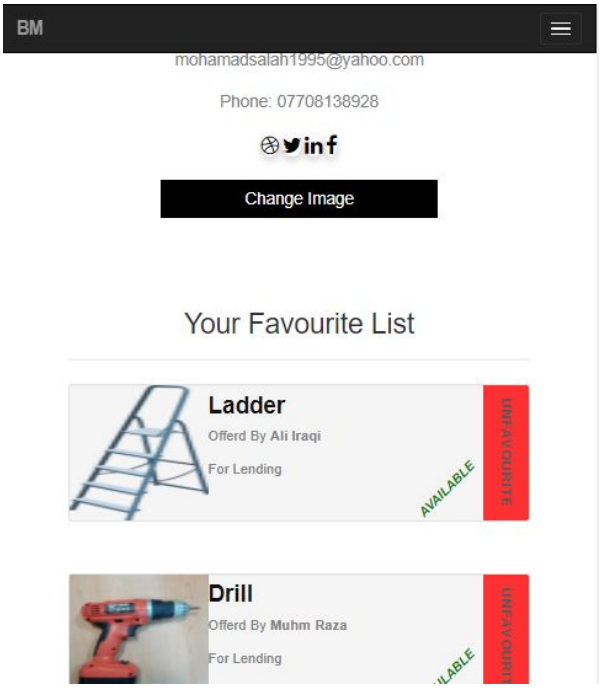
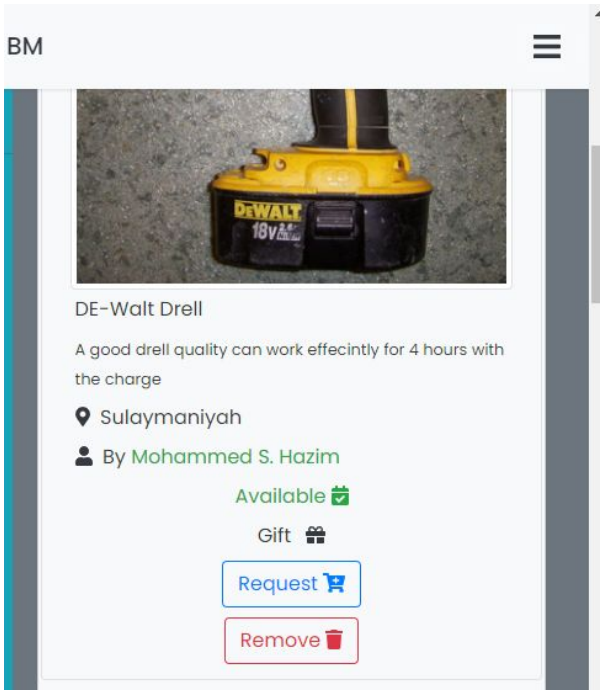
We have done the same thing with favorites page
Before:



After



Mobile view:

Before	After
	

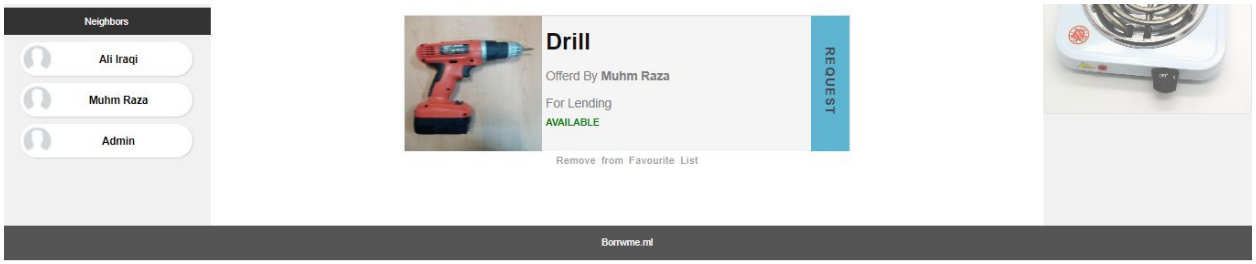
Neighbors page

In the neighbors page we have a button to be clicked and a list of neighbors will be shown with their images and the user will click to one of them then he will be redirected to another page that shows the user's information, All neighbors will be shown in the sidebar without information.

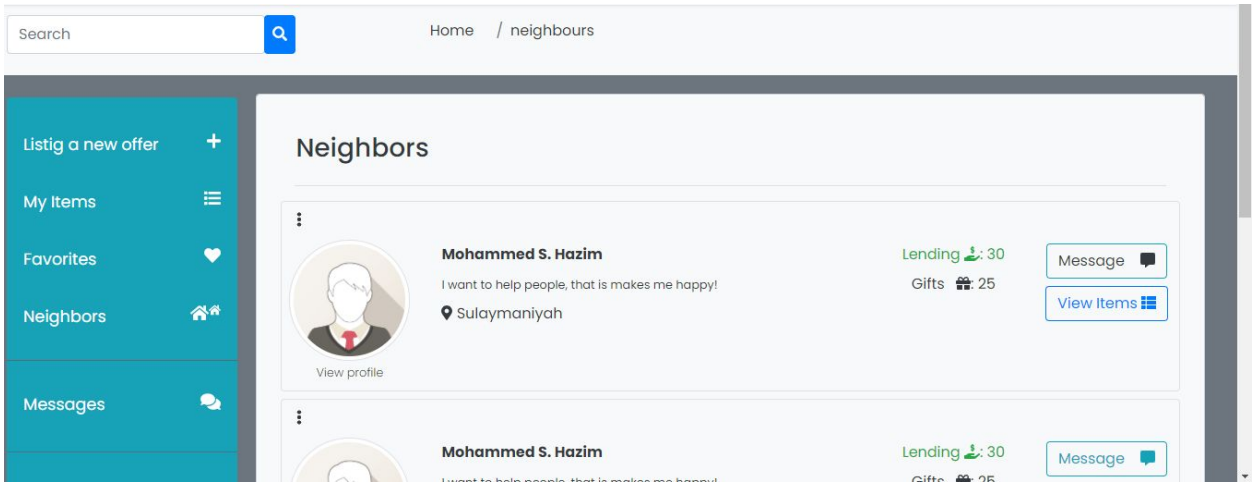
What we have done to solve this problem:

We include the neighbors button in the sidebar which makes it a lot easier to find and when the user clicks on it he will see all his neighbors information as shown below.

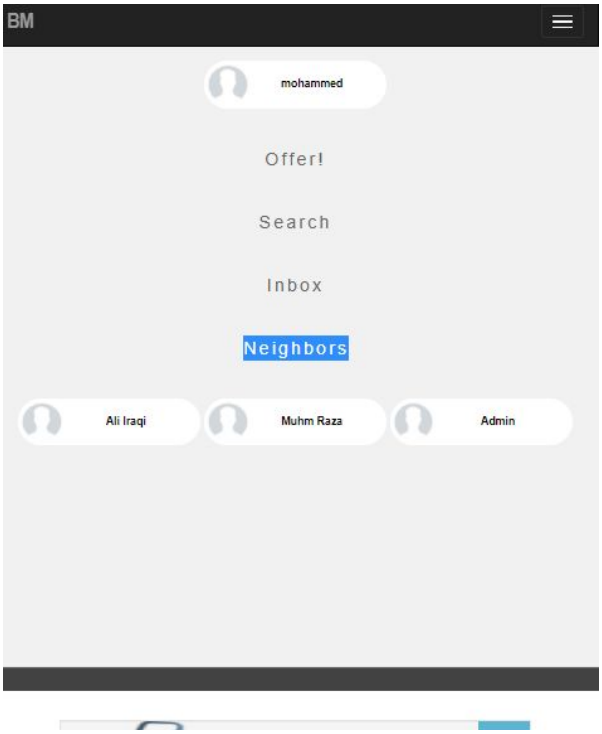
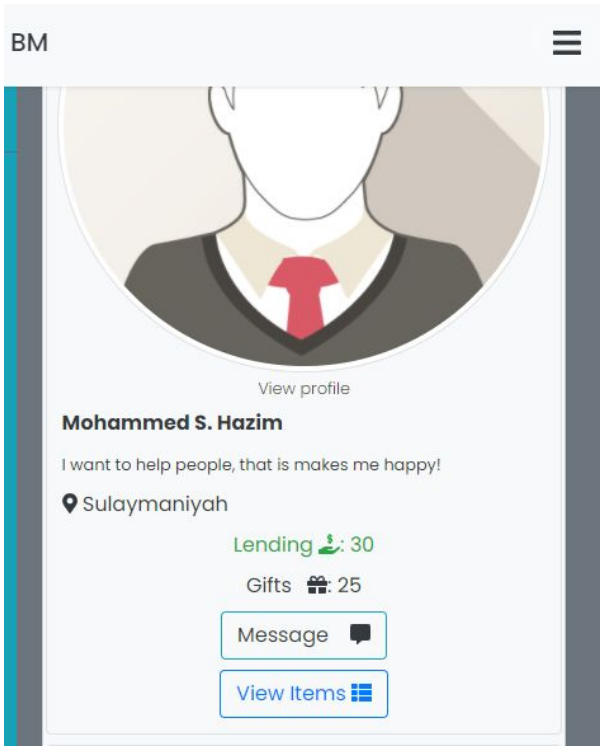
Old page



New page:

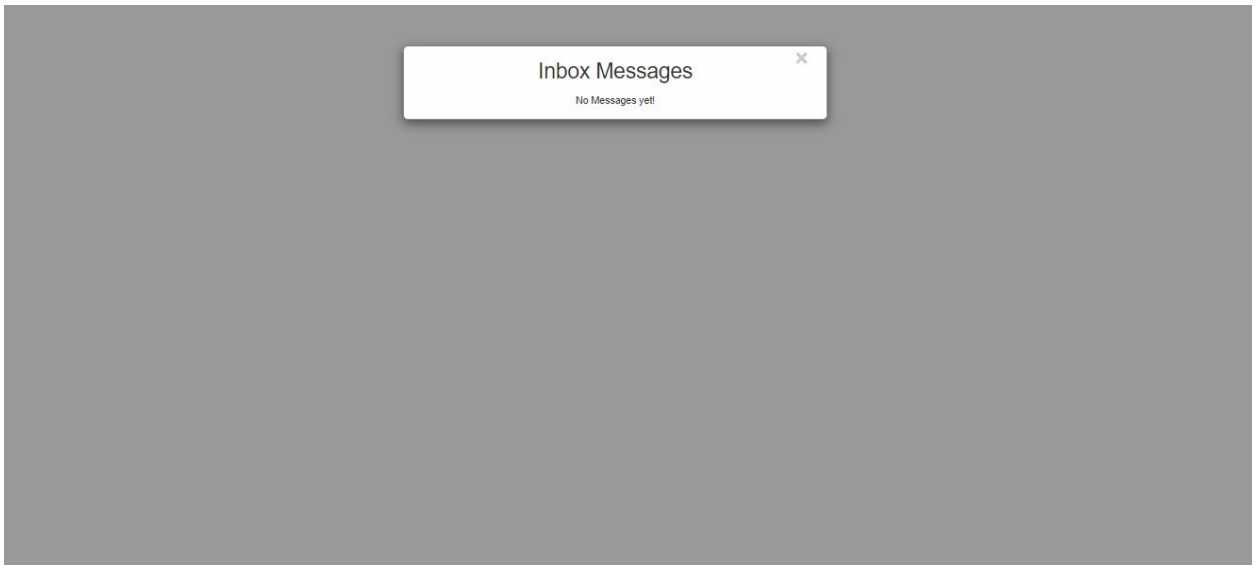


Mobile View:

Before	After
	

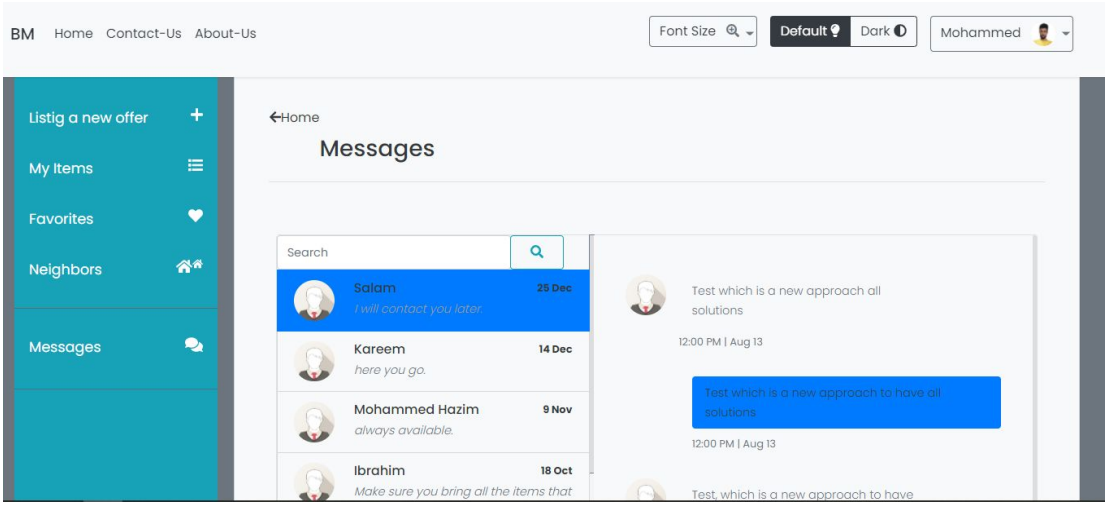
Messages page

Before the messages page was popping up without showing any information about the previous messages and the current page elements will disappear like the header. The page doesn't have back button, header or footer or any information for the user to know where he is.

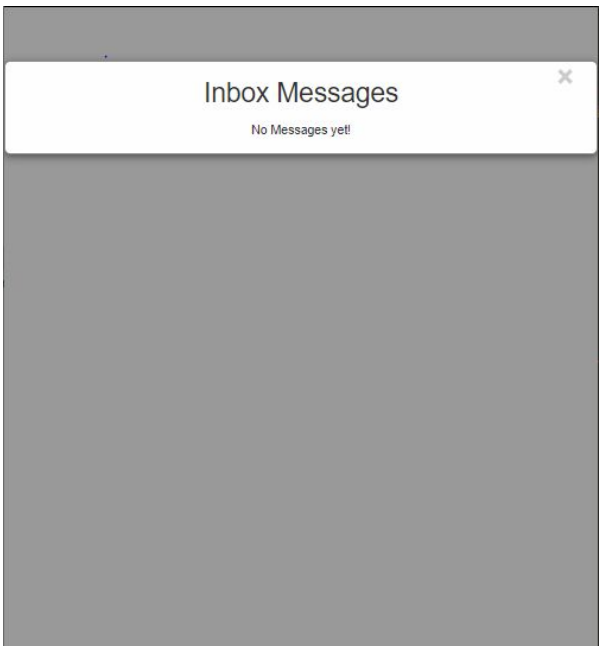
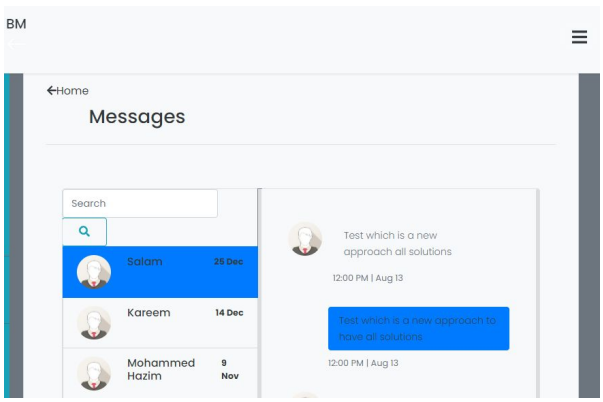


New Design of Messages page:

After the user clicks on the messages button on the sidebar he will immediately be redirected to all the messages and the main content of the page like the header, sidebar, and footer will still be available for the user to navigate through. Users will be able to see all the received messages and navigate among the messages and send messages any time. This supports the Usability and flexibility of the site.



Mobile View

Before	After
	

Navigation bar, And Secondary Navigation bar

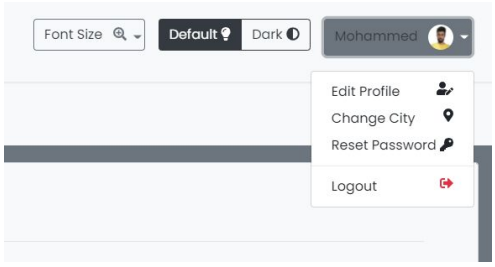
Old Navigation bar:

- User will not know on what account he is logged in
- Logout button doesn’t have an icon
- Navigation doesn’t have search button
- Navigation bar doesn't specifies the path that current user on

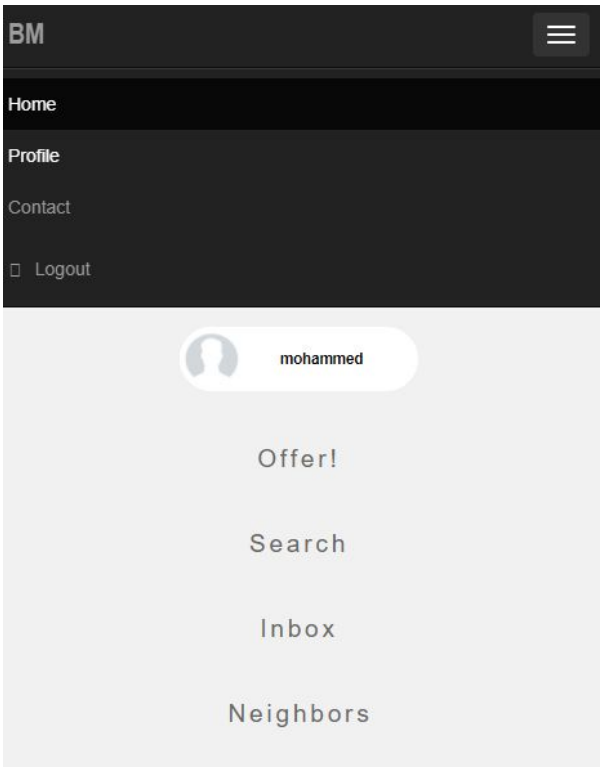
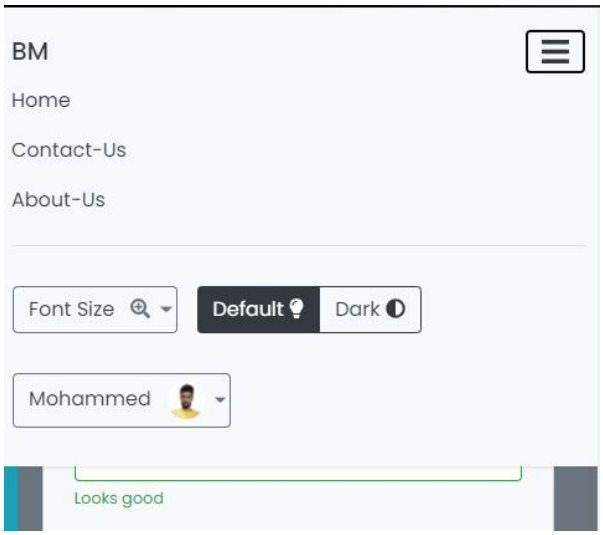
New Navigation bar:

- We have included all the accessibility that users need they will be available in all the pages:
- Following the standard navigation design.

- Having accessibility helps, changing font size and switching between dark and light mood.

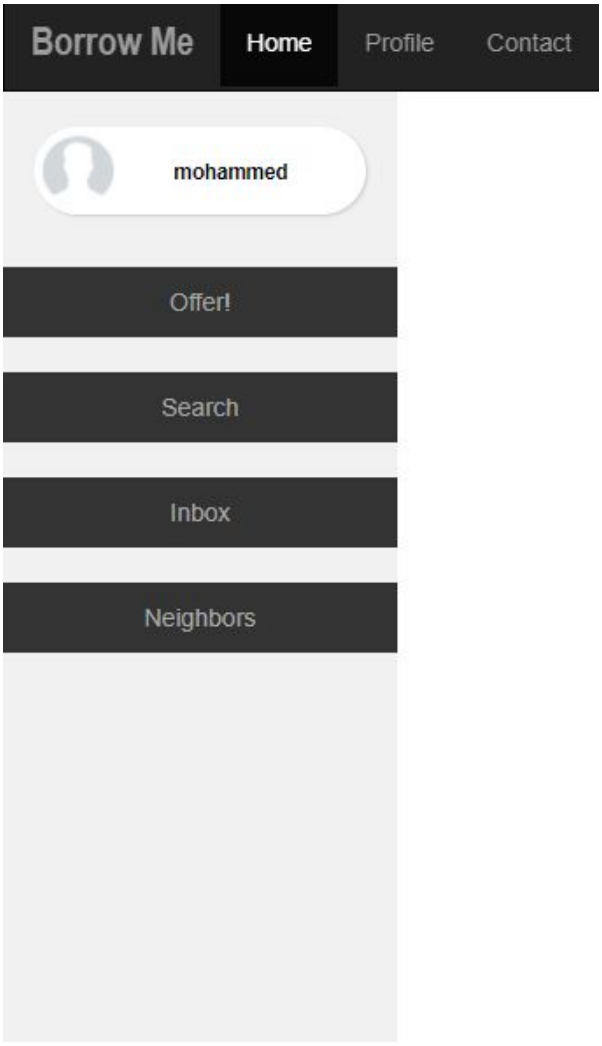
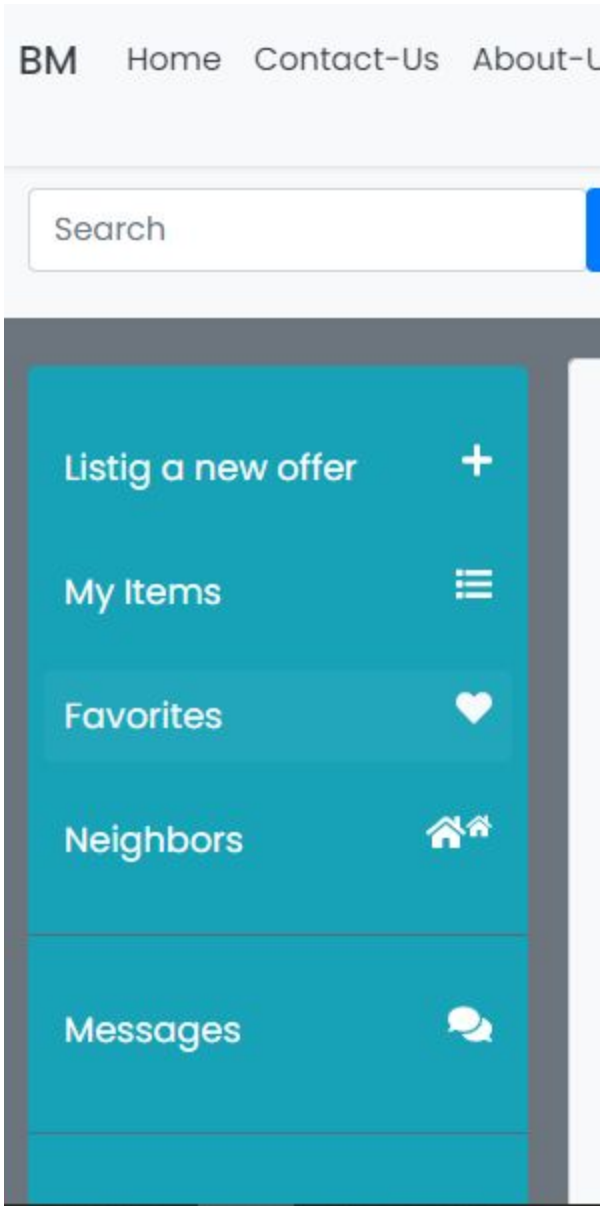


Drop down menu for the user which contains:
Edit profile
Change City
Reset password
Logout
Mobile View:

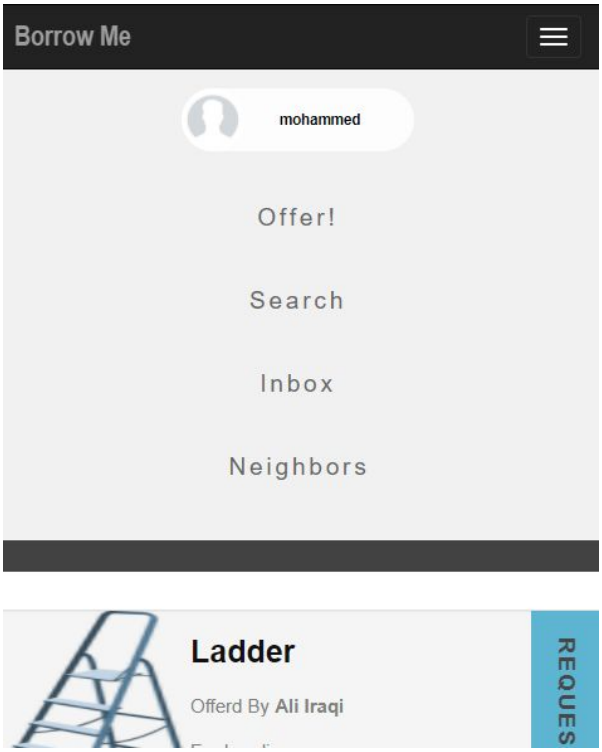
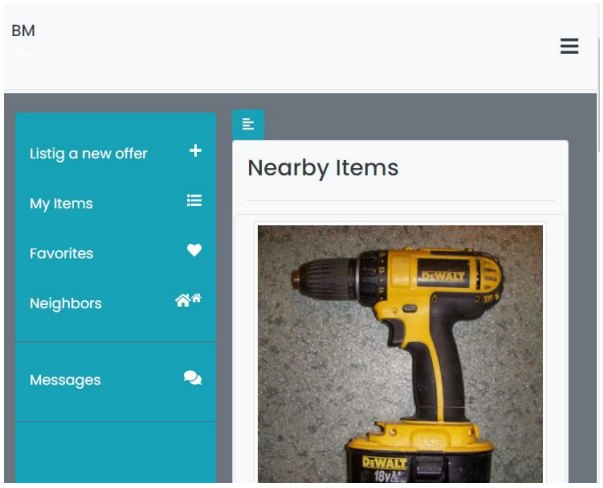
Before	After
	

Sidebar

We have changed the sidebar to contain all the required links with suitable icons that the user will need to navigate through the page which supports the usability, Accessibility, flexibility and saving time.

 Borrow Me Home Profile Contact mohammed Offer! Search Inbox Neighbors	 BM Home Contact-Us About-U Search Listig a new offer My Items Favorites Neighbors Messages

Mobile view:
Side bar

Before	After
 	

Features Added

Supporting the Accessibility

We have added a new future to read any text for those who have problems with seeing the text in order to know where they are exactly and what they are going to do. Once they click on any text it will automatically output a voice reading that text.

Auto Focus

This future is added to any page that we expect that the user will start inputting something in the field as a first step after visiting the page, the user will start writing directly.

Successful message

We added a successful message to any action that the user did successfully like posting an offer, or when updating his profile message.

Confirmation message

A confirmation message will appear when a user tries to delete a post, or logout from his account to confirm his action.

RESULTS AND DISCUSSION

The design is very easy so that the user will not memorize any steps about how the website works. The design is effective, efficient, attractive, enjoyable and easy to use. The website is suitable to be used by all the users regardless of their experience, backgrounds, and disabilities. The principles of visual design are applied properly. The design of the interface is better in terms of clarity, interaction, and Consistency.

We have added a sidebar which contains all the shortcuts that the user needs which is one of the most important functional requirements which makes the website: efficient, effective, simple, easy to use, saving time and more attractive. We included the dropdown menu instead of the logout button in order to a shortcut for the user to access his profile setting easily and have the ability to logout keeping in mind the consideration of including the proper icons that makes the dropdown more understandable. The new design is more efficient and simple for the user to understand in terms of task rate, the user will spend less time to understand how to use the system.

Usability

when editing a profile page In order to make it more usable we added a sidebar that has appropriate font and icons which is easier to understand instead of the buttons. We have added a new offer option to the sidebar page to make users be able to list a new page which is shortcut (NON-functional requirements) .

Learnability

we redesigned the pages to be easy for the user to navigate among the pages because we have listed all the pages in a formatted way which appears in all of the pages.

Flexibility

The pages that we have designed are much more flexible compared to the original page in terms of:

- Supporting mobile view and shows the user a large font which matches his screen.
- Including a button for showing the sidebar which contains all the options that the user needs and it has an icon which shows only on mobile view.

Understandability

We have redesigned the pages to be much more user friendly and understandable in terms of the font size, coloring the items and buttons.

CONCLUSION

The new design is more efficient and simple for the user to understand in terms of task rate, the user will spend less time to understand how to use the system. It is now more usable and easier to understand. It is easy for the user to navigate among the pages. The pages are much more flexible compared to the original website in terms of supporting mobile view and shows. The pages are much more understandable and suitable in terms of the font size, coloring the items and buttons. The layout of the pages, icons and sections, and etc. are very attractive and user friendly. The website has become more user friendly, efficient, understandable, usable, flexible, and accessible.

REFERENCES

https://stackoverflow.com

https://www.tutorialspoint.com

https://www.w3schools.com

https://getbootstrap.com

https://www.thesitewizard.com/

https://jquery.com/