

## Mobile User Experience 6MMCS001W

### Coursework 1 Report - Mobile App Design

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Links to Prototypes:

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iPad Landscape URL: <https://xd.adobe.com/view/709c04c8-c6ac-41ee-b5c3-2052b7a8bde2-25cf/?fullscreen&hints=off>

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## 1. Project Concept

Foster Collar is a mobile friendly web application which connects pet sitters with pet owners. This application helps to find a suitable sitter to take care of a pet when the pet owner is away. The platform provides a simplified booking flow along with fast and secure online payments. In addition to that, Foster Collar offers a store named “Pawster Store” which includes pet related items. The gamification strategy of this application provides coins upon successful completion of a quiz. These coins are called “Pawster Coins” and it can be redeemed in the Pawster store or when placing a sitter booking.

In the below sections, the web application is described with a focus on the mobile user experience and user interface design.

## 2. Discussion of UI and application of UX principles

The application was designed targeting the Web 3.0 and mobile era which is also called as “Semantic Web”. Web 3.0 is known to be more intelligent, open, and always connected (René and Mapes, 2019). A real-time web application which is always connected and location-aware was tailored to match smaller screens.

The web application that was designed based on 3C Framework which was proposed by Michal Levin. The 3C indicates Continuous, Consistent and Complementary (Levin, 2014). Some of the pages designed may differ from this rule due to the page being subpage or the page containing popups. The design of the web application also follows the “Fold Manifesto” rule. This rule helps to provide a better user experience and guide users to the purpose of the application (Nielsen and Pernice, 2010).

The target audience of the application is the people who want to leave their pets at a safe place while they are on a trip or due to specific reasons. Considering this the application has been designed such that the core concept of the application is highlighted using varying pictures of pets and features.

Reduced time to perform tasks, reduce scrolling and showing the most relevant information and tasks on the screen are some points noted when designing this application. For example, time was reduced in performing login action by integrating the single sign-on functionality.

For visual pleasure to the users, the application has been designed such that all the main pages have the same header, footer, and same colour palette. Connectivity and consistency have been designed and maintained throughout the application. The application contains eye-catching colour palettes and usage of icons to improve user engagement.

The application design for both iPad and iPhone are similar and depending on the device type the responsiveness has been adapted to give an overall better user experience to the user.

## 2.1. Information Architecture

The web application was developed for pet hosting for a start-up company. The theme of the application is to provide a platform where users can find a host to leave their pet. The location of the pet sitter should be nearby to the user so it will be convenient for the user thereby providing users with the opportunity to find the pet sitters near to them using their location. Based on this the information architecture that was chosen to represent the web application is **geographical information architecture**.

For the mobile Information architecture, all the contents are coupled together by navigation bar, this allows users to conveniently navigate through the web application and understand the functionality of the application at the first usage. The pattern that was selected is **Tabbed view**. The application also uses the **nested doll pattern** as a sub pattern to show that some contents/pages are closely related to each other.

Foster Collar has a consistent navigation bar in all the pages so that the user can easily traverse through the pages of the web application. The hamburger menu and the navigation bar allow users to jump to a different page of the mobile application at any time of their position. This will be further explained under the section design of the features.

The tablet/Tab was designed based on the dashboard pattern to ensure that more details of the functionality is visible at the first sight of the user and that the user can use the application easily and efficiently.

## 2.2. Emotional design

Emotional design is a concept which is highlighted when designing UI/UX elements. It evokes emotions which result in positive user experience. There are several aspects which needs to be considered when designing an UI element which fits the emotional design concept.

### 2.2.1. Colours

Colour scheme which is being used has a great impact on the view of the web application. If the web application has a good eye-catching view, users will tend to use the web application or else users have so many other options to consider. The main theme colour for Foster Collar is **Red Salsa(#F4364C)**. Red Salsa contributes to increasing the heart rate of the viewer and the call for urgent action as it evokes strong emotion, energy, and enthusiasm (Evans, 2017). Red symbolises love (Shin *et al.*, 2012). Foster Collar is a concept which is built to take care of pet animals. Therefore, to symbolise the love and the affectionate provided by the sitters Red Salsa was chosen. Another colour used in Foster colour is **Rajah(#FEA853)**. Rajah is a shade of orange, this colour symbolises positivity among the users (Osborne, 2018). This colour was added to set a positive mind of using Foster Collar, when they need a loveable person to take care of his/her pet. Positivism improves the trust which both the parties will build each other. **White(#FFFFFF)** symbolises newness, pureness (Osborne, 2018). White has been used as the background colour of the application in most of the pages. It gives emphasis to the items on the foreground, defining a proper background with a new feeling throughout the application.

### 2.2.2. Typography

Typography is another important aspect of a web application. Foster Collar web application content is readable and usable even from a smaller screen sized device such as iPhone 6. **Montserrat** font which is used in Foster Collar web application is sans-serif typeface. Due to this reason it is highly visible in screens. It has a lot of variations. Light, medium, bold, and italic are few of them. All these variations help to identify the content in a hierarchical manner. In that case the users do not need to worry about the flow. These variations will help them to identify each section. Easy to use and hight readability increases the attractivity of the users towards the web application. It will make the users use Foster Collar service throughout their whole life.

### 2.2.3. Imagery

Imagery is another important aspect in a web application. Foster Collar has many image types used. **Icons, clip arts, photographs** are the image types which are used in Foster Collar. They are a great attention grabber, and it helps Foster Collar users to find and scan content. Foster Collar has used clip arts to easily illustrate any idea simply. When Foster Collar users see these clip arts, the time spent to read the content will be reduced and it will be easy for the users and they will be pleased. Photographs help to show the reality. The gallery photos will be very useful to for the users to have a quick look and get an instant idea about the sitter's environment to decide if the pet sitter is capable of take care of the pet.

### 2.2.4. Language

Foster Collar do not have any lengthy sentences. This make the busy users easily tap trough a small form and book a suitable sitter of their choice. Simple language is used so it can be understood by the user very easy.

## 2.3. Use of Colour

Simplicity can be shown in the colour scheme used. Foster Collar has a very simplified colour scheme, and the entire web application is based on that colour scheme. The diagram below will elaborate on the colour pallet.



Figure 1: Colour Pallet

Foster Collar theme is based on “**Red Salsa (#F4364C)**” colour. Buttons, header, notification bar active status, item rating notifier, message popup button and some of the images which are used in the web application are in Red Salsa colour. “**Rajah (#FEA853)**” colour is used to support the theme by providing a small touch to elements. To highlight the selected elements Rajah colour is used. For selected menu tab lines, notification count in icons, this colour is used. “**White (#FFFFFF)**” colour is used mainly in the button text. As the background colour, Foster Collar uses white colour. The white colour defines newness and cleanliness. Newness and cleanliness are some factors which users look when they pay for some service. **Gray(#AAAAAA)** is a very useful



colour when using black and white. In colour psychology, grey represents neutrality and balance. Gray is used in text boxes and in places where there is a text/number input from the user. “**Charcoal Blue (#454A55)**” colour is used in the footer, navigation bar icons. A lighter shade of charcoal blue is used for most of the body text including the reviews. All the icons except the trash icon are in charcoal blue colour. Other than the colours used in the colour pallet, “**Purple (#690097)**” colour is used. It is used as a default colour to show the previously visited links.

## 2.4. Typography / Consistency

Foster Collar website is designed using a sans-serif typeface font named “Montserrat”. Sans-Serif fonts have less amount of stroke width. These qualities convey the modernity and the simplicity of an application. Sans-Serif fonts are considered to have high legibility on a screen and suitable for web applications (Miniukovich *et al.*, 2019). Montserrat font has a high x-height. Due to this factor, it allows more balance and contrast throughout the web application. Moreover, this font is selected mainly because the website should be visible in small devices such as the iPhone 6. This font contains several variations like semi-bold, light, italic, thin, medium etc. For section titles which are in the home page, semi-bold variation with 20px is used. As the header text in subpages, medium variation with 20px is used. For body text, regular variation with 20px is used. For reviews, light variation with 14px is used. The reason to use variations is to indicate the information hierarchy.

To improve readability and scannability of a web application, line spacing should also be considered. The rule of thumb is to keep approximately 130%-150% of the font size (Collier, 2020). In the Foster Collar web application, each section in the home page was divided by using high line spacing (220%). In each section, sentence line spacing is approximately 137%. By following these guidelines, it brings the web application more clearly readable.

## 2.5. Photography/Consistency

“Images speak louder than words” is a popular saying which gives a powerful message that the images present something that could not be conveyed in words (Kjeldsen and Andersen, 2018), this saying explains the importance of images. Foster Collar web application contains icons, photos, and clip arts. Icons are used in the hamburger menu for the options list which Foster Collar provide to the users. These icons are selected to give a quick idea of what the option is about.

These icons are positioned to the left side of the wording. The reason to do the positioning is that English is written from Left to Right. Therefore, immediately users start reading from the left side (Nielsen and Budiu, 2013). Before reading the wording, users get the idea of what the option is about. These icon colours match with the colour theme of Foster Collar. For trash icons, red colour has been used to give an alert/warning impression.

Photos need to be provided to show the reality. Foster Collar has included a gallery maintaining option where sitters can upload images to their profiles and any user can check the photos to get an idea about the quality and the background of the sitter before booking a slot for foster care. User profile photos and pet profile photos which are used, have a circled border to easily identify.

Clip arts bring it easy to communicate ideas in a simpler format. Foster Collar footer has a clip art which shows a happy dog with a bone. This expresses the feeling that the pets will be looked after with care and therefore the pets are happy.

The compressed logo image is used in all the main pages of iPhone with dimensions of 69px by 67px.

## **2.6. Gestalt Principles**

The usage of gestalt principles in the web application to reveal the purpose of the content, to direct the user towards the content and to increase the legibility are discussed below:

### **2.6.1. Similarity**

It states that similar elements of a class should be group together for visual composition.

For example, for the usage of similarity, Search/List of pet sitter's page, the items in the Pawster store page are aligned and group together and a-symmetrical balance is also ensured. A repetitive design element and a card structure is used to represent sitters or products of the store, this allows the user to scan through them very easily.

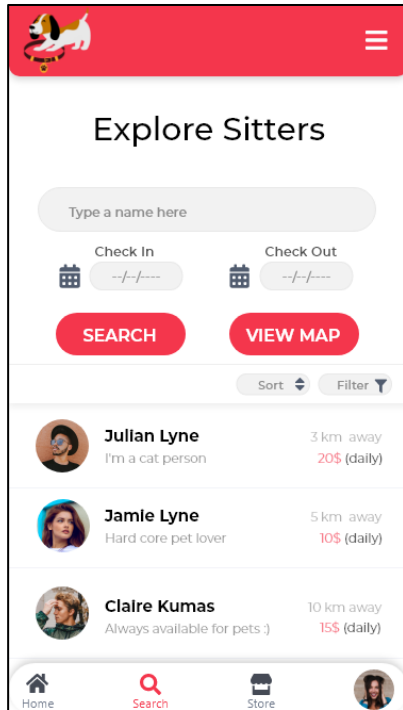


Figure 2:Search

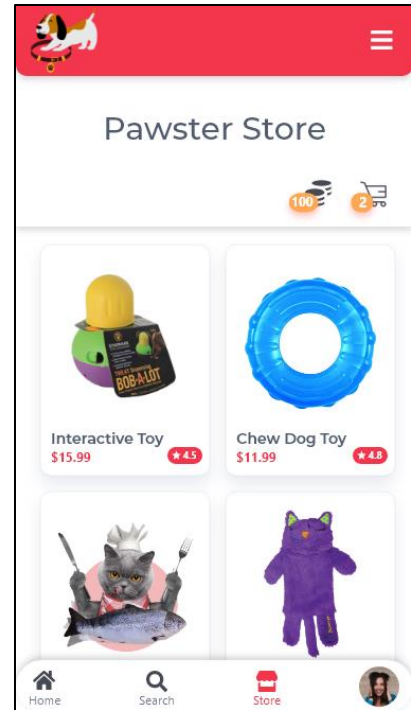


Figure 3:Pawster Store

Some of the button's designs used in the web application are designed in such a way that they stand out and give more importance to the user.

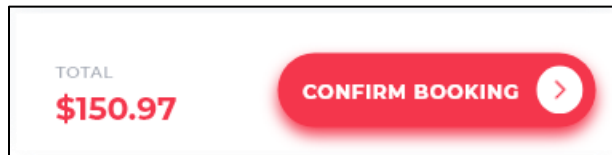


Figure 4:Confirm booking button



Figure 5:Checkout button

This principle is also applied where comments and reviews appear under a specific product, these comments and reviews have a boundary within the post and hence stand apart from others.

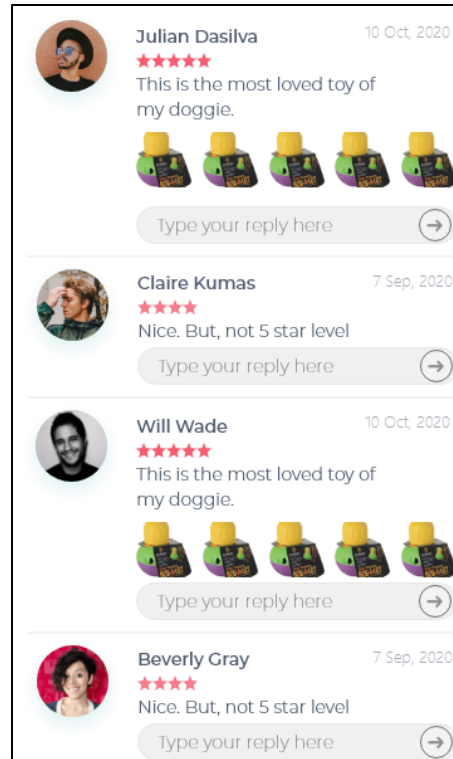


Figure 6: Reviews

Throughout the application, the links are designed and formatted in the same way such that the user will understand the structure of the web application.

### 2.6.2. Continuity

Continuity is a valuable tool to guide the user's perception in a certain direction.

Since the eye of the user naturally follows a line. The application uses horizontal sliders to show the nearby pet sitters and the products available in the Pawster store. This enables the user to naturally navigate from one item/sitter to the next.

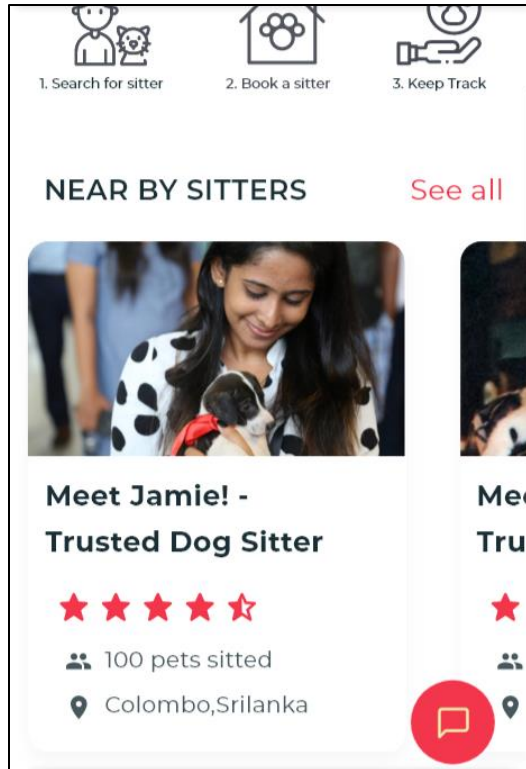


Figure 7: Nearby sitters' slider

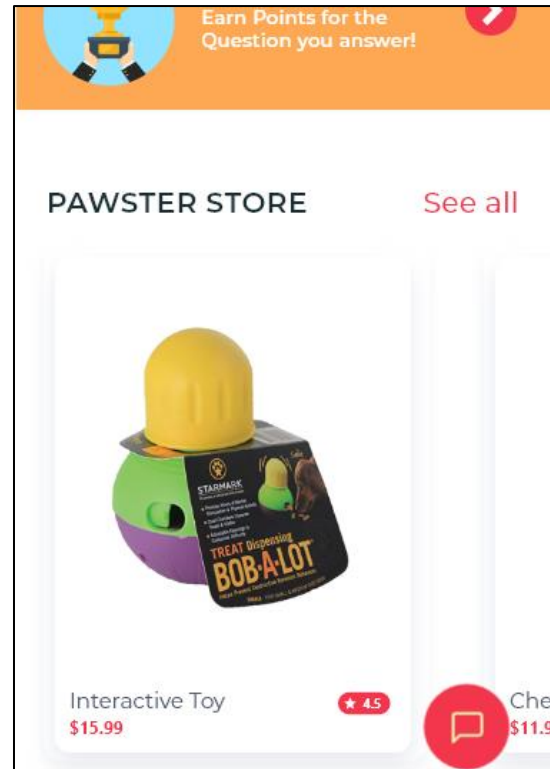


Figure 8: Available items in Pawster store

Before reaching the end of viewport, starting points of the next page are shown to the user to let them know that there is more to the page. That will encourage them to scroll down and see other content as well. The starting point of the next elements provide the user that there is more content to the page and the user will scroll through the page vertically ensuring the continuity of the page.

### 2.6.3. Closure

The application design uses the closure principle to provide the user to fill the missing parts of a design or image to create as a whole unit. In the home page, a slider has been used to show the sitters and items in the iPhone horizontal design mode. In this, the design has ensured that a partial image is there in the slider to indicate the user that they have to swipe/ tap to see the full image.

In the home page, sitter page, and store page all the elements are encapsulated in their section. This gives the user the perception of closure such that the user can understand the beginning and the end of an element.

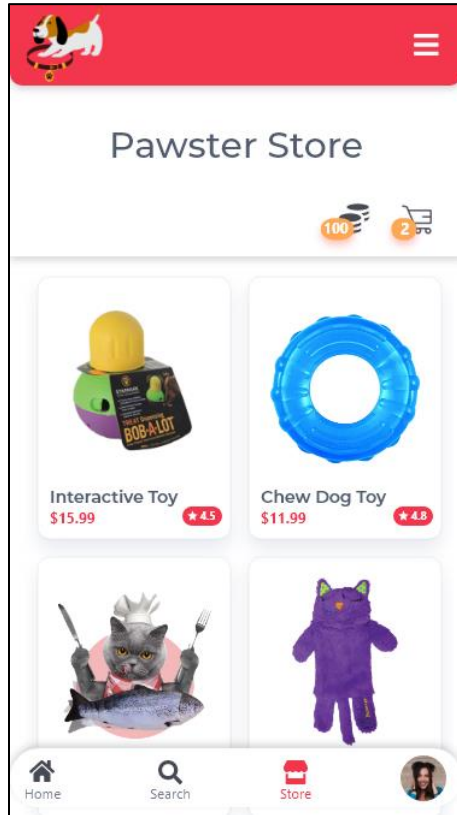


Figure 9:Element encapsulation in Pawster Store

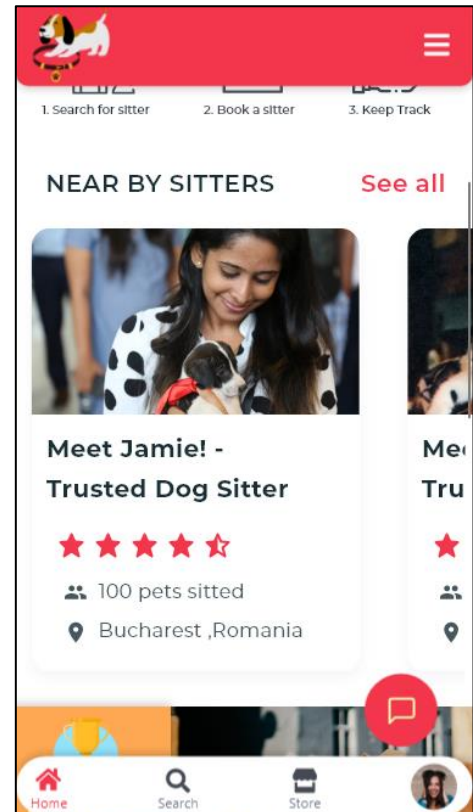


Figure 10 - Element encapsulation in Home

## 2.6.4 Proximity

In the application design, proximity is used to get users to group certain things without the usage of hard borders. By providing fixed spacing between input fields in forms indicate that those fields have a strong proximity relationship. The application also uses spacing between the sitters and items card structures on the home page to indicate that those are two different groupings.

Figure 11: Sign Up

### 2.6.5 Figure/Ground

The figure/ground principle came in very handy when designing the web application. It is used mainly in the web application to establish a focal point. For example, when a pop-up window appears on the web application, the rest of the background is faded, this ensures the focal point.

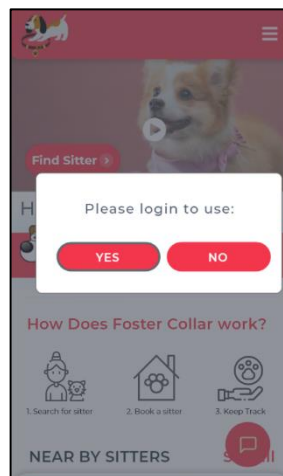


Figure 12: Restricting access to non-logged in users

The principle is used to demonstrate the status of an element whether it is active or inactive. This concept is used in the search bar such that when it is clicked, the bar is highlighted thus showing that the bar is active.

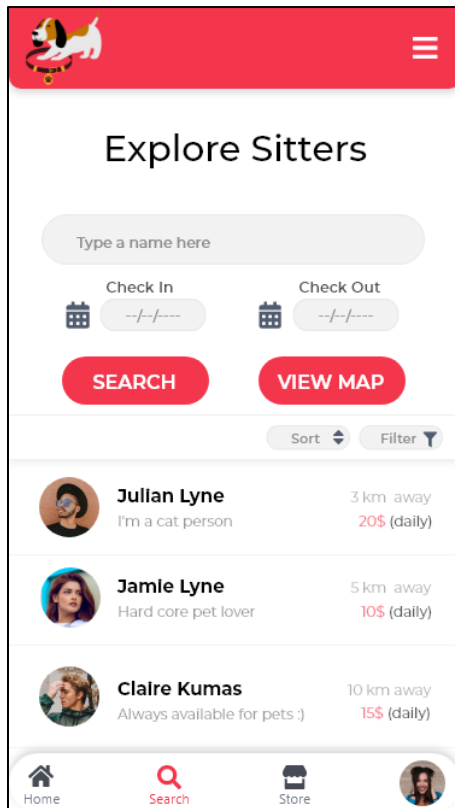


Figure 13: Search bar

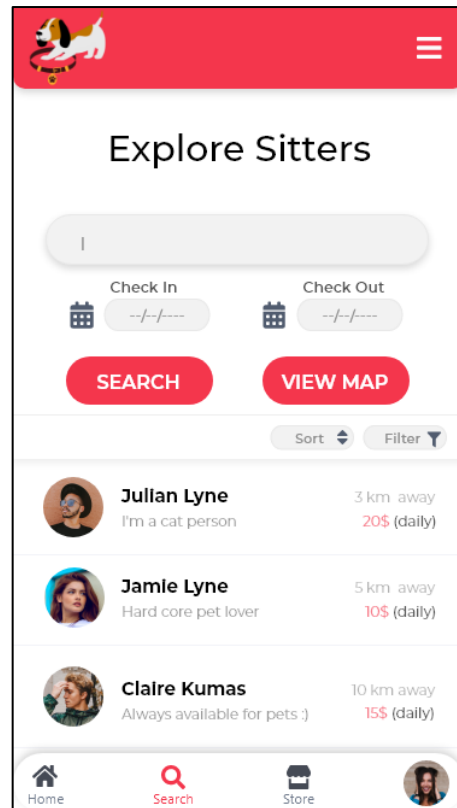


Figure 14: Search bar (highlighted)

Figure/Ground in Pawster store is obtained through shadows and outlines for elements to separate them from the background.



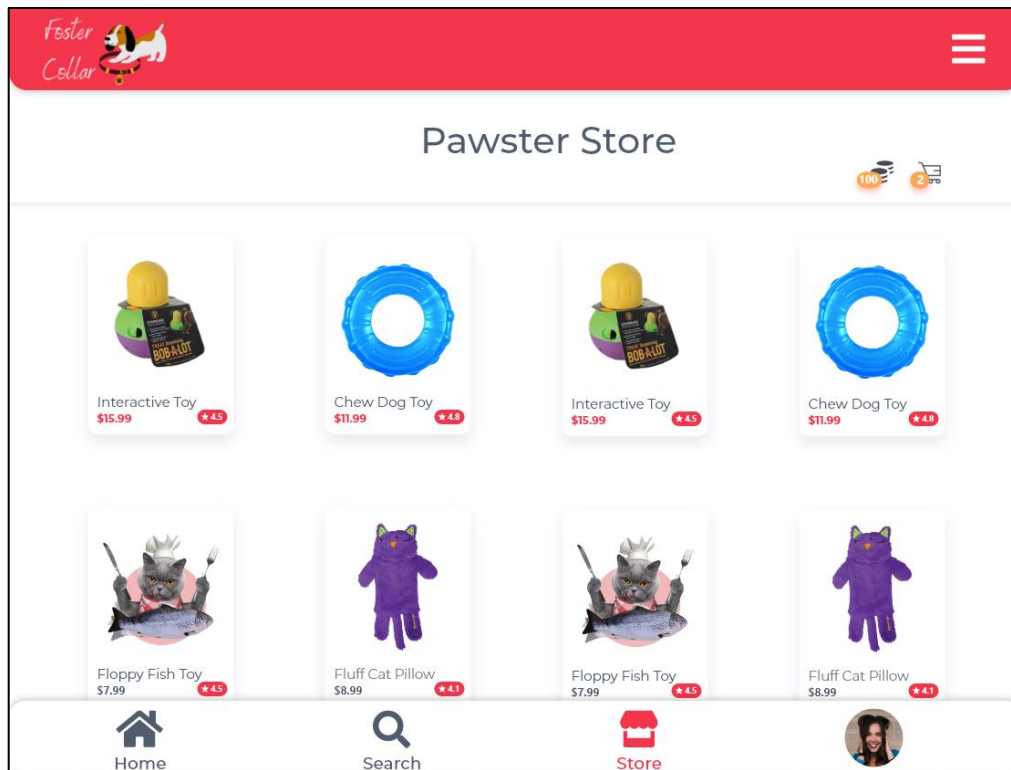


Figure 15: Pawster Store (iPad)

### 3. Design of the features

In this section, the design aspect is further discussed to show the functionality of the features.

#### 3.1. Landing Page/ Introduction

The landing page of the web application sets the tone throughout the application. Foster Collar gives a brief description of the overall abstract idea and the functionality of the application. The introduction plays a huge role as it will provide the user with the knowledge of how to use the application. iPhone and iPad are designed in the same context but there is a difference only in the size of the component.

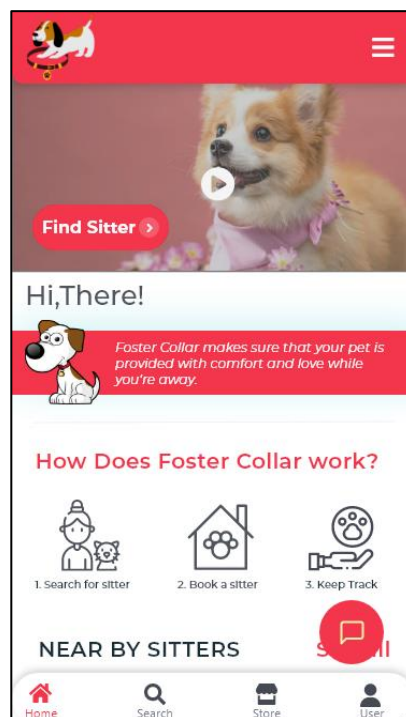


Figure 16: Foster Collar Home page

#### 3.2. Incorporation of a short video.

A short video related to the core idea of the application is placed on the landing page and in the about us page. In the design perspective, a place holder is used to indicate the presence of the video, the actual video image displayed will be different and the content of the video will be how the application works. An animation is shown on the about us page, such that once the play button

is clicked in order to give a sample visual experience for the user how the video will be incorporated into the application.

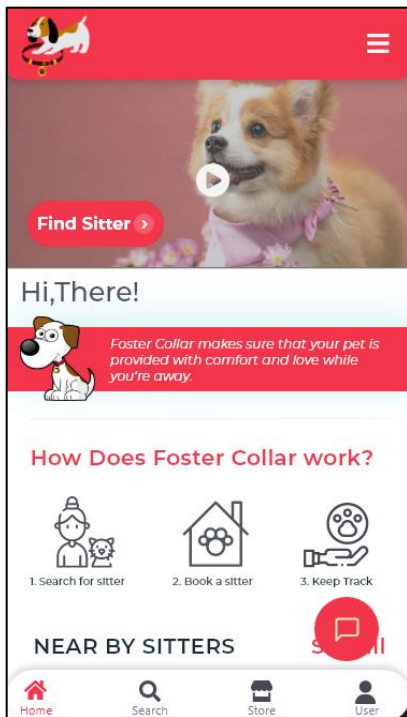


Figure 17: Incorporation of video Home page

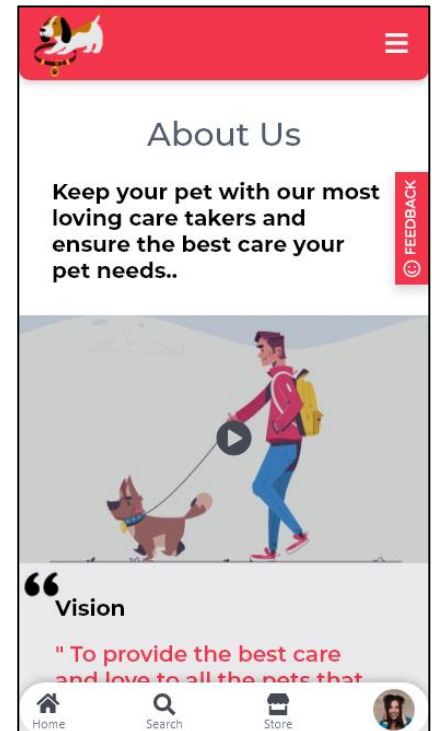


Figure 18: Incorporation of video About Us page

### 3.3. Point of Interest (POI)

In this application, the main POIs are the sitters and the products in-store. Each POI has a title, image/s of it, details section about it, an explanatory description, a rating, and a reviews section shown in the respective page/s designed for each POI.

These points of interest are designed in two different versions to suit iPhone design and iPad design, respectively. To get the maximum use out of the available small space in iPhone, the main page for each POI has been divided into subsections to show different information on each page. For example, a product in-store has one subsection to show the details and a description about it while there is another subsection to show reviews and ratings related to the product but, the image of the product will remain the same throughout both sections, maintaining the focus of user going to the particular point of interest.

When it comes to the iPad view, those two sections are gone and those are merged into a single view. In that view, space will be used efficiently to represent all divided sections in the iPhone view in a single page of the iPad. Also, in the iPad view, more images of the POI can be shown.

It is ensured that the POI and buttons are positioned in a way that it obeys the thumb rule for both the iPhone and iPad, placing important functional elements where it is reachable by the thumb.

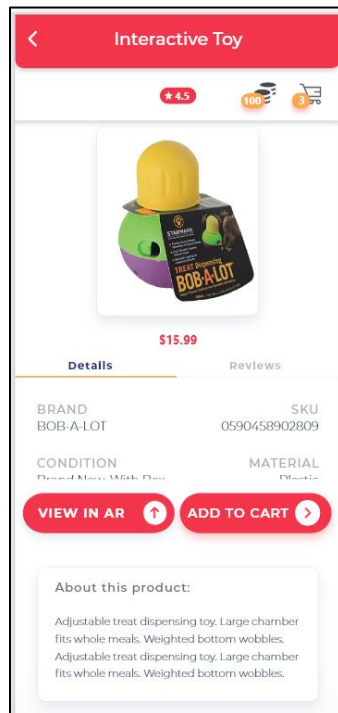


Figure 19: Store Item

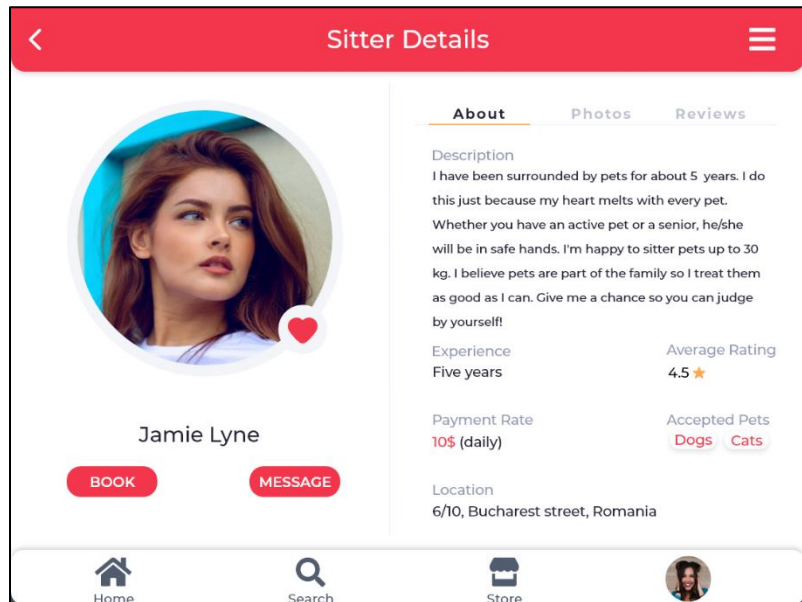


Figure 20: Sitter Details

### 3.4. List Creation

Throughout the Foster Collar web application design, lists have been used in different cases. Gestalts principles and thumb rule were used as the base to implement the content structure according to the specific device (iPhone and iPad). It is designed in a way that there will be no major structural difference when the orientation is switched. The spatial changes differ between the iPhone and iPad to ensure that the content can be scanned by the user efficiently.

Different Cases where lists have been used.

- 1) Messenger Page- List of conversations are shown out here.
- 2) Explore Sitters Page- List of sitters according to the location, booking date are shown here.

- 3) Pet Bucket- List of pets which are saved are shown here.
- 4) Favourite Sitters- List of favourite sitters will be shown here.
- 5) History Tab- List of past booking will be showed here.
- 6) Upcoming Tab- List of upcoming bookings will be shown here.

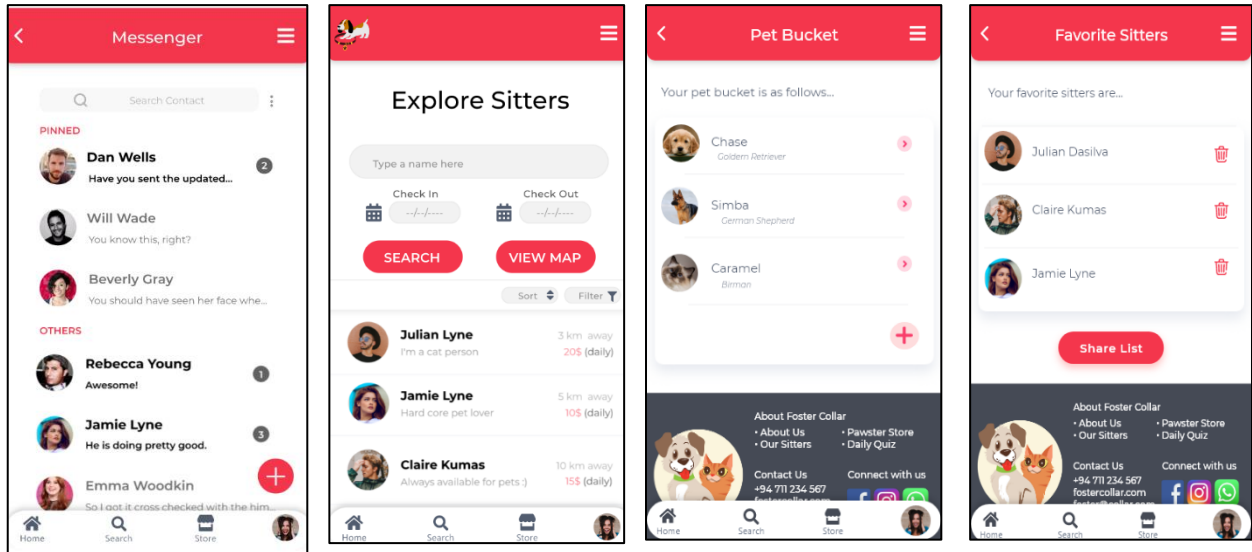


Figure 21:List Pages

### 3.5. Incorporation of Google Maps

Google maps has been integrated to pinpoint the location of sitters and nearby sitters such that the content will be shown based on the user's location. The application uses google maps to pinpoint locations of sitter such that it will be convenient for users to navigate through the map and find sitters based on a specific area. Users can also find the location they are in and to zoom in and out of the map. A new page was taken to integrate this functionality on the design. The Design is consistent between iPhone and iPad.

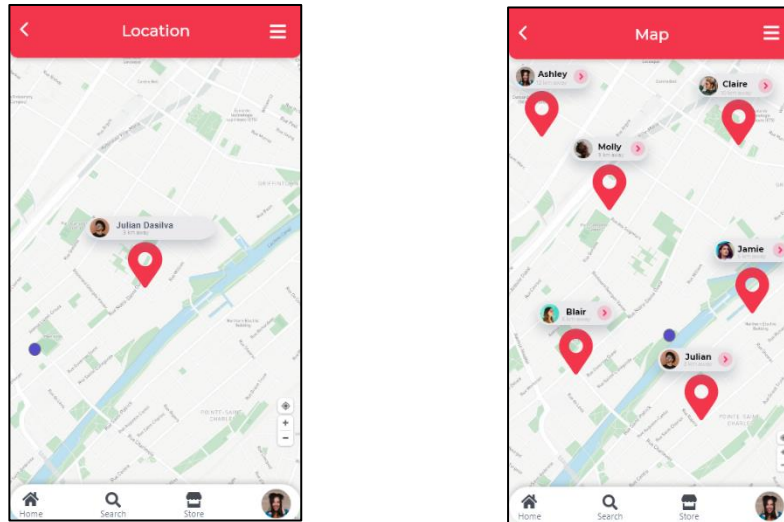


Figure 22: Map integrated pages

### 3.6. Sorting and Filtering Widgets

Foster Collar provides sorting and filtering widgets for the sitters list. The list can be filtered by a date range, sitter rating and price range. The list can also be sorted according to ascending and descending based on price, distance, rating and name or it can be sorted depending on the location using the view map option.

Favourite messages can be pinned by the user so that option will work as a filtering mechanism to pin the important messages on top of the application.

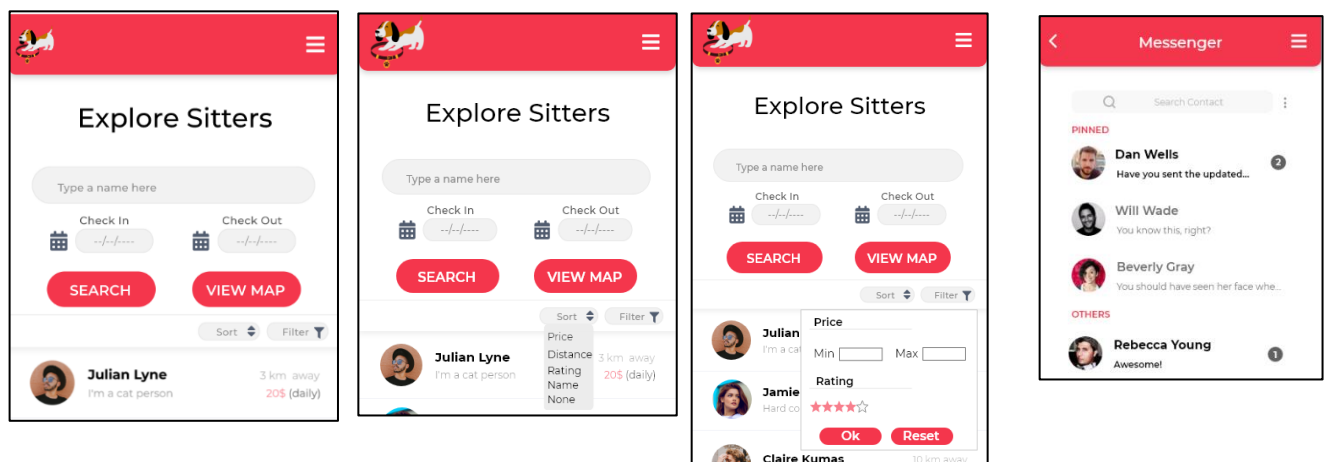


Figure 23:Sorting(Explore Sitters) and Filtering Page (Messenger)

### 3.7. Booking Form

The booking form was created by combining different components such as item price or the wage rate of the sitters.

Foster Collar provides an option called pet bucket, which keeps track of multiple pets for a user, such that when filling the form, user doesn't have to mention the details again, it can be automatically added to the booking form, thus reducing the number of steps in filling a form.

The booking form confirmation leads to a payment gateway where the user can book the sitter or purchase an item. Payments can be done through linking the user's PayPal or Stripe account with the Foster Collar platform. The application ensures that the content is consistent between different orientation even though there might be a difference in special structure.

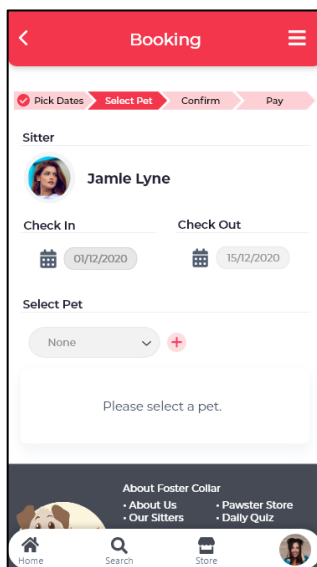


Figure 24: Select pet

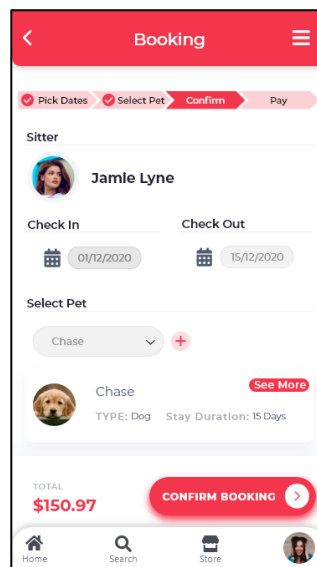


Figure 25: Booking

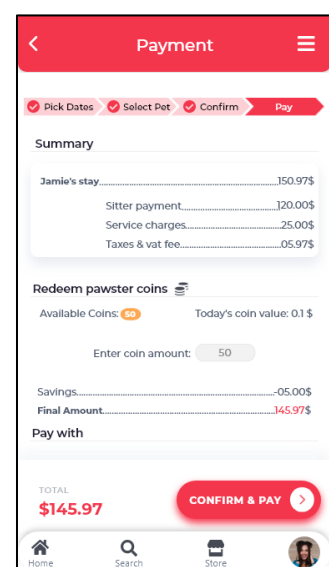


Figure 26: Payment

### 3.8. Favourites List Emailing

Model boxes were assigned for each element throughout the application. The user can select the sitters in his favourites list and email it to himself or share it with another person.

The user can select the sitters which needs to be shared with the help of check boxes. The application provides an export feature in a button such that when the button is clicked it will show



a popup form requiring the details to send an email including the favourite sitters to the recipient. The list can be also shared via copying a link.

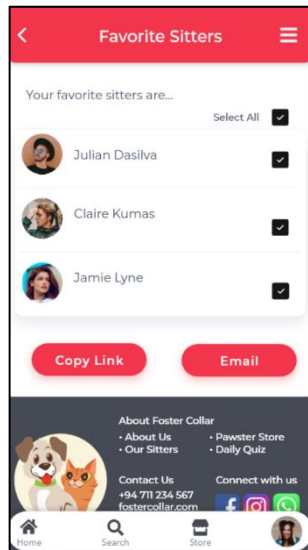


Figure 27: Select favourite sitters

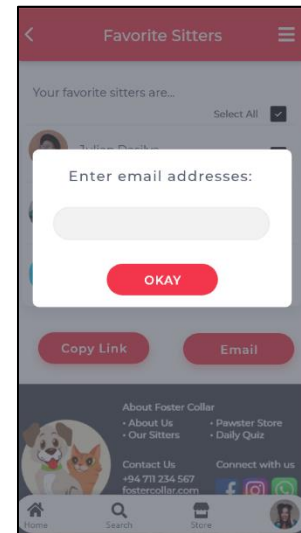


Figure 28: Email address to email

### 3.9. Gamification

The web application has designed to introduce a gamification procedure for the user to increase user engagement. The gamification idea is to have a daily quiz, in which the user has to roll the dice on the screen and a question will be provided according to the dice roll number. If the rolled number is not satisfactory there is an option to roll the dice again. If the user answers the question correctly, he/she will be rewarded with coins/points. These points can be used for purchasing items from the “Pawster Store”. This has been integrated on both iPad and iPhone application.

An interactive dice roll animation will be shown to notify the user, that the dice is rolling and to expect a dice number.

#### 3.9.1. Steps of the Gamification Process

- 1) The user will be asked to roll the dice.
- 2) Once the rolling is complete the dice roll number will be shown, and an option is provided to re-roll the dice again.
- 3) According to the dice roll number a general knowledge question will be given regarding animals and pets.



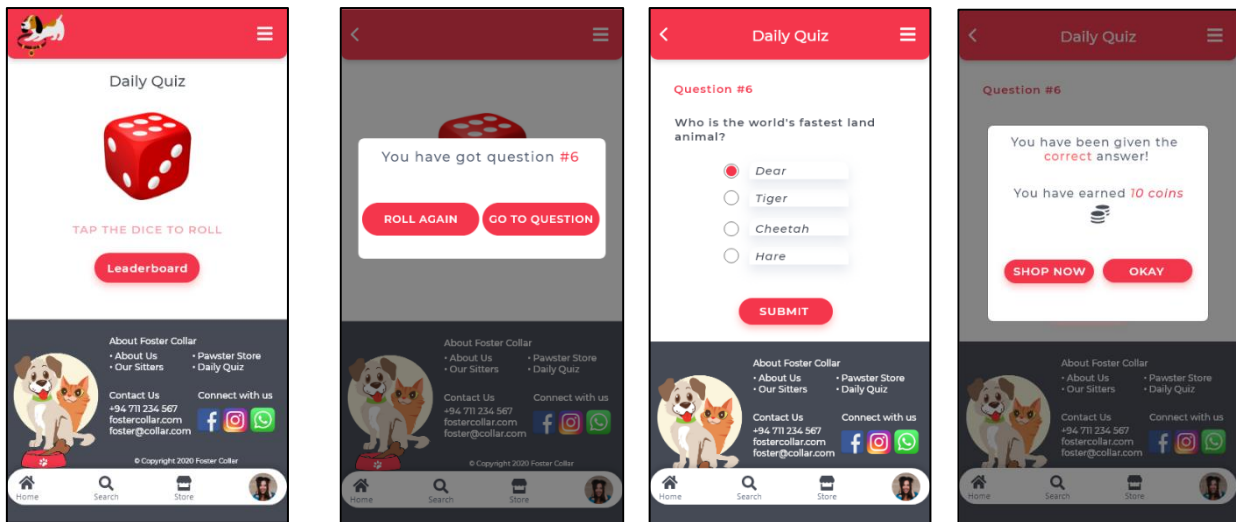


Figure 29: Gamification Process in steps

4) Coins will be awarded to each correct answer

### 3.10. System Response and Feedback

1) A response from the system to the user is provided for actions performed by the user. When a link or a product is clicked from a list (sitters list/products list), next time when the user visits the list, the clicked links are shown in a different, contrasty colour to ensure that the users know they already viewed the item.

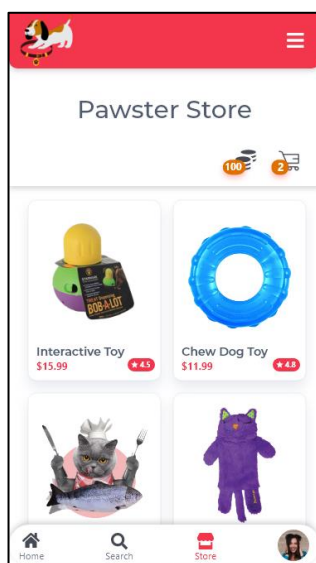


Figure 31: Before visiting Store

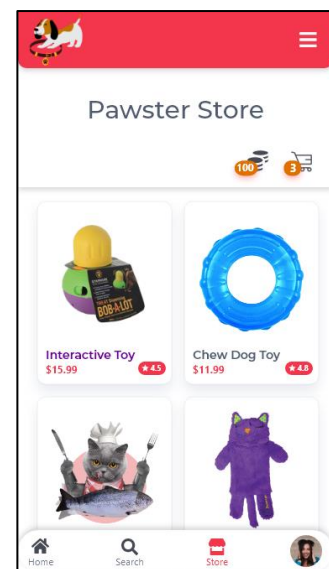


Figure 30: After Visiting Store

2) A system response is provided to the users when they are adding a sitter to their favourites list. Before a particular sitter is added to the favourites list, the favourite icon will be a blank heart only consisting of a border but, once a sitter is added to the favourites list by clicking the button, the heart icon will be filled with red. That way it gives a proper response to the user that the sitter has been added to their favourites list.

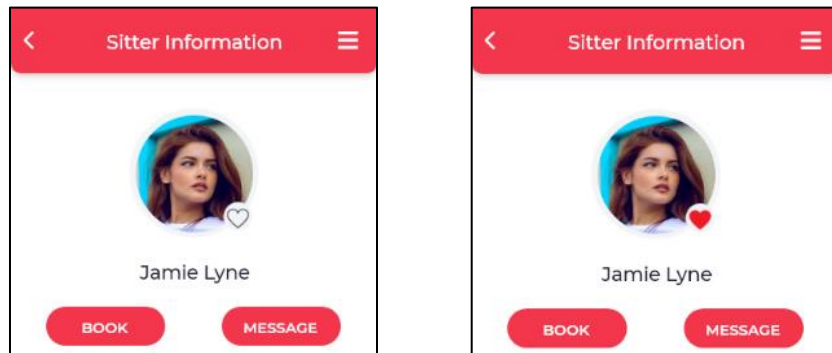


Figure 32: Before and after view of favourite sitter

3) The system provides a response when a user is removing a sitter from the favourites list or when an item is removed from the cart. In both functionalities, there is an option to remove a sitter or an item by clicking the trash icon. But, before this action is performed, there is a popup dialog box asking for the confirmation from the user to delete a sitter or an item from the list. Moreover, in the popup dialog box there are two suitable options to pick (Yes or No). The system highlights and borders around the safest option to pick which is “No”. This indication is highlighted by the user and accidental deletions will be prevented by choosing “No” option.

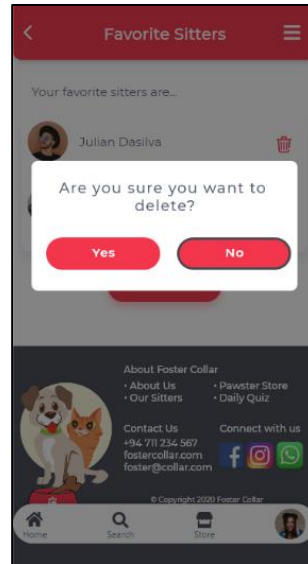


Figure 33: 'No' button highlight

4) The system always shows confirmation and failure popups dialog boxes. Some of these situations are when a login is unsuccessful, when feedback is successfully provided, when a password reset is successful a popup dialog will appear and shows the status of the task. This is a very useful feature to communicate with the user about the status of the task.

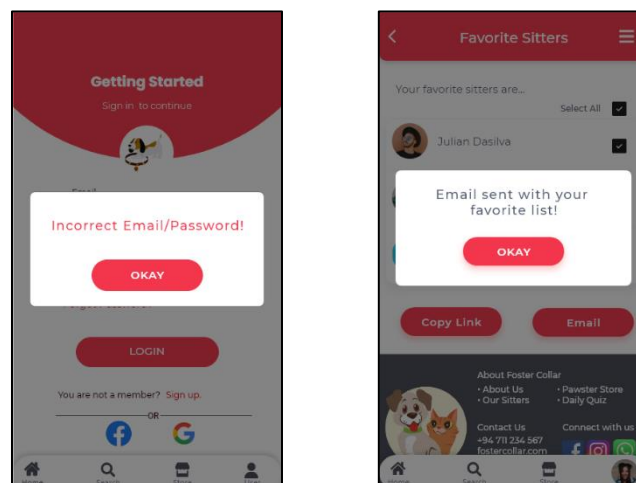


Figure 34: Failure/Success dialog boxes

5) The option of providing feedback to the system is given to a user to communicate any of the suggestions and complaints about the app. This feedback consists of a rating (five stars) and a feedback message. Star rating is to get an overall idea about how the user feels about the system and feedback message helps in understanding any of the suggestions or complaints. This feedback will be very helpful in enhancing the future design of the application and getting rid of any flaws in the system.

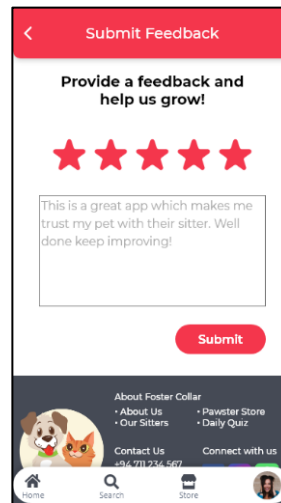


Figure 35: Option for users to provide feedback to the system

6) The user is provided with an option to redo activities if the system provided an output which is not satisfactory by the user. In the daily quiz, there is an option provided to get the response and the feedback of the user to roll the dice again if the dice number which was rolled is not satisfactory. In the QR scanner, once the QR code is scanned, there is an option to scan again if there is an issue with the QR code description which was shown by the system.

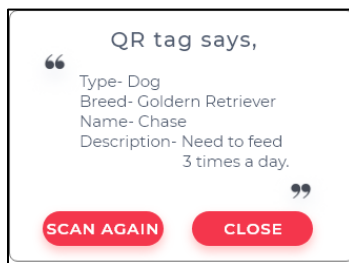


Figure 37: QR code re-scan

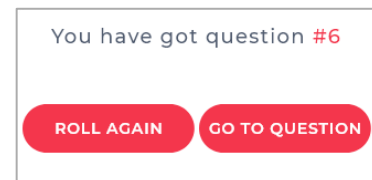
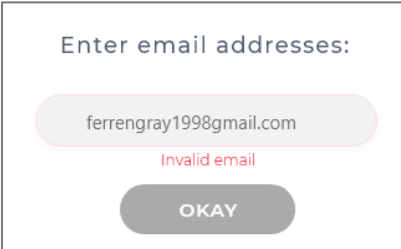


Figure 36: Dice re-roll

7) The system makes the submission buttons disabled to give a better understanding to the user that required information is not provided or the information provided is not accurate according to the validation rules.



Enter email addresses:

ferrenggray1998gmail.com

Invalid email

OKAY

Figure 38 - Email address validation

### 3.11. Scores and Points:

When the user plays the daily quiz challenge, they will earn coins(points) for the correct answers. To ensure that a user engages with the system more often, there is a leader board which is maintained to display the ranks of all the people who have earned coins from Foster Collar. In the leader board, the top three users will be displayed with the rank and the total coins collected.

The coins(points) received can be redeemed in the “Pawster Store” as discounts. The “Pawster Store” page and the “daily quiz” page indicates the collected coins as an icon.

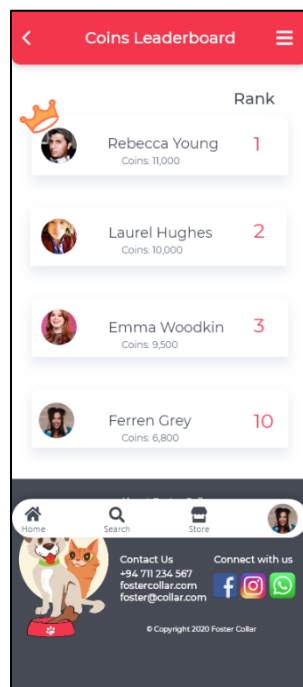
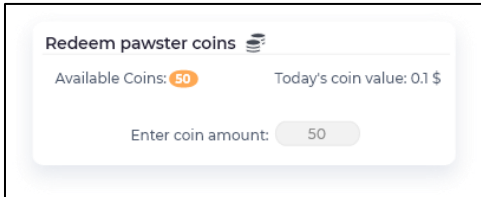


Figure 40: Leaderboard to encourage users to engage daily



Redeem pawster coins

Available Coins: 50 Today's coin value: 0.1 \$

Enter coin amount: 50

Figure 39 - Redeeming Pawster coins functionality

### 3.12. Comments and Reviews

The users can add reviews regarding both pet sitters and items in the respective designated POI page. Throughout the whole site, they are given below functionalities to work with.

- View existing reviews
- Post replies to existing reviews
- Post a new review
- Add images and a description to a new review

Any logged in user can go to the store or a sitter's page to view reviews about the particular item or the sitter. Each review will consist of a rating and a descriptive comment. Every logged in user can reply to the reviews that are already published, to clarify their doubts or to report something similar. Users are given the opportunity to add new reviews with rating, to these items and sitters as well. In the store, users can attach photos relevant to items in their reviews.

It needs to be mentioned that users are given the opportunity to add images only in the reviews of products in-store. For the reviews about items, photographs will be very useful for the buyers and users can take pictures of the products since they have the bought products with them. That option is not provided for the reviews about sitters since there is a very less chance for the users to have photographs of their pets in foster care and it will not be very useful for the viewers as well. With that in mind, and to make full use of the available space, adding images to reviews option was not included in the reviews for sitters. There are no alterations for reviews or their replies with orientation changes.

### 3.13. Navigation

Navigating throughout the web application is a very useful feature. Foster Collar has some useful ways of navigating one page to another.

#### 1) Navigation Bar

Foster Collar has thought about the easiness of the user. Mobile users can see the navigation bar closer to the bottom of the screen. Navigation bar is reachable to the thumb. The active page is

indicated in the navigation bar. If the user is not signed in, the profile picture will be changed to an icon and displayed.



Figure 41 - Nav bar for non-logged in user (left) and for logged in user (right)

## 2) Hamburger Menu

There are two types of hamburger menus in Foster Collar. Before logging in, the users will be able to see a hamburger menu with less features. After logging in the hamburger menu will contain more features which are only provided to registered users.

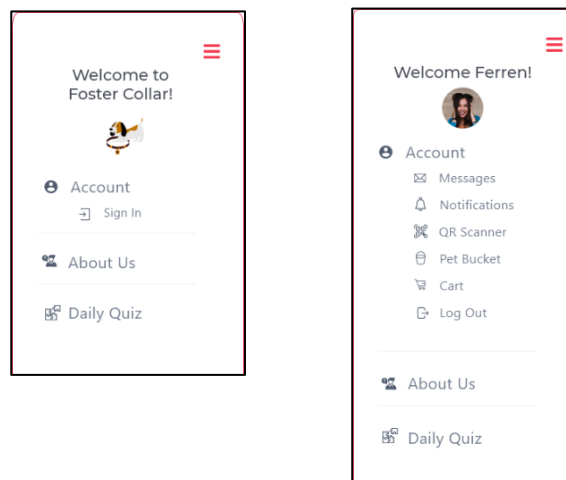


Figure 42: Hamburger menu (Sign in, Sign Out)

### 3.14. Rating

The application uses a 5-star rating system in store comments, sitter comments and system feedback section. The rating system is for a user to rate how he feels about the system or the POI. Users can rate sitters, products and the system depending on their experience. The rating system does not alter with the change of orientation.

The rating was displayed on the home page and respective sitter list and product items page. It is also shown in the reviews.

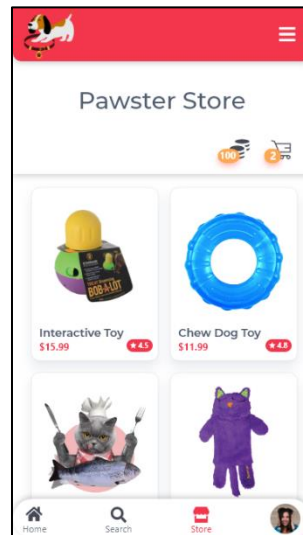


Figure 43:Rating of items

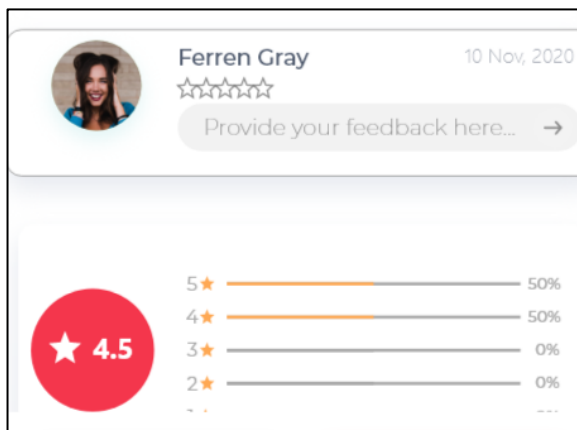


Figure 44:Rating description of items

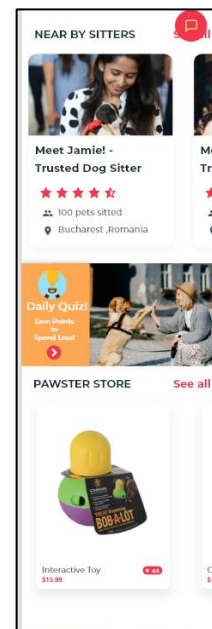


Figure 45:Rating Shown in home



### 3.15. Augmented Reality (AR)

Augmented Reality (AR) will be used in the application for viewing products of the store. AR placeholder is integrated to be accessed through Pawster Store's product details and reviews section of the application. The AR Viewer is integrated in the design prototype of the application using a background and an image of a product to represent the actual experience. Users can view every item in the store using AR. They can place the item in the environment where they are staying in and view it there, using the camera viewfinder of their phone. This increases the chances of a user buying a product because they can see how it looks in an environment which they are familiar with. The design of AR placeholder does not change with orientation or between iPad and iPhone. All it does is opening the camera viewfinder to scan an AR marker.

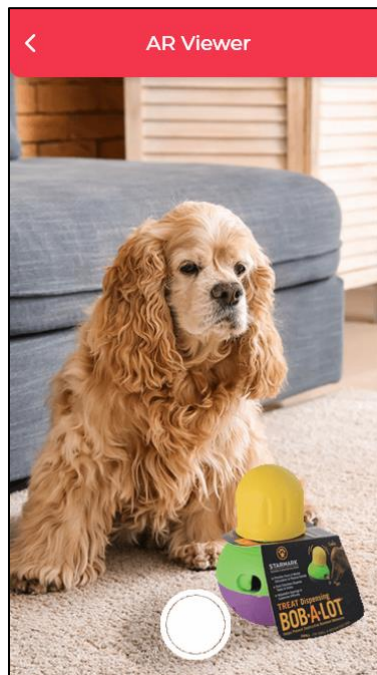


Figure 46 - AR viewer to view products

### 3.16. Quick Response Code (QR code)

QR codes are used in the app to extract information about pets. QR Scanner is placed in the design view of the application, linked to account. By clicking on QR code scan, a user can scan a QR code. QR code contains information about a specific pet with its details such as the type, name, breed and description. When the details are entered, the QR is generated from the web application and the generated QR code can be attached to the pet's collar. By doing so, specially the sitter can view details about the pet by scanning the code and they do not have to worry about memorizing all details about a pet. The design of QR placeholder does not change with orientation or between iPad and iPhone.

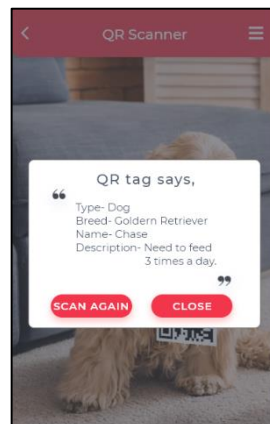


Figure 47 - Scanned QR code description

### 3.17. Directing the user to content and use of emphasis

The foster collar is designed in a such way that it guides user to direct in content. As already discussed in other sections, the navigation bar and the hamburger menu allow user to direct into a different page at any point of view. Home page and footer is another example to show that the user direction is handled. Where from the start itself an introductory information was given to the user directing the path that needs to be followed. In addition to that, this can be seen on the booking flow as well. A progress bar was designed to displaying each step directing the flow of the booking process. A check mark will be added notifying that a step is successful upon completion of a step, and the next step will be highlighted where the user should focus on.



Figure 51 - Booking progress bar (step 1)



Figure 51 - Booking progress bar (step 2)



Figure 51 - Booking progress bar (step 3)



Figure 51 - Booking progress bar (step 4)

## 4. Design of custom features

### 4.1. SSO Login/ SSO Sign up

To minimize the steps involved in registration of the user, Foster collar uses the single sign-on functionality. This will maximize the usage interaction with the application as most of the users do not like filling long forms.

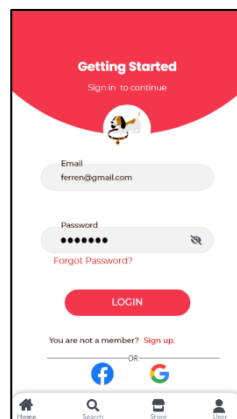


Figure 52 - Login page

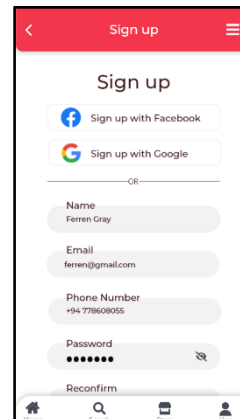


Figure 53 - Sign up page

Forgot Password through multiple options.

The application provides the ability for a user to reset password through phone number verification or through their email, this enables easy and convenient way for user to change their password.

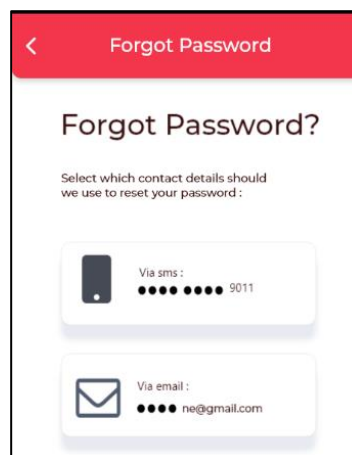


Figure 54:Forgot Password

## 5. iPhone vs iPad

Throughout the Foster Collar application, there are several variations depending on the screen size. The end goal of this is to efficiently fit in content in both mobile (iPhone) and tablet view (iPad). Below the techniques used is explained in detail with the justification for the variation.

### The use of photography

Photography has been used to utilize the extra space in larger screens (iPad). This technique not only helps to place the content in an optimistic manner but also gives an attractiveness to the application. The images represent the idea of a particular web page and matches the colour theme of Foster Collar. For example, the Favourite Sitters page in iPad contains a picture of a pet sitter hugging his/her foster pet. This gives the idea of favourite and love. The picture also contains a red colour bridge helping to match the image for the application theme. The same technique has been applied in several pages in the application. Some of these scenarios are listed below.

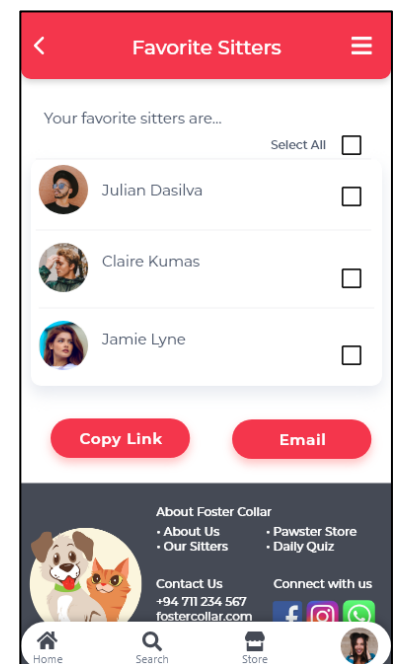
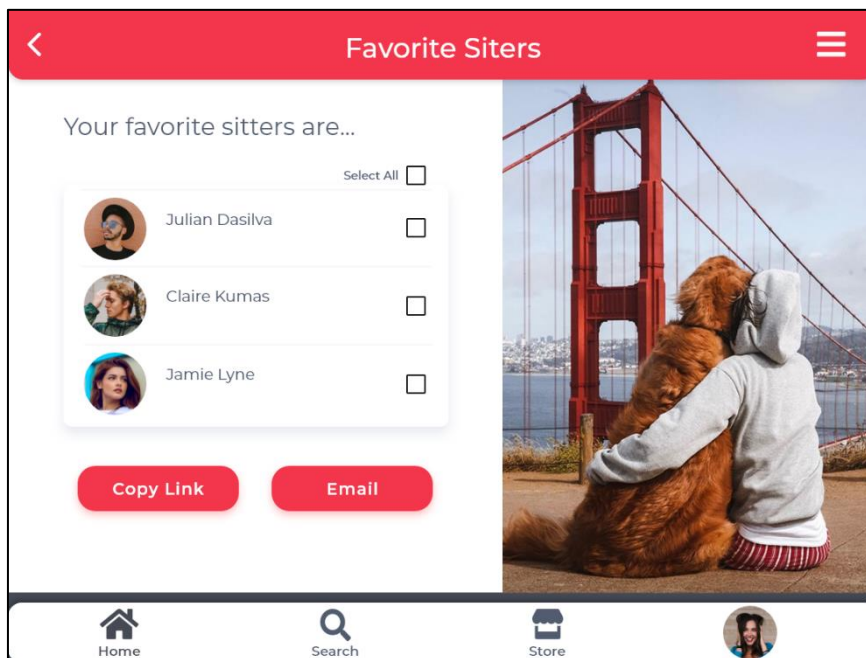
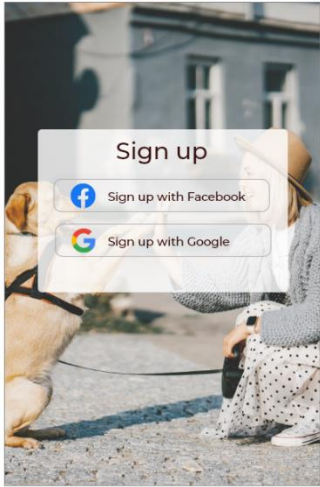


Figure 55: Favourite Sitters



**Sign up**

Sign up with Facebook

Sign up with Google

Name  
Someone

Email  
Someone@gmail.com

Phone Number  
0778608055

Password  
••••••

Reconfirm  
••••••

☒ I accept the policy and terms

SIGN UP

Home Search Store User

Figure 56: Sign up page

**Sign up**

Sign up with Facebook

Sign up with Google

OR

Full Name  
Ferren Gray

Email  
ferren@gmail.com

Phone Number  
+94 778608055

Password  
••••••


Reconfirm

Home Search Store User

**Booking**

Pick Dates Select Pet Confirm Pay

Sitter

 Jamie Lyne

Check In  
01/12/2020

Check Out  
15/12/2020

Select Pet

None +

please select a pet.


Home Search Store User

Figure 57: Booking page

**Booking**

Pick Dates Select Pet Confirm Pay

Sitter

 Jamie Lyne

Check In  
01/12/2020

Check Out  
15/12/2020

Select Pet

None +

Please select a pet.

About Foster Collar  
• About Us  
• Our Sitters  
• Pawster Store  
• Daily Quiz

Home Search Store User

## The use of illustrations

Illustrations has been used throughout the application to visualize the idea on the current action/scenario. This helps the application in multiple ways such as in navigation, utilizing extra space in larger screens (iPad) and as a helper to fit on content in an optimized way. For example, in the payment page an illustration gives both the benefits of utilizing extra space and as a helper in navigation. It helps in navigation to the daily quiz motivating the user through giving the message “spend less”. Several more illustrations relevant to the application colour theme are used in the iPad view to utilize the extra space, some of the scenarios are listed below.

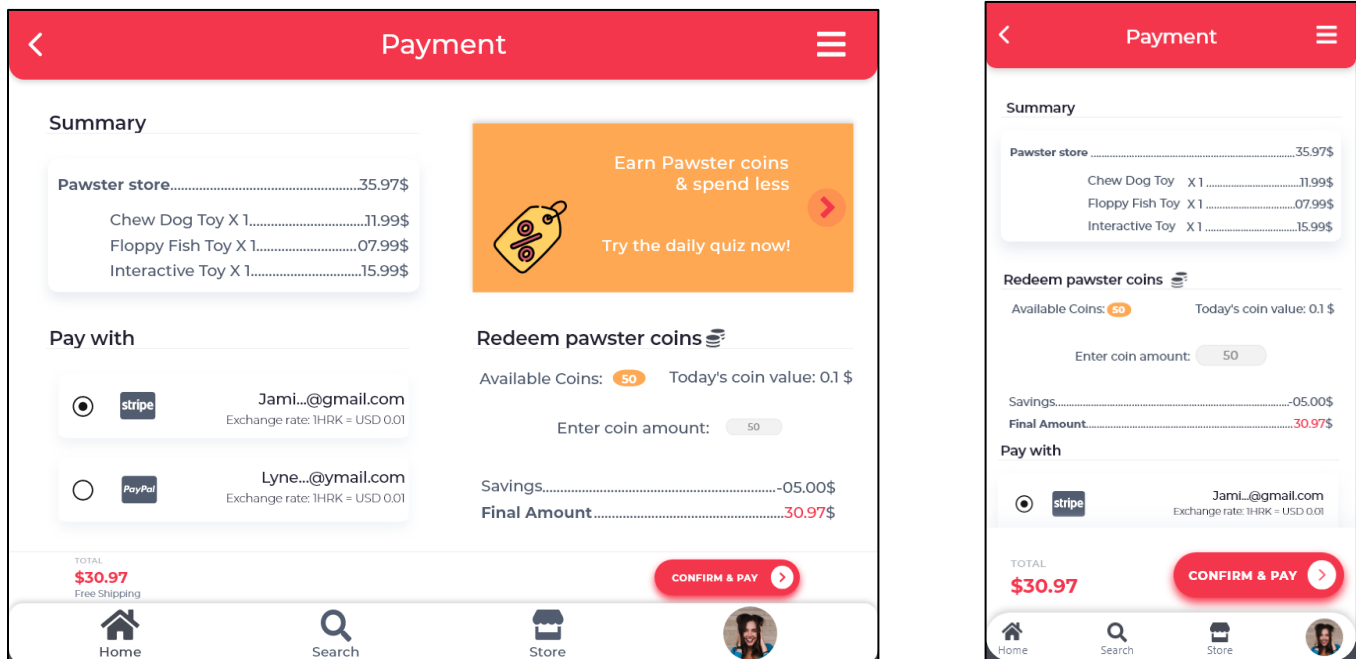


Figure 58: Payment using shopping label illustration

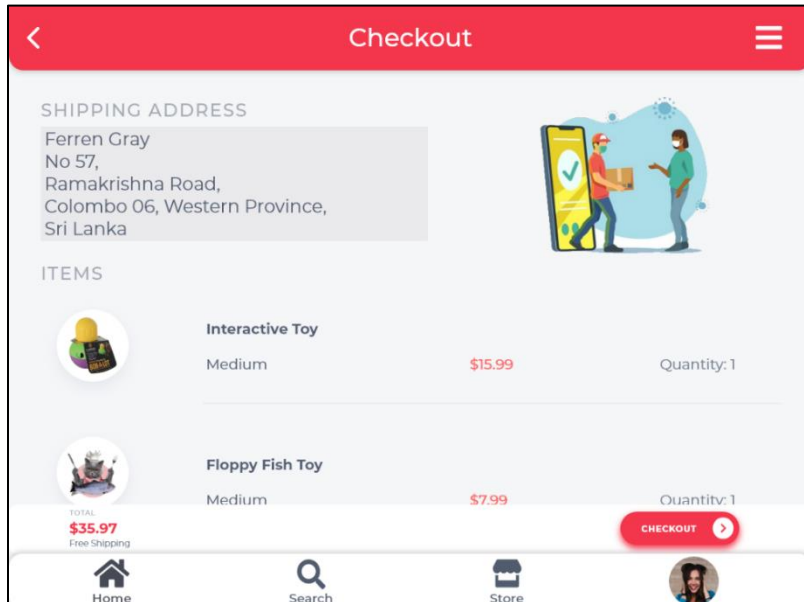


Figure 59:Checkout page using delivery man illustration

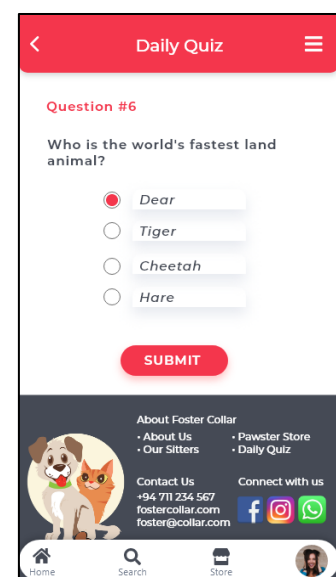
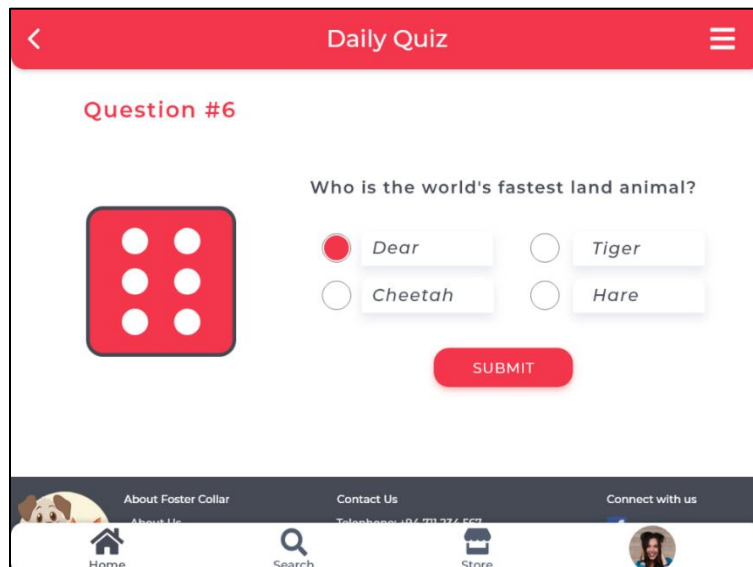
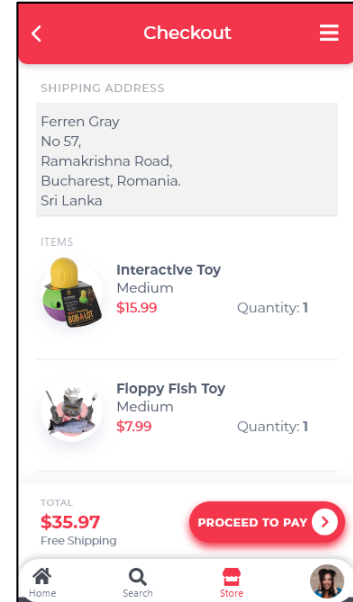


Figure 60:Daily Quiz



## Scrolling Direction

### 1. Home page scrollers

The difference is due to the mobile screen size in horizontal mode being small compared to tablet view and to show multiple elements in a screen at a fixed position a horizontal scroller was chosen and used but in tablet view screen size is bigger and the design uses a landscape mode, hence the user can have an abstract information at first sight, due to this reason, a vertical scroller was chosen.

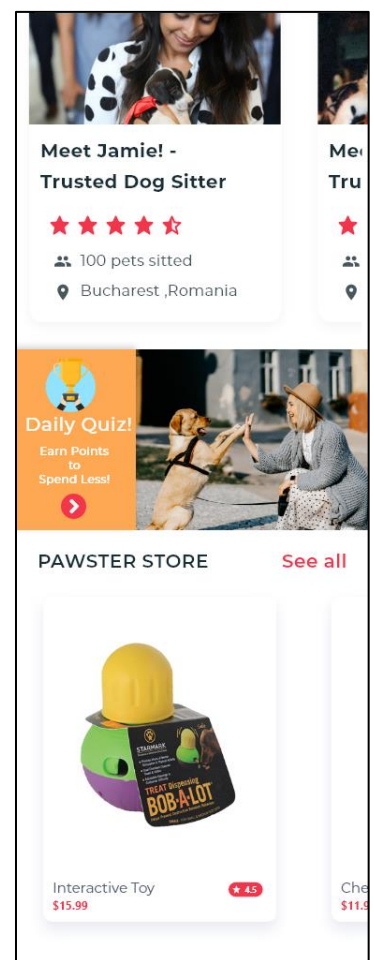
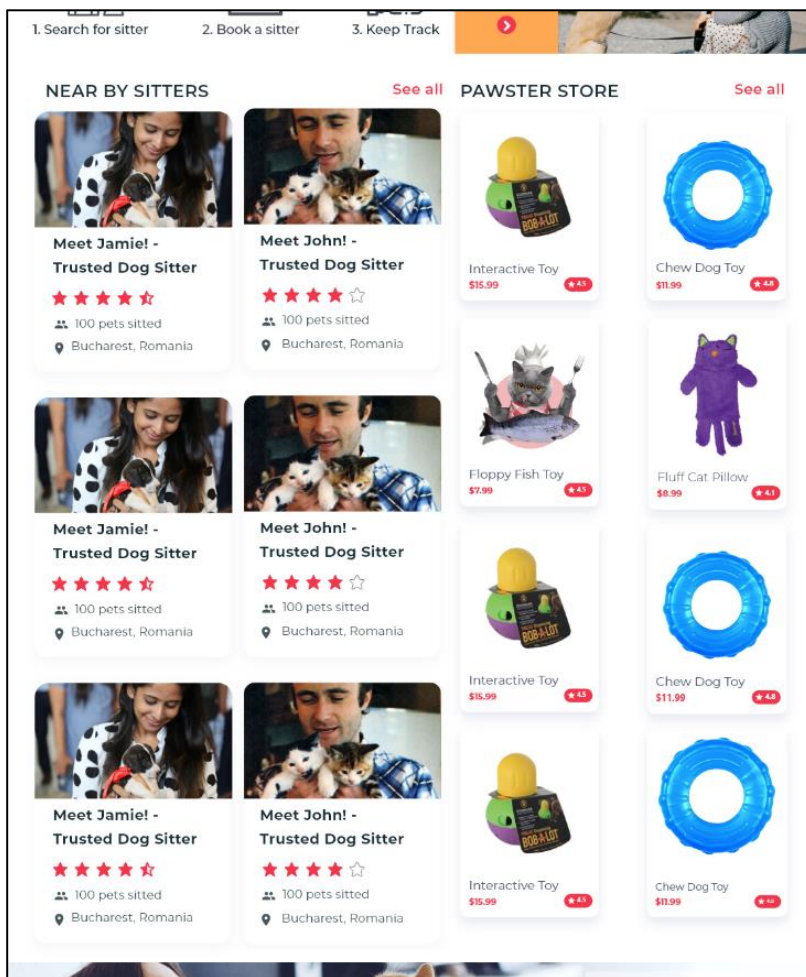


Figure 61: Home Page

## 2. Sitter's booking page

The sitter's booking page in mobile view consists a vertical scroller and the sitter's booking page in tablet view contains a horizontal scroller. The difference is due to the orientation of that page, Mobile view uses a portrait mode and since the latest bookings should be shown at first, a vertical scroller was chosen to show that and since only the same bookings element is there throughout the dedicated page, a vertical scroller is beneficial in this scenario than a horizontal scroller. For tablet view a horizontal scroller was chosen as its in-landscape mode and user will prefer to swipe from left to right on that orientation.

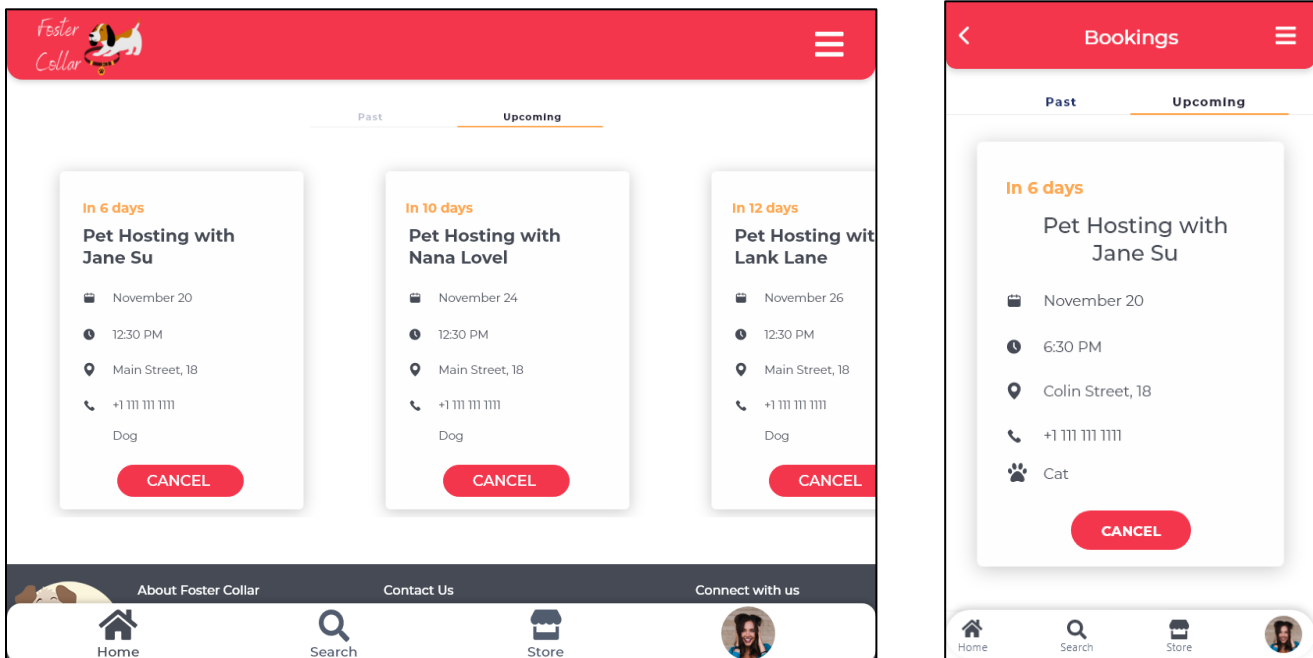


Figure 62: Sitters booking page

## Spacing

In larger screens (iPad view) more spacing was used between elements and objects to give a better look. The line spacing in text also differs in large screens according to the thumb rule ratio. This technique can be widely noticed across the application. For example, in the pawster store the grid size become more in width and less in height with more spacing in the iPad screen compared to the iPhone screen.

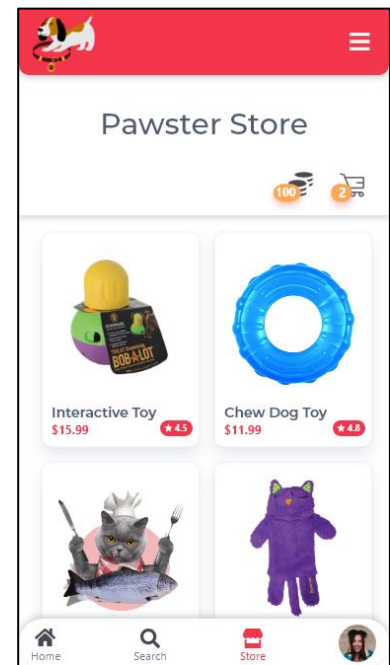
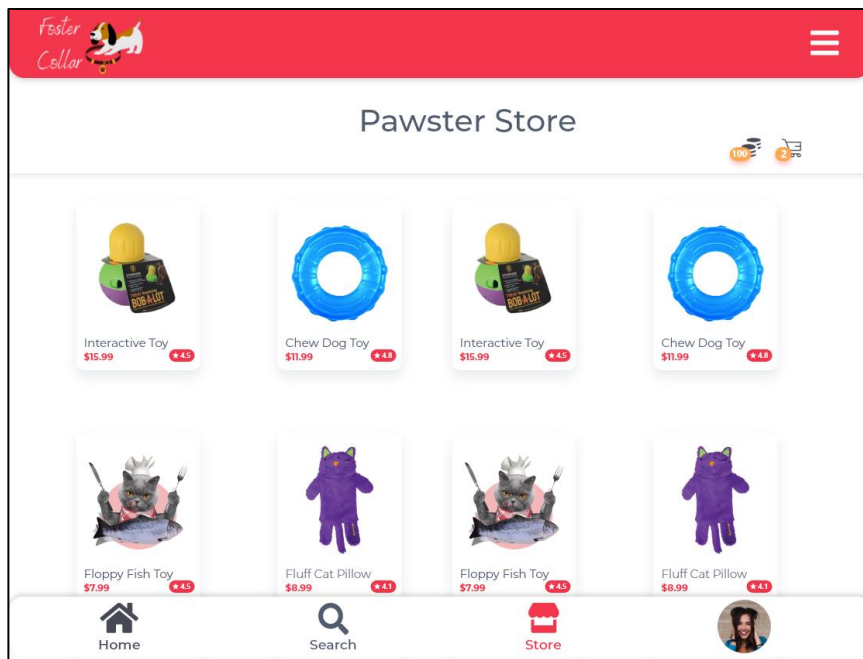


Figure 63: Pawster Store

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