**NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA,**

**SURATHKAL.**



**DEPARTMENT: - INFORMATION TECHNOLOGY**

IT351: - Human Computer Interaction

Assignment-2

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# ● Information About Hick Hyman's Law :-

○ Examine the relationship between the number of stimuli present and an individual's reaction time to any given stimulus.

○ Predicts the time it takes to make a decision in selecting among possible choices. It measures cognitive information capacity.

○ The more stimuli to choose from, the longer it takes the user to make a decision.

The formula for Hick's Law is defined as follows:

**RT = a + b . H**

Where ,

**H = entropy**

**a, b** are constants that are empirically determined.

With equal probabilities:

**H = log2 (n)**

With unequal probabilities:

$$H = \sum_{i}^{n} p_i \log_2 (1/p_i + 1)$$

# ● ScreenShots Of Mobile Phone Interface :-

The mobile phone interface includes two screens first/home screen which has a title **"OrderNow Activity Screen 1"**. The first screen consists of a textfield widget followed by dropdown widget menu which includes all the house hold items name.Next to it there will be an image widget ,at bottom there will be three button widgets one is **ADD TO CART**,**BUY NOW** and **NEXT PAGE**.The **ADD TO CART** and **BUY NOW** button will show an alert message when user click on these buttons.The **NEXT PAGE** will redirect to the second screen which has a title **"OrderNow Activity Screen 2"**.
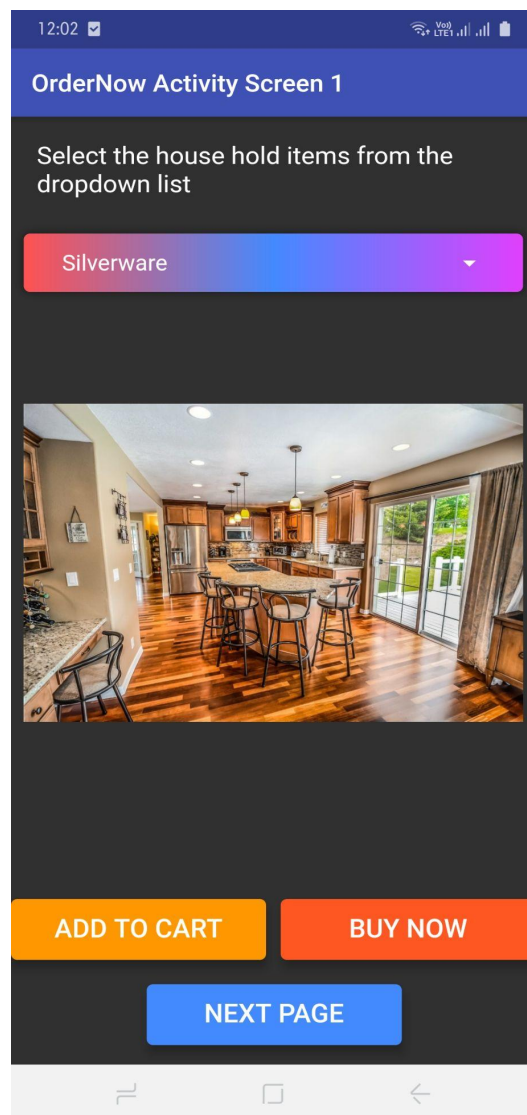
**/* First Screen */**



Fig.1 First Screen.

When you click on the dropdown button the following changes happen in the mobile app interface.
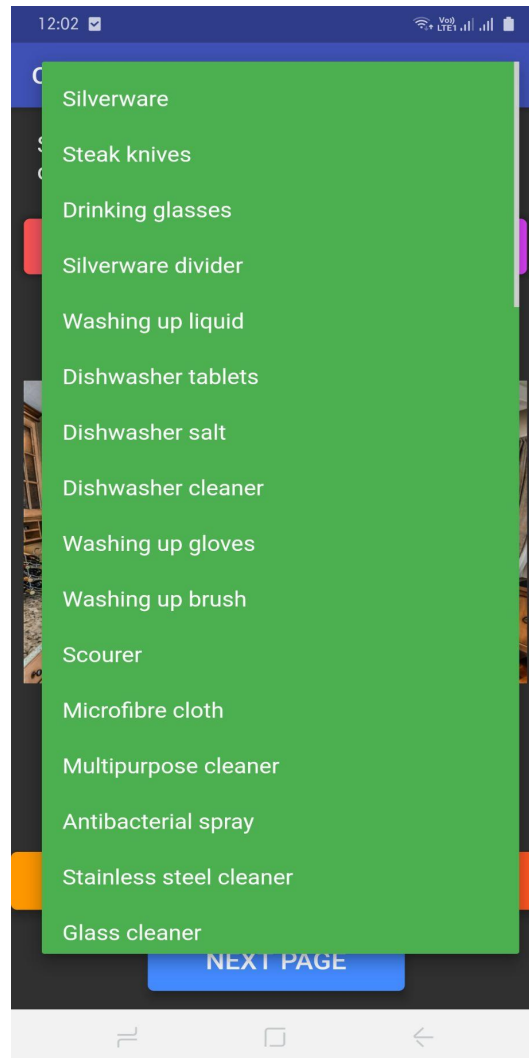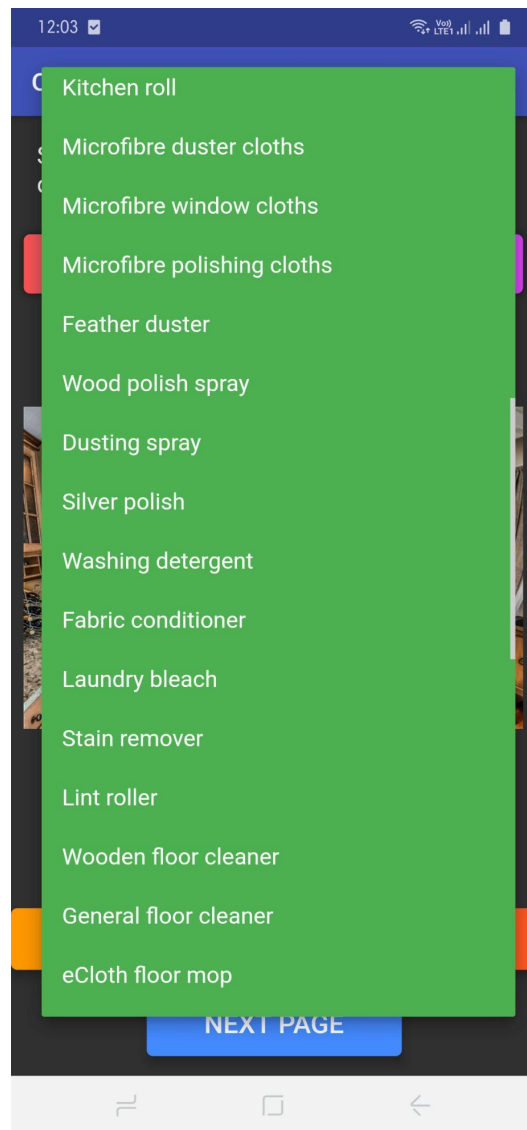


Fig.2 Dropdown Widget.
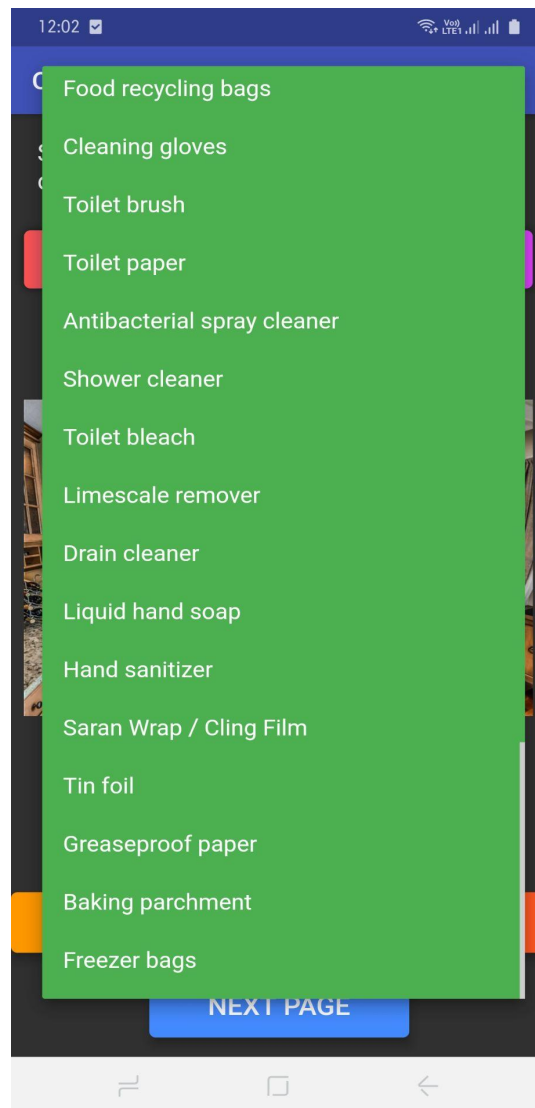
Fig.3 Dropdown Widget.

Fig.4 Dropdown Widget.

The second screen which has a title **"OrderNow Activity Screen 2"** includes a textfield widget followed by an image widget , a drawer widget which includes the house hold items,these items are categorised into 10 main headings and in each heading a dropdown widget is present which will help the user to identify the items fast compared to previously dropdown widget which was present in the first screen of the app.At bottom there will be three button widgets one is **ADD TO CART**,**BUY NOW** and **PREVIOUS PAGE**.The **ADD TO CART** and **BUY NOW** button will show an alert message when user click on these buttons.The **PREVIOUS PAGE** will redirect to the first screen which has a title **"OrderNow Activity Screen 1"**.

**/* Second Screen */**



Fig.5 Second Screen.

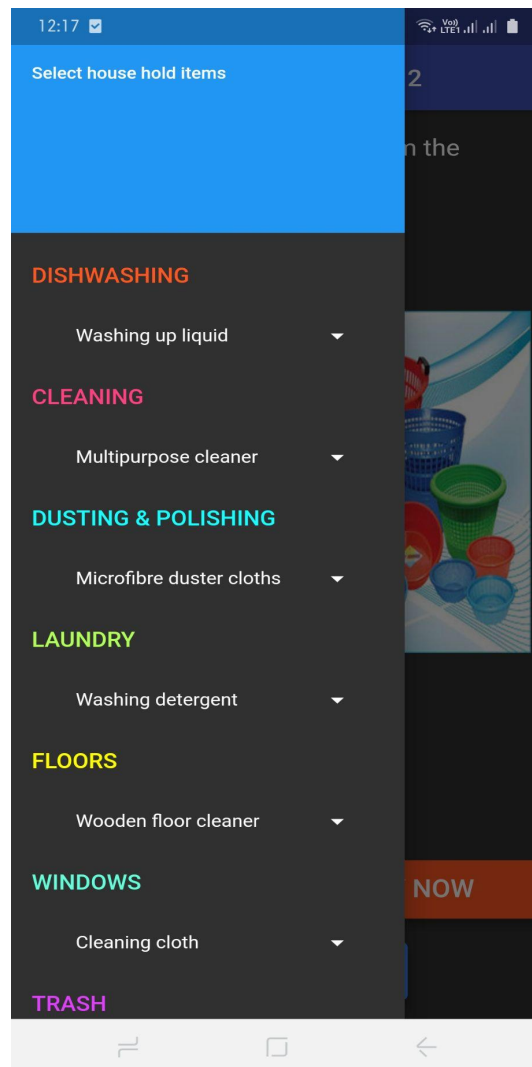When the user clicks on the drawer widget the following changes happen in the mobile app interface.
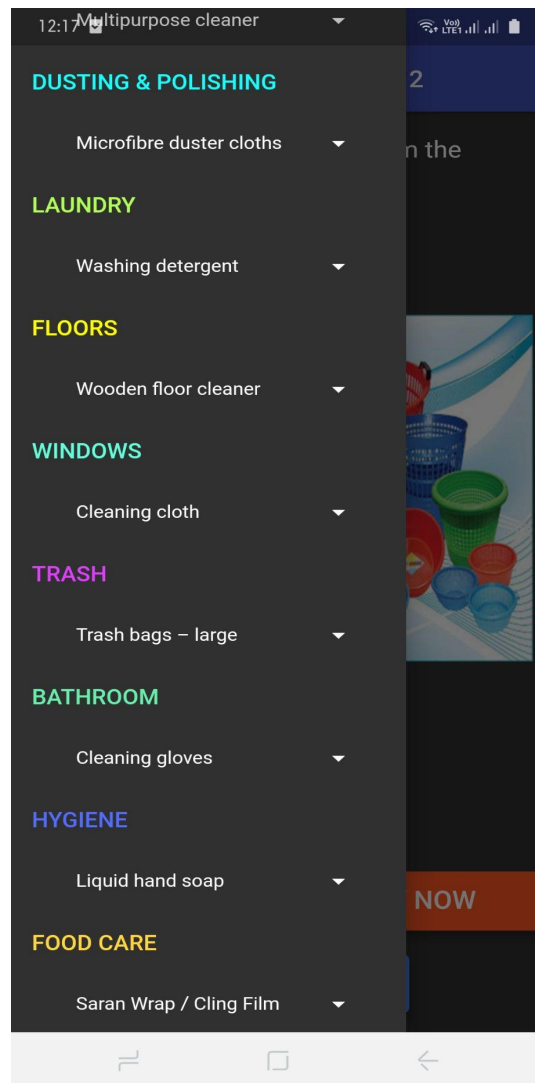


Fig.6 Drawer Widget.

Fig.7 Drawer Widget.

When the user wants to select the household items from dropdown.Since its categorised user can select easily.
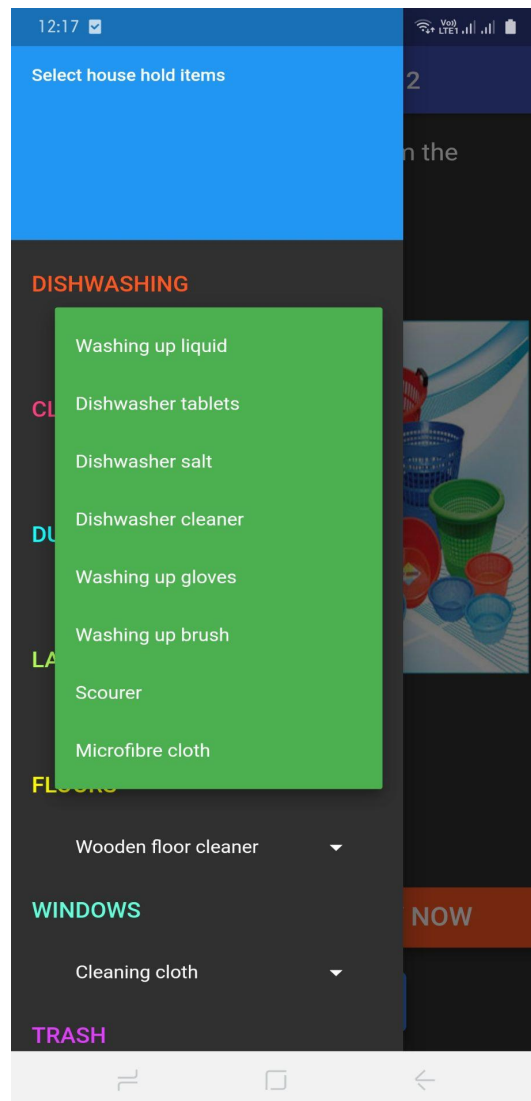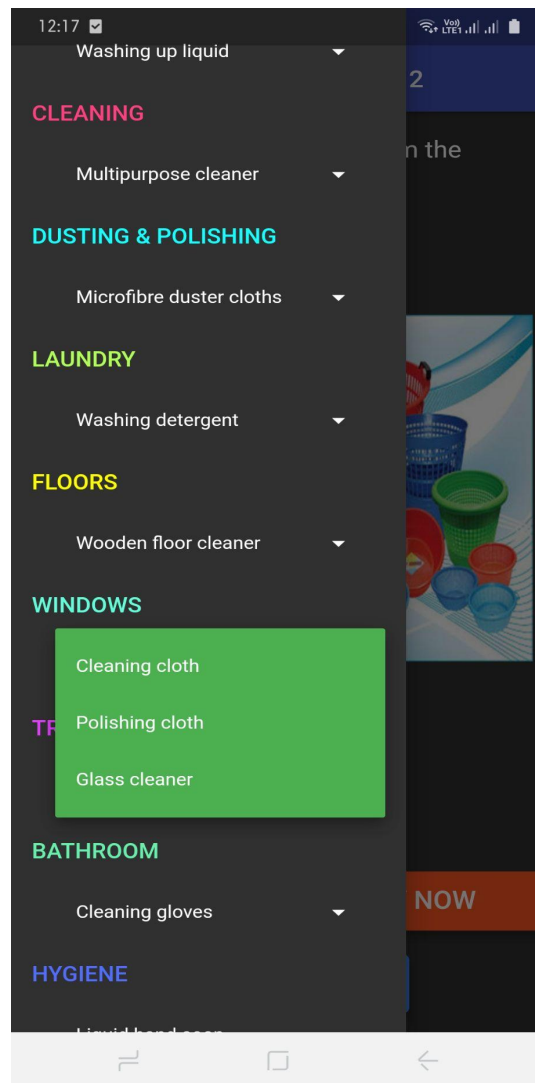


Fig.8 Dropdown Widget in Drawer Widget.
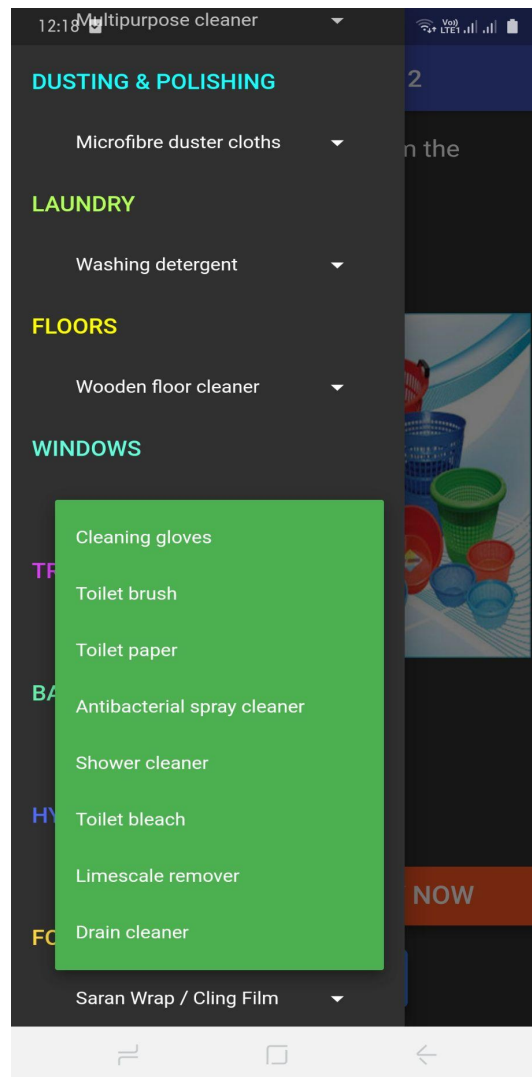
Fig.9 Dropdown Widget in Drawer Widget.

Fig.10 Dropdown Widget in Drawer Widget.

When the user clicks on the **"ADD TO CART"** button.Which will just give the alert message to user "Added To Cart" as a title and "You can select some more items or you can buy now!!" as a subtitle.
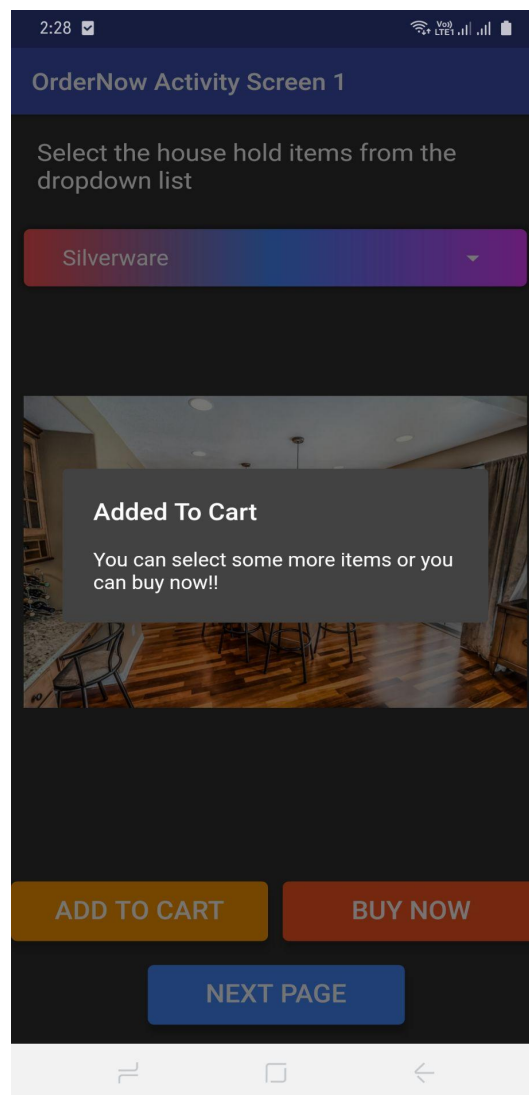


Fig.11 ADD TO CART button Widget.

When the user clicks on the **"BUY NOW"** button.which will just give the alert
message to user "Order Placed" as a title and "Visit Again.Thank you!!" as a subtitle.
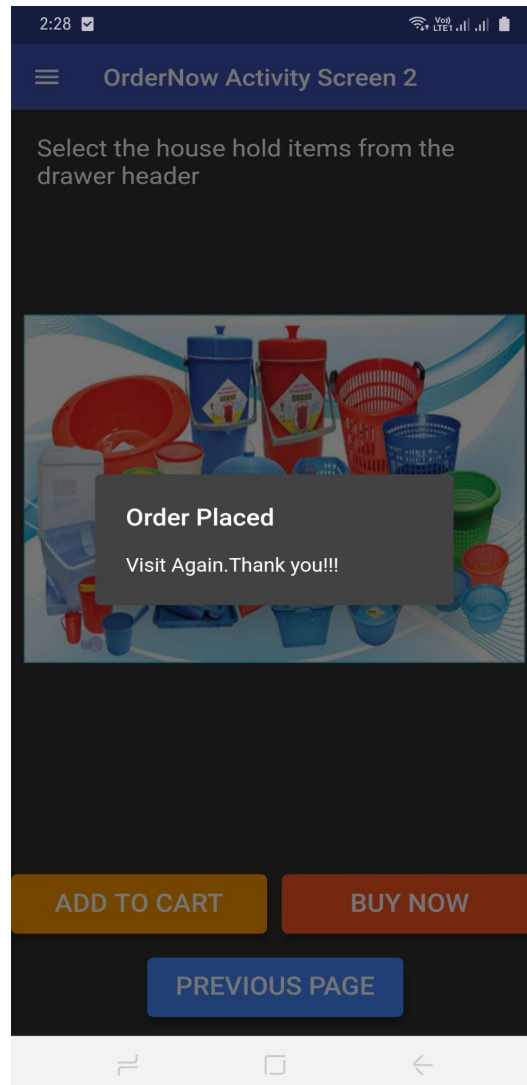


Fig.12 BUY NOW button Widget.

The **"NEXT PAGE"** button widget which is present on the first screen which helps the user to navigate to the next page.
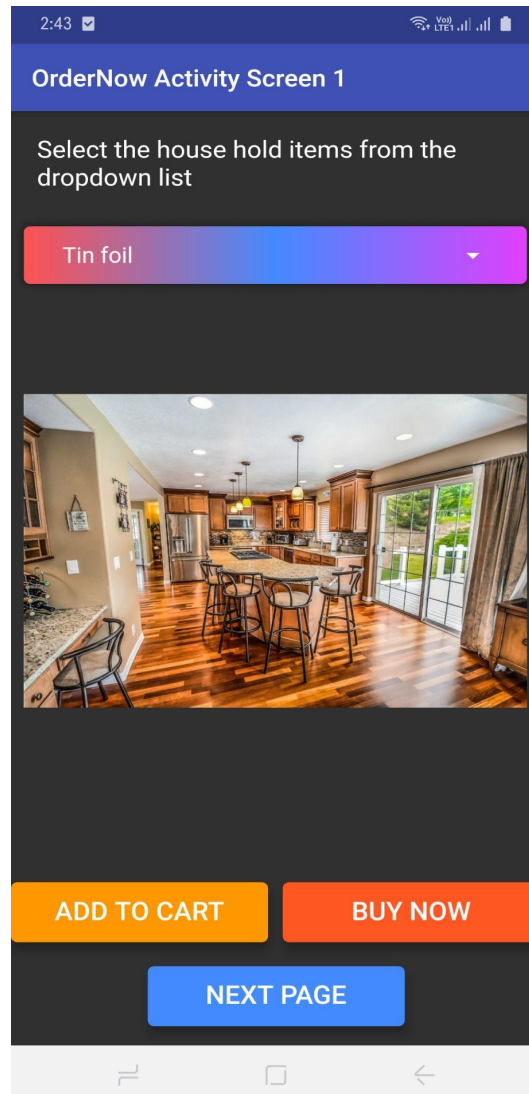


Fig.13 NEXT PAGE button Widget.

The **"PREVIOUS PAGE"** button widget which is present on the first screen which helps the user to navigate to the previous page.



Fig.14 PREVIOUS PAGE button Widget.

- **Novelty :-**

  1. Added images to the mobile interface.
  2. Dark mode enabled by which apps can prolong the battery life of smartphones also reduces the light emitted by device screens while maintaining the minimum colour contrast ratios required for readability.
  3. Added three button widgets **"ADD TO CART"**, **"BUY NOW"** and **"NEXT PAGE"/"PREVIOUS PAGE".**

- **Conclusion :-**

We can see that in the first screen the dropdown widget is not categorised i.e all household items are present in one list.Therefore, the user can take much time to find the household item he/she wants.

But,if we see in the second screen the dropdown widget is categorised into the main menu and submenu,because of this the user can take less time to select the household item which he/she wants compared to the first screen dropdown widget.