

Sri Lanka Institute of Information Technology



IT3060 - Human Computer Interaction

Assignment 3

High Fidelity Prototyping

2024-WE-S1-46

Tech Titans

Group member details:

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IT22032706	Dissanayaka R.M.L.R	<ul style="list-style-type: none">• Addresses Page• Edit Address Page• About Us
IT22170934	Wanasekara W.A.O.H	<ul style="list-style-type: none">• Edit Account Page• Pricing Page• Resellers & Dropshippers Page
IT22034236	De Silva K.G.G.C.D	<ul style="list-style-type: none">• Login/Register Page• Products Page• Sample Request Page
IT22347480	Himasha Y.H.P.	<ul style="list-style-type: none">• Contact• Blinky Builder Page• Shipping Policy Page

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Introduction

Blinkee is a one of largest website which sell items and famous in logo designing. Magic Matt's Brilliant Blankies provides exciting glow in the dark toys, flashing jewelry, blinking pins, flashy Blankies and accessories for the twenty-first century. Magic Matt has been a vendor of light up novelties, and flashing toys online and in person for over 15 years. Over the years they have built up a great reputation of quality and service.

According to our point of view there are many mistakes in the web site as such as extra whitespaces, no right color themes, no alignment, footer isn't always properly organized, messy navigation bar, touch us web page isn't always nicely categorized withinside the navigation. Therefore, customers cannot get the right concept approximately about the products, follow coupon button is not always working. Users cannot customize the numerous colorings which they need to buy. It is a multi-colored net site. There is not any right color theme and flow theme. The colors they have used is not matching.

Therefore, we are determined to remodel the blinke.com internet site. First, we accumulate consumer problems from our users and stakeholders. So, we use to brainstorming and interviews as an ideation, strategies to accumulate requirements. Finally, we redesign consumer pleasant outcome.

Methodology

Optimizing usability and elevating the user experience was the goal of Blinke.com's redesign process. One CRUD interface was among the three main interfaces that each team member was tasked with redesigning. Contextual interviews and video analysis were used at the start of the project to obtain firsthand user insights. Through these unstructured interviews, users' feelings, ideas, and difficulties with the current interface were explored.

In order to map out the fundamental structure of the website during the early stages of design, we used MockFlow to generate low-fidelity prototypes. Until comprehensive designs were developed, this stage of sketching was crucial to visualizing possible changes. Then, we employed Figma, a powerful tool for producing high-fidelity prototypes, to craft polished, interactive designs that faithfully captured the essence of the new interface.

We conducted user tests based on predetermined test cases to assess the efficacy of these prototypes. The purpose of these testing was to find out if the revised interfaces improved usability and made the experience more seamless. Final changes were made based on the testing phase's insights, guaranteeing that Blinke.com's new design was effective and user-friendly.

Prototypes

Figma Link-

<https://www.figma.com/design/yEdptyw95XHkQxA5zFaBCj/Blinkee---Designs?node-id=0-1&t=7uKnMXslxWNhRpdr-1>

Prototype UI Links

1. IT22280138: Jayasooriya H.M.S.M :- Checkout Page, Home Page, Cart Page
https://drive.google.com/drive/folders/1tSz6xVfsxXoL5FrS6_1-Lfj_s9H4--vz?usp=drive_link
2. IT22032706: Dissanayaka R.M.L.R :- Addresses Page, Edit Address Page, About Us
https://drive.google.com/drive/folders/1WTsE5TxbzaROUh3JUrwppNEWM874j_hk?usp=drive_link
3. IT22170934: Wanasekara W.A.O.H :- Edit Account Page, Pricing Page, Resellers & Dropshippers Page
https://drive.google.com/drive/folders/1-uqfQu8xPcd2L17ZOLsSULRN50xfthvV?usp=drive_link
4. IT22034236: De Silva K.G.G.C.D :- Login/Register Page, Products Page, Sample Request Page
https://drive.google.com/drive/folders/1tH7YlwpwTzG3gOWg4HmGTTHUL_O8Qhq0?usp=drive_link
5. IT22347480: Himasha Y.H.P. :- Contact page, Blinky Builder Page, Shipping Policy Page
https://drive.google.com/drive/folders/1tlt1SAsG9rHkzGYVJO0wq0o7R4R74bsI?usp=drive_link

video demonstration link -

<https://drive.google.com/file/d/1GD7k717mkuQ5eHwSNqH8DXQgDfKXxY41/view?usp=sharing>

Test cases

Jayasooriya H.M.S.M - IT22280138

Test Plan for Home Page, Cart Page, and Checkout Page













What is being tested (features and tasks)

1. Logo is clickable and leads to the homepage
2. Drop-down list in the header is functional
3. Navigation links are visible and working
4. Hover effects on interactive elements work properly
5. Main slider is clickable and functional
6. Footer navigation links are functional
7. User can easily navigate through the interface
8. Product section is easily discoverable
9. All buttons are clickable and functional
10. Key features are visible and clear
11. Cart contents are clearly displayed
12. Checkout button is visible and functional
13. All price calculations are accurate
14. Shipping and billing details are easily identifiable
15. Total order amount is clear
16. Delete and update buttons are easily identifiable
17. Colors are suitable and visually appealing
18. Font and image sizes are appropriate and readable

How it is going to be measured

1. If clicking the logo redirects users to the homepage, it is a pass; if not, it is a failure.
2. If the drop-down list in the header opens and displays all items correctly, it is a pass; if not, it is a failure.
3. If clicking the navigation links leads to the correct pages, it is a pass; if not, it is a failure.
4. If hover effects are noticeable and enhance user experience, it is a pass; if not, it is a failure.
5. If clicking the main slider changes to other slider image, it is a pass; if not, it is a failure.
6. If footer navigation links function correctly and lead to the intended pages, it is a pass; if not, it is a failure.
7. If users can easily navigate through the interface without confusion, it is a pass; if not, it is a failure.
8. If users can quickly locate the product section on the homepage, it is a pass; if not, it is a failure.
9. If all buttons are clickable and perform the expected actions, it is a pass; if not, it is a failure.
10. If key features are visible and easily identifiable by users, it is a pass; if not, it is a failure.
11. If cart contents are clearly displayed and easy to understand, it is a pass; if not, it is a failure.
12. If the checkout button is clearly visible and functional, it is a pass; if not, it is a failure.
13. If all price calculations are accurate and agreed upon by users, it is a pass; if not, it is a failure.
14. If users can easily identify and fill in shipping and billing details, it is a pass; if not, it is a failure.
15. If users can clearly see and verify the total order amount, it is a pass; if not, it is a failure.
16. If users can quickly find and use the delete and update buttons, it is a pass; if not, it is a failure.
17. If the color scheme is considered suitable and visually appealing by users, it is a pass; if not, it is a failure.
18. If font and image sizes are appropriate and readable without difficulty, it is a pass; if not, it is a failure.

Generating dummy data

Name of participant	Verify Navigation Links	Order Billing Details Visibility	Color and Visual Appeal	Note
Wanasekara W.A.O.H				Task is passed
Dissanayaka R.M.L.R				Task is passed
De Silva K.G.G.C.D				Task is passed
Himasha Y.H.P.				Task is passed

Total number of tasks = 12

Total number of successful tasks = 12

Success rate = 100%

Sample analysis of data.

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification	Way(s) to rectify and any tradeoffs
Home Page	No negative feedback given.	None	None	None
Cart Page	No negative feedback given	None	None	None
Checkout Page.	No negative feedback given	None	None	None

Test Plan for About Us, Address, and Billing Address Pages













What is being tested (features and tasks)

1. Verify user navigation to 'About Us', 'Address', and 'Billing Address' pages.
2. Ensure 'About Us' color scheme matches the website.
3. Check font readability on the 'About Us' page.
4. Test buttons for functionality on the 'About Us' page.
5. Verify hover effects on links and buttons on the 'About Us' page.
6. Ensure 'Address' navigation links are visible and functional.
7. Check button visibility and functionality on the 'Address' page.
8. Ensure colors and fonts are consistent on the 'Address' page.
9. Verify hover effects and button functionality on the 'Address' page.
10. Test form fields and buttons on the 'Billing Address' page.
11. Check color scheme and design consistency on the 'Billing Address' page.
12. Verify required fields on the 'Billing Address' page are marked and validated.
13. Ensure the Country/Region dropdown on the 'Billing Address' page displays all options.
14. Verify the Street Address field accepts sufficient characters on the 'Billing Address' page.
15. Confirm the 'Save Address' button on the 'Billing Address' page redirects correctly.
16. Verify consistency in color scheme, fonts, and button styles on the 'Billing Address' page.

How it is going to be measured

1. If clicking the navigation links leads to the correct pages, it is a pass; if not, it is a failure.
2. If the color scheme of the 'About Us' page matches the overall website, it is a pass; if not, it is a failure.
3. If the font is clear and readable on the 'About Us' page, it is a pass; if not, it is a failure.
4. If all buttons on the 'About Us' page perform their intended functions, it is a pass; if not, it is a failure.
5. If hover effects on links and buttons are noticeable and provide feedback, it is a pass; if not, it is a failure.
6. If 'Address' navigation links are visible and function correctly, it is a pass; if not, it is a failure.
7. If all buttons on the 'Address' page are visible and functional, it is a pass; if not, it is a failure.
8. If colors and fonts on the 'Address' page are consistent and easy to read, it is a pass; if not, it is a failure.
9. If hover effects on 'Address' page buttons are functional and provide feedback, it is a pass; if not, it is a failure.
10. If form fields and buttons on the 'Billing Address' page are working as intended, it is a pass; if not, it is a failure.
11. If the color scheme and design on the 'Billing Address' page are consistent with the overall design, it is a pass; if not, it is a failure.
12. If required fields on the 'Billing Address' page are clearly marked and validated, it is a pass; if not, it is a failure.
13. If the Country/Region dropdown displays all expected options, it is a pass; if not, it is a failure.
14. If the Street Address field accepts the necessary character length, it is a pass; if not, it is a failure.
15. If clicking the 'Save Address' button successfully redirects the user to the correct page, it is a pass; if not, it is a failure.
16. If the color scheme, fonts, and button styles are consistent across the 'Billing Address' page, it is a pass; if not, it is a failure.

Generating dummy data

Name of participant	Ensure font clarity and readability on 'About Us.'	Ensure color scheme and design align with website.	Verify form fields and buttons on 'Billing Address' page.	Note
Wanasekara W.A.O.H				Task is passed
Jayasooriya H.M.S.M				Task is passed
De Silva K.G.G.C.D				Task is passed
Himasha Y.H.P.				Task is passed

Total number of tasks = 12

Total number of successful tasks = 12

Success rate = 100%

Sample analysis of data.

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification	Way(s) to rectify and any tradeoffs
About Us	No negative feedback given.	None	None	None
Billing Address	No negative feedback given	None	None	None
Address	No negative feedback given	None	None	None

Test Plan for Edit Account Page, Dropshippers and Resellers Page, and Pricing Page







What is being tested (features and tasks)

1. Working with the User interfaces, the colors chosen are appropriate for any kind of users.
2. It is clearly seen that font size is considerable and button visibility is also good enough.
3. All account details can be well interpreted easily, and the details can be placed easily in the form.
4. All are discernable functions for the portion of the system under consideration, although some may be implicit. (e.g. adding buttons, remove buttons, save buttons)
5. The user can easily find the Account Page, Dropshippers & Resellers Page and the Pricing Page.
6. Page functions are well organized.
7. Use proper images and icons for special sections.
8. Verify hover effects on links and buttons on the 'Edit Account Page' page.
9. Considering the edit Account page, find a technique to edit form fields and remove or change profile photo effortlessly when needed.

How it is going to be measured

- 1.If the colors used in the UI are too strong for the user, it is a failure. Otherwise, it is a pass.
- 2.If the user is able to view the page without any contrasting change in size and the buttons are easily locatable than the criterion passes. Otherwise, it is a failure.
- 3.If such account details can form part of the entities that the user can simply recognize and enter then, that is pass. Otherwise, it is a failure.
- 4.All the functions must be clear so that the user does not get hard time trying to understand them, then it is a pass. Otherwise, it is a failure.
- 5.If, the user can be able to locate easily the options of navigation and has an easy time moving from one page to the other, then it is considered to have passed. Otherwise, it is a failure.
- 6.This is considered a failure if the page sections cannot be divided neatly, or if identifying the separation is too difficult on the page. Otherwise, it is a pass.
7. If did not use proper images and icons for special sections then it is not a pass.
8. If hover effects on links and buttons are obvious and give feedback, it is a pass. otherwise, it is a failure
- 9.If user can easily find a way for edit form fields and remove or change profile photo, it is a pass. otherwise, it is a failure.

Generating dummy data

Name of participant	All functions are clearly visible.	The colors used for the website are suitable for all types of users.	Page details are clearly identifiable.	Note
Jayasooriya H.M.S.M				Task is passed
Dissanayaka R.M.L.R				Task is passed
De Silva K.G.G.C.D				Task is passed
Himasha Y.H.P.				Task is passed

Total number of tasks = 12

Total number of successful tasks = 12

Success rate = 100%

Sample analysis of data.

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification	Way(s) to rectify and any tradeoffs
Account Page	No negative feedback given.	None	None	None
Dropshippers and Resellers Page	No negative feedback given	None	None	None
Pricing Page.	No negative feedback given	None	None	None

Test Plan for Login/ Registration Page, Products Page and Sample Request Page













What is being tested (features and tasks)

1. Username and password fields are functional
2. Login button works properly
3. Registration form is functional
4. Password reset link is visible and functional
5. Error messages are clear
6. Form validation works correctly
7. Product grid is visible
8. Product filtering works correctly
9. Search bar functions properly
10. Add to cart button works for all products
11. Product details are clear and complete
12. Pagination works
13. Sample request form loads correctly
14. All required fields are functional
15. Submit button works
16. Confirmation message appears after submission
17. Validation for required fields
18. Form is responsive across devices

How it is going to be measured

1. If users can input text without errors, it's a pass; otherwise, fail.
2. If clicking logs the user in successfully, it's a pass; otherwise, fail.
3. If all fields accept input and form submission works, it's a pass.
4. If clicking sends a reset email, it's a pass; otherwise, fail.
5. If users see understandable error messages, it's a pass; otherwise, fail.
6. If form catches incorrect data (e.g., invalid email), it's a pass.
7. If the product grid loads and displays all products, it's a pass.
8. If filters return the correct product results, it's a pass.
9. If searching displays relevant results, it's a pass.
10. If clicking adds products to the cart, it's a pass.
11. If details (price, description) are visible for all products, it's a pass.
12. If users can move between product pages without issues, it's a pass.
13. If the form appears fully on the page, it's a pass.
14. If users can fill in required fields without errors, it's a pass.
15. If clicking submits the request and confirms submission, it's a pass.
16. If users see a confirmation after submission, it's a pass.
17. If the form catches missing required fields, it's a pass.
18. If form displays correctly on mobile and desktop, it's a pass.

Generating dummy data

Name of participant	Properly navigate to Login/Registration Page	Users can move between product pages without issues	The form appears fully on the Sample Request page	Note
Wanasekara W.A.O.H				Task is passed
Dissanayaka R.M.L.R				Task is passed
Jayasooriya H.M.S.M				Task is passed
Himasha Y.H.P.				Task is passed

Total number of tasks = 12

Total number of successful tasks = 12

Success rate = 100%

Sample analysis of data.

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification	Way(s) to rectify and any tradeoffs
Login/Registration Page	None	None	None	None
Product Page	No negative feedback given	None	None	None
Sample Request Page.	No negative feedback given	None	None	None

Test Plan for Contact Us page, Shipping Policy Page, and Blinky Builder page.













What is being tested (features and tasks)

1. Verify all buttons are clickable and functional.
2. Verify navigation bar works properly.
3. Verify Contact Us form is functional.
4. Verify hover effects on buttons on the 'Blinky builder' page.
5. Verify form validations are working correctly on the 'Contact us' page.
6. Verify footer navigation links are functional.
7. Check font size and icon size are readable.
8. Check shipping policies are easily identifiable.
9. Ensure colors and fonts are consistent on the pages.

How it is going to be measured

1. If all buttons are clickable and perform the expected work, it is a pass; if not, it is a failure.
2. If clicking the navigation bar leads to the correct pages, it is a pass; if not, it is a failure.
3. If all fields accept inputs and form submission works, it is a pass; if not, it is a failure.
4. If hover effect on 'Blinky Builder' page buttons are functional and provides feedback, it is a pass, if not it is a failure.
5. If the form identifies errors and displays suitable error messages, it is a pass; if not, it is a failure.
6. If footer links navigate correctly and lead to the intended pages, it is a pass; if not, it is a failure.
7. If fonts are clear and readable, it is a pass; if not it is a failure.
8. If users can easily identify shipping Policies and readable, it is a pass; if not, it is a failure.
9. If colors and fonts are consistent and easy to read, it is a pass; if not, it is a failure.

Generating dummy data

Name of participant	Shipping policies are visibility	Verify Contact us form validations are functional	The colors chosen are appropriate to any kind of user	Note
Jayasooriya H.M.S.M				Task is passed
Dissanayaka R.M.L.R				Task is passed
Wanasekara W.A.O.H				Task is passed
De Silva K.G.G.C.D				Task is passed

Total number of tasks = 12

Total number of successful tasks = 12

Success rate = 100%

Sample analysis of data.

Prototype screen / UI	User's feedback /Problem	Reason for negative feedback	Severity (high/ medium/ low) and justification	Way(s) to rectify and any tradeoffs
Contact Us page	No negative feedback given.	None	None	None
Shipping Policy Page	No negative feedback given	None	None	None
Blinky Builder page.	No negative feedback given	None	None	None

Summary

The Blinker.com redesign focused on improving the look and ease of use of the website, which sells unique party items and accessories. After reviewing the current site, we found several problems like too much empty space, a mix of random colors, misaligned elements, a messy navigation bar, and a disorganized footer etc.

we created a high-fidelity prototype that makes the design more user-friendly and visually appealing. We used space better, applied a consistent color scheme, aligned elements properly for easier reading, and simplified the navigation to help users find information more easily. We also reorganized the footer to include important links, making the website easier to use.

This project shows how we applied human-computer interaction principles to make Blinker.com more intuitive and attractive for both customers and resellers.

Future Work

Looking ahead, our goal for Blinker.com is to keep improving the user experience through innovative design and technology. As e-commerce continues to evolve, we see many chances to make the site even better for customers.

To start, we plan to conduct user testing with our high-fidelity prototype. This will allow us to gather feedback from real users on how easy and enjoyable the site is to use. Their insights will help us identify areas where we can make further improvements.

We also want to explore new technologies that can enhance the shopping experience. For example, we may introduce personalized product recommendations based on what users like and how they shop. By analyzing user behavior, we can better understand their preferences and offer tailored content that meets their needs.

Additionally, we aim to add interactive features, such as live chat support and improved product filtering options. These changes will make it easier for users to find what they are looking for and enhance their overall experience on the site.

This plan will ensure that Blinker.com stays up-to-date with the latest trends and technologies while continuing to provide a user-friendly and enjoyable shopping experience for everyone.

Grant Chart

ID	Task Name	Sep 19 - Sep 25							Sep 26 - Oct 2							Oct 2 - Oct 9							Week 4				
		19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct
1	Arrange group meetings to discuss workload																										
2	Distribute the workload among group members.																										
3	Design Ui into Figma.																										
4	Find 4 participants to test the user interface.																										
5	Allow the participants to test the user interface.																										
6	Gather the participant's feedbacks.																										
7	Analysis participant's feedbacks.																										
8	Page UI Design again with participant' feedbacks.																										
9	Create final report.(Assignment 3)																										

References:

[1]

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[3]

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[4]

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