

A summary of the website and the overall findings from the analysis:

- I would like to use the “Dlish Cupcakes” online website for my final project.
This online website is for ordering cupcakes, provides both home delivery and pickup options to the customers. After performing the Heuristic Evaluation on the “Dlish Cupcakes” website, I came up with the following summary:
- The overall score after considering all the cases of Heuristic Evaluation is 59, which classifies this website under the “Moderate” category which means the users can use this site or system to complete the most important tasks of ordering cupcakes, however, the user experience can be significantly improved.
- The Home page loads upon opening the link. Though it was able to communicate its theme of cupcakes, it looks strong and distractive. The website can be more pleasing and seem connected by improving aesthetics, avoiding extraneous cognitive load on the users, and having sufficient white space for enabling the user readability to increase the customer demand and satisfaction.
- Color aesthetics of the website can be improved, The navigation bar on the top does not seem to integrate with the body page as well as the theme, and also upon highlighting the tool button on the navigation bar, the color does not stand clear. Contrasting and a good choice of colors for the website can be implemented wherever necessary.
- The order of the functionalities upon the navigation bar is confusing. It can be more clear by placing the necessary functions in order like Home->Menu->Order->FAQ->Gallery and also there is no proper internal navigation from any of the pages to checkout or order page, vice versa. They also didn't implement the instant “order now” button or shortcut to get to the order page directly.
- The website also lacks to simulate the cart functionality to add the items, having a cart functionality will enable the user to collectively quantify the items of the cart at the checkout.
- The signup option should be added to maintain the session history this enables the user to access his/her's past order history and helps them to take decisions.
- The website has the inactive filter like the type of items available per day statically in the menu page and the checkout page actually has the active version of this filter and is also overloaded with many other functionalities. There should be a balance of load across every page on the website.

- Though the website handles decent validations, however, some of the data entry fields such as city, state, credit card expiry date can be made appropriate by including good user interface controls like a combo box.
- To understand the customer experience, the website can improve by providing the rating scale after the customer service, by adding the online feedback form to know the user sentiment concerning both usability and user experience.

Details on specific problem areas and an explanation of how the issues relate to the concepts we have covered in class.

- According to **Fitt's Law**, the distance between the user's task (attention) area and the task button should be minimum, the website did not include the cart facility to update the items in the cart and also the shortcut to proceed to the cart whenever needed from any section of the website. Hence, it violates Fitt's Law.
- Upon clicking the Flavour's section, there is a static chart that represents the items available per day and also the page includes a variety of flavored cupcake images (20) with their description displayed below each of them. It violates **Miller's Law** because according to this law, the average user can remember only 7 (plus or minus 2) items in his working memory.
- The website can implement the **Zeigarnik Effect** to track the progress of the order, this allows the users to keep track of the process and also allow them easily navigate among any pages, it also creates a visualization that the task is incomplete, guides the user to complete the task.
- The website has an image slider with a lot of images with information, the user can be confused to decide to pick any image and pay attention, and also on mouse hover, the image does not stop and continues scrolling. This scrolling can be distractive too. **Hick's Law** states that if many options are provided, the decision-making can be critical.
- Few pages are cluttered, creating an **Extraneous Cognitive Load** for the users. The image sliders and the stuffing of most of the load in the order page are distractive.
- The overall **constraint management** can be improved. The form is only validated completely after clicking the order button, instead, each section of data entry can be validated immediately, and also proper constraints can be introduced in the billing section.
- User Experience and Usability can be improved. The website can make user's functional flow simple and easy, having Home-> Menu->Order->FAQ->Gallery instead of having many unnecessary sections in between. It can make the menu interactive in the flavor

section directly instead of having it on the checkout page. The overall **Aesthetic Usability Effect** can also be improved to make it simple, more attractive, and pleasing to the customers.

- The navigation bar at the top seems disconnected from the homepage, a proper color theme must be incorporated between them, and also on hovering the sections in the navigation, the background color can be contrasting to make the text stand out. The home page may look like clutter to the user, adding white spaces can make the visualization easy for the user. Hence, it violates some of the **Color Aesthetics**.

Suggest improvements that may address the problem area.

- Obeying Fitt's law, the cart system must be introduced to update the items in the cart easily, and also each cupcake on the menu page can have an update option to update the number of cupcakes, right below the cupcake image to reduce the distance between the user attention area and task button from any given section.
- Obeying Miller's law, the page can be made more readable by reducing the load on the working memory by displaying only a few images and their description on the page.
- Obeying the Zeigarnik Effect, the progress bar can be introduced which enables the free flow of navigation from the Home page to the Order page and also tracks the user's progress
- Obeying Hick's law, few image options can be shown in the image slider, and also on hovering the specific image, the image can be stopped giving a chance for the user to go through the image and make a decision.
- All the pages can have equal load and can be less distractive, the order page has a lot of functionalities in it, this can be broken down for simplicity.
- Each data entry field in the form must be immediately validated, if all the errors are shown at once, it may overwhelm the user and discourage him.
- The color of the navigation bar and the background highlights of the text of each section can be improved and matched with the theme of the website.
- Obeying the Aesthetic Usability Effect, the functional flow of the navigation bar can be ordered properly, having Home-> Menu->Order->FAQ instead of having many unnecessary sections in between, and the user interface of the flavor page can be made interactive by making the menu and cupcake quantity updations interactive. The website aesthetics can be more simple and appealing to the users

- To record the history, to create references for users, and also to continue the unfinished progress, the session management can be handled by introducing the SignUp page.
- Online feedback forms and rating systems can be introduced to collect the feedback from the user and improve on it.

Offer suggestions on what metrics like time on task, satisfaction, etc you might use to evaluate the redesign based on the issues to measure whether the improvements were effective.

- **Total Order Time:** This is defined as the total effective time the customer takes right from the visit of the webpage to the completion of his order. This is one of the essential metrics to measure the improvements to evaluate the website in terms of simplification and ease of functional flow.
- **Performance Evaluation:** This metric measures the performance of the website in terms of efficiency and time taken after changing the order of the sections to Home->Menu->Order->FAQ->Gallery as well as by adding cart facility and improving the checkout page.
- **Heuristic Evaluation:** This can be performed for a specific use case in detail and also as a combination of use cases after improvements.
- **Performing Survey:** This can be one of the good metrics to understand the users and take feedback from them to further improve the website.
- **Target Search Time:** The total time taken to search the target item determines the effectiveness and efficiency of the website.