CS6115 Assignment

ASSESSMENT AND REDESIGN OF IPICCY

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Introduction

iPiccy photo editor is a free online image editing tool that is directed at photo editing novices. I chose to analyse this website as I am familiar with similar editing tools. This website tries to replicate the simplicity of using software such as Adobe's lightroom. Despite, successfully being simple in certain aspects, I found many of the design aspects of the website to be questionable. This report will assess these design aspects, propose a redesign and then briefly describe the accompanying prototype based on the redesign.

Assessment of the original site's usability, accessibility, etc.

The first thing that should be addressed is that when the tool is first opened, a prompt appears for the user to select a way to upload an image. When I was first using this tool, I chose an image through my finder as I assumed the tool was instructing me to do so. After using the website for a bit longer it became apparent that the small dropdown arrow which highlights when 'OPEN' is hovered over is a separate button to the 'OPEN' one. When I initially saw it I presumed it was an indication for opening the sample image menu shown below (Fig1). It actuality, it is an indication of a dropdown menu featuring tools such as a drag & drop function to open an image.
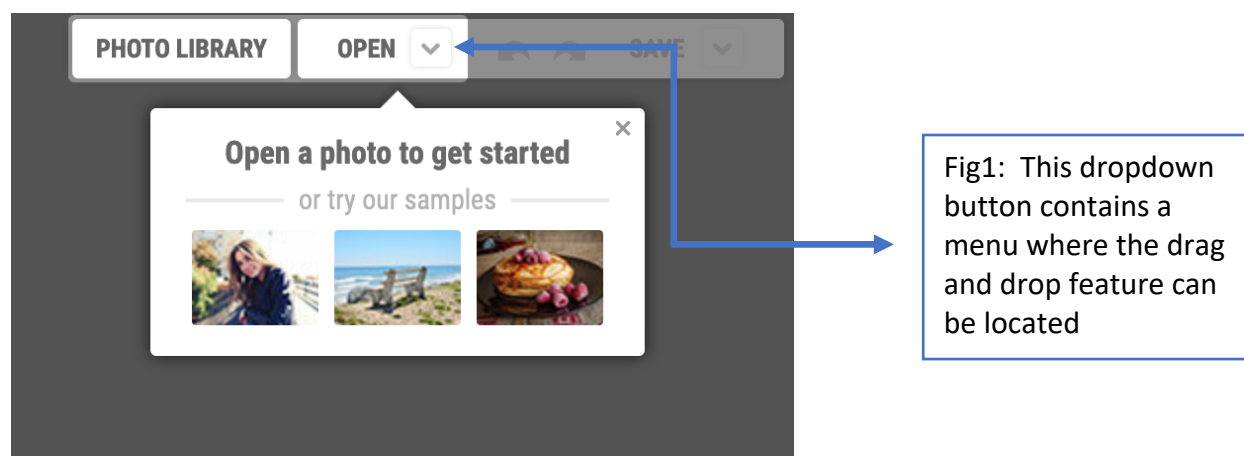

Fig1: This dropdown button contains a menu where the drag and drop feature can be located

When I was working with a selected image, I wanted to find the navigation tools needed to do so. The use of a menu selection is the primary interaction style of this website. All the tools need to for the image editing process are in a vertical navbar that is located on the left-hand side of the screen. For a web tool aimed at novices, the first thing I noted was how overwhelming the features appeared when displayed in the menu. The menu is composed of small icons on the far left of the screen that can be clicked. When clicked on, the icons display different tools which can be used to edit the images in different categories that can be clicked to show a dropdown display of different tools. It is important to note that these dropdown categories are already selected to be opened when the user chooses a category.

Concerning the icons on the left-hand side of the screen, I believe they rely too heavily on the user's previous knowledge of what they could symbolise. As someone who has used

image editing software before, I had to think about what they represented before I could make the match. I feel for a novice that this would be completely inaccessible. For example, the top icon looks to represent a cropping tool. Below this is a magic wand icon. However, when the cropping tool icon is selected, the first feature under 'Basic' to appear is an auto-fix tool that has the same magic wand function. There is a remarkable number of options in this menu selection and I felt overwhelmed trying to navigate it. The vagueness of the icons and the reuse of them in different areas for different things is a poor design decision in relation to short-term memory. There are too many features that the user must find where is located in the menu for it to become a normal cognitive function. It requires too much effort for the user to be able to easily store it in long-term memory. As a more advanced user using the software, I found that this particular menu selection tool took far too tedious to find what I needed to find. As it is meant to be a quick and easy tool to use, I feel that having to scroll through many different features to get what I needed is both monotonous and unproductive.
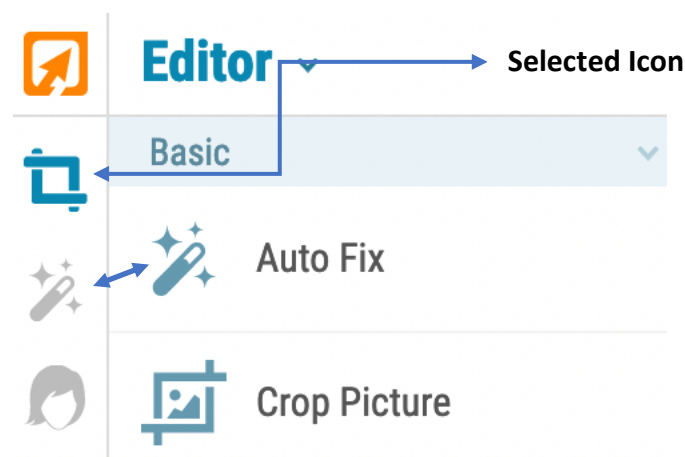
Editor → Selected Icon

Basic

✨ Auto Fix

Fig2: The reuse of icons as mentioned above

🖼 Crop Picture

Despite these flaws, good design can be identified on the website. The use of the slider widget stuck out in particular. It allowed for great ease of use in image editing and the consistency of its use for many of the image editing features reduces the learning curve needed to get used to using the tool. The function of each slider is clearly labelled above it. The feedback that is provided to the user is also extremely useful and very fitting for novice users. When the user uses the slider widgets, they have a choice to either apply or cancel the effect. If the user selects 'cancel' it resets the effect to default and if the user clicks 'apply' then the effect is applied. However, if the user forgets to do so they are met with a prompt alerting them that they will lose the change made if they do not click apply. The use of the application and cancel buttons with feedback is very appropriate here as it accommodates greatly for novice users to perform trial and error tasks that can easily be corrected. As well as this, it accounts for the error of forgetting to click apply in a simple manner that allows for an easy correction.

Concerning accessibility, the WAVE tool was used to investigate any shortcomings. The most frequent accessibility issue was that the many icons that are in the menu selection system had no clear labels to identify their use. Another issue was to do with low colour contrast. This was apparent in the use of faint blue and orange text against the backdrop. Another contrast error that could be identified is the colour of the icons. They are a faint grey. With

regards to users who are colour blind using the tool, this issue would be significant as they are the first feature of the menu selection system that the user would have to interact with.

The Redesign and how it Addresses the Issues mentioned

The basis of the criticisms discussed so far is the confusing and poorly designed navigation aspect of the website. A redesign of this image editor tool should overcome the shortcomings mentioned above. The issue that is most suitable to address first is the image upload system. The one currently in place is the first thing the user's attention is directed to through a prompt that could cause confusion. Having the drag and drop box as part of a drop-down menu should be changed. Instead, it would be more suitable to have it as the first thing the user sees, being placed around the centre of the canvas. The blank canvas is filled with empty space that could so easily accommodate this. It would decrease the amount of time it would take a user to start a task, and a drag and drop box upon opening the image editing tool is suitable for a target audience of novice users who are most likely only using the tool for casual photo editing. The file uploader, sample image selector and other options for opening the image can remain in the small menu at the top of the screen.

The next thing that needs to be redesigned is the navbar menu. The first thing the user has to interact with are the icons. I would suggest replacing the existing icons with ones that have more intrinsic meaning. These icons should keep a novice user in mind, so they could look like things they would be able to identify on a day-to-day basis. As an interaction style, menu selections should rely on the user's recognition. The current icons do not allow for this for a novice user. As well as this, taking inspiration from other similar tools such as GIMP, I would include a small hoverbox for each of these icons, so the user knows exactly what each is meant to represent. This would also improve the accessibility of the site. To further improve accessibility the icons should be given a distinct colour that differentiates from the background. The same consideration should be given to any text that has the same issue.

As previously mentioned, there are too many features and options placed in the navbar. This needs to be revised. A solution to this issue would be to not have the drop-down selected by default for each submenu. This benefits the novice user as they can clearly read what they need and choose an option based on this. It also benefits users who would regularly use the tool as it eliminates the amount of time taken for them to find what they need. It would also be practical to break up the navbar and have some features on the opposite side of the page. An obvious feature that this would apply to is the layers editor. Working with layers is something that is regularly needed in image editing, so having them as part of a large navbar is impractical as it would take the user too much time going back and forth from other editing features. Positioning this at the other side of the screen would overcome this issue and also make the navbar feel less overwhelming to work with.

A pie menu would be a suitable addition to the website. This would benefit the targeted novice users of the tool, as it would allow for them to access the primary basic editing features quickly without having to use the navbar. As well as this, if a more experienced user uses the web tool, they would not have to spend time scrolling through the current navbar to use what they need to make any edits.

The Prototype

The prototype will demonstrate two aspects of the redesign concerning interaction styles.

1. <u>Drag and Drop</u>

As mentioned in the report, the current dropdown menu contains a button that opens the drag and drop section is impractical. The prototype contains a drag and drop feature that fits in the blank canvas. The user can drag an image straight from the desktop without having to look for the option from a menu. Having the drag and drop on the screen without the user having to locate it puts a greater focus on direct manipulation. A bold icon that consists of a black outline was chosen to be placed as a background for the box so that this feature is easily identifiable. The high contrast also would mean it is accessible and clear to the user.

2. <u>Pie Menu</u>

To help achieve more effective navigation, a pie menu has been implemented in the prototype. As previously mentioned, the current menu selection system needs redesigning so that the website's useability would be improved. A pie menu is a useful way of appealing to the targeted novice users by providing an easy way of exploring basic features and it also appeals to more experienced users as it could provide a shortcut to features they want to use. The pie menu created for this prototype users an animation when open and closed. It features many of the icons on the website. A key difference is that they are all distinctively different from one another and the black outline of each one of them has high contrast against the white circular background. The pie menu is not opened by default unlike all of the submenus in the current website's navigation. The user can simply click the plus simple to open it and click it (when it rotates to an 'X') to close the menu again. Hovering over the icon changes the outline colour, indicating that the icon has been selected.
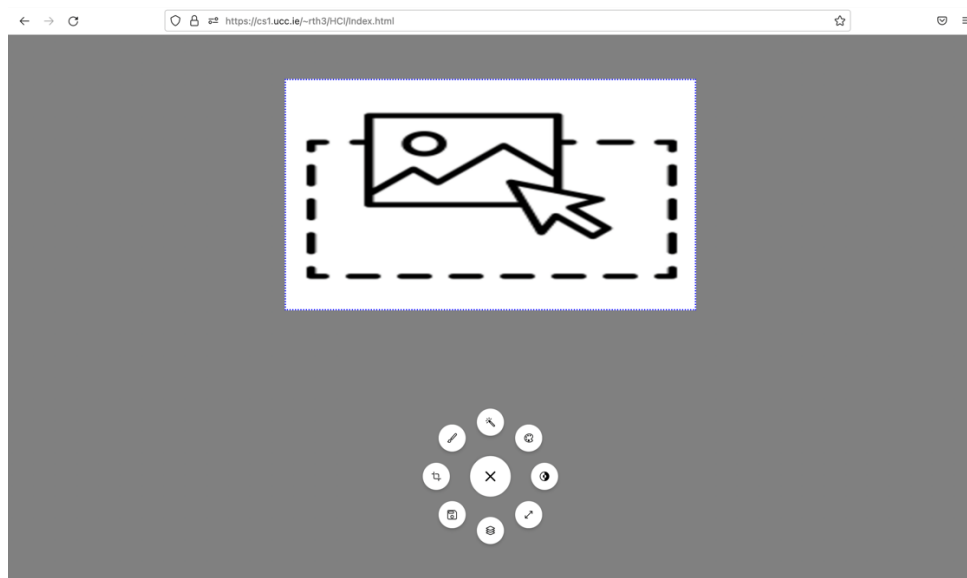

Fig3: Prototype of the Redesign

To ensure the requirements of the brief are properly met, features that are not part of the redesign (such as remaking the navbar and including a separate section for layers) will be excluded from the prototype.

Conclusion

iPiccy is an effective tool for novices to use for image editing. However, concerning the usability of the site, it suffers as a result of a poor menu selection system, making it difficult for the user to navigate the site and find what they need. The core focus of the redesign is to address this issue. As shown in the prototype, implementations such as a pie menu can simplify the task of searching for features while also addressing the accessibility of the site as it displays them in a clear distinct way that makes the icons easily identifiable. As well as this, the use of a drop and drag box in the empty canvas also simplifies things greatly for the user and saves time spent on learning the current image upload system that is in place.

Resources

Website examined: https://ipiccy.com/ (Select 'Edit a Photo' upon arrival)

Icons for pie menu taken from https://ionic.io/ionicons