UX: Design Project (Daisy)

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Summary of project
This app is catered towards university students looking to make a change in their eating habits. This app is designed to aid users in being sustainable while facing many hindrances from external sources outside of their control. Daisy is a service which provides users with sustainable recipes while informing users of the importance of food all while keeping in mind barriers such as finance. The main benefit of this is informing all our users the significance of sustainability and how small changes to their food habits can create a big impact on the environment around them. Unlike Yummly, Daisy will be targeted towards a specific demographic ranging from 18-24 as that is the main bulk of student ages. This will mean a lot of the features will be more stylised to an intuitive navigation system, similar to Instagram which was an app favourite in my research. Daisy will aid in helping its users with recommendations and congratulating them for being a part of a thriving community who aims to be sustainable together.

Keywords: Sustainability, GoodGrapes, Daisy

1. Introduction

The projects aim is to create an application catered towards "Sustainable Food Choices for Students", the initial stages of this was in groups and to be later developed individually. In the project, a prototype app, portfolio, powerpoint, report and video walk through of the app was to be created.

Design recommendations or user needs were discovered in the early stages of the project with professionally conducted interviews and sharing data matrices in a group for more information and viewpoints. Interview points were further reinforced with secondary research from articles or websites.

My role in this was conducting the interviews and creating the initial questions, equally sharing responsibility in the group work so everyone's workload was even and creating a prototype app. The app went through various modifications from feedback received by either lecturers or family members who trialed the app. Improvements were then made in accordance with the feedback to make an ending project that attains the initial goal of an app catered towards, "Sustainable Food Choices for Students."

GoodGrapes

GoodGrapes was an educational sustainability app that worked as a database to store food users scan in the app or buy often to inform them of sustainability of products and better alternatives if applicable. This idea was conceptualized as a group and had very few design requirements as shown in figure 1, which were all targeted towards positive reinforcement.

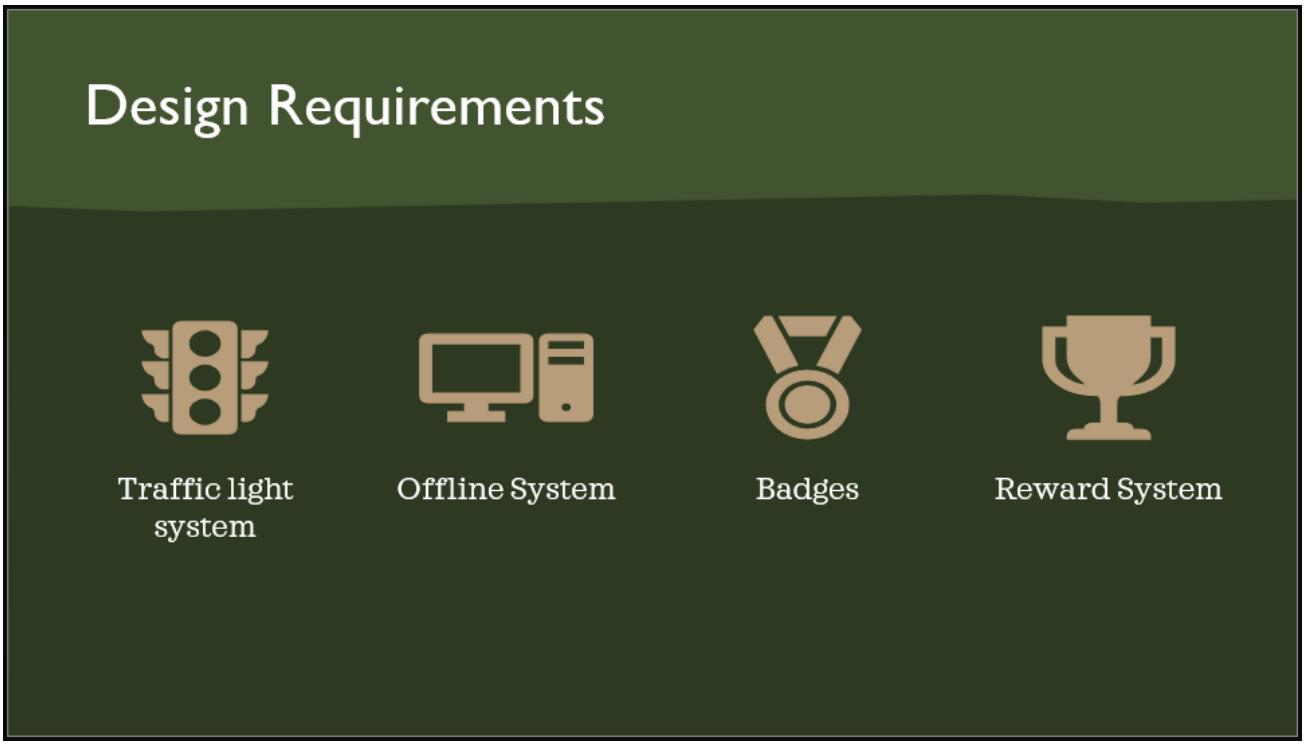

Figure 1: GoodGrapes Design Requirements

It was designed have an offline mode of products previously looked at so a user could check the sustainability of a product at any moment of time. GoodGrapes followed the Peak-End rule, "people judge their experience on the peak and end of their experience"[1], to encourage prolonged sustainability with the app, the end goal was the reward system, which was accompanied by numerous accounts of positive reinforcement in the shape of badges.

GoodGrapes was successful in fulfilling the user journeys created and meeting the expectations of all three personas while treating all their needs fairly. However, GoodGrapes had many flaws such as the idealistic view of a completely offline and accurate database to specific stores. There was also the problem of a further purpose, GoodGrapes could ideally be a successful database, but it doesn't guide users towards

[1] Yablonski, J. (2022) *Peak-End Rule* [online]

being sustainable but rather informs them of sustainable things. The app could have been improved with a direction to point users in for example, adding a pantry to the app or showcasing recipes to the users from the products they searched or scanned. This would have been significant as the target audience for GoodGrapes were students, and research from interviews and articles online detail that students are very unmotivated to creating food and being sustainable. One article stated, "University policy to improve students' diets should be incorporate efforts to promote student engagement in cooking and food preparation, and increased availability of low-cost healthier food items"[2] this was reinforced by another article which had a similar point, "…the most common factors that are reported as barriers to a healthy diets are time constraints, the high price of food items… followed by the lack of motivation in food preparation…"[3]. If GoodGrapes had taken the next step towards informing users of possibilities and encouraging the capability of students to prepare food, it could have been successful in achieving its aim and reaching its target audience. In addition to this, GoodGrapes also had the challenge of helping users who couldn't procure their desired food choice due to financial limitations, many of my interviewees stated finance was a major issue towards not eating sustainably or sometimes skipping meals such as breakfast or lunch. With the inclusion of a recipe page or pantry that suggests recipes, students may have further encouragement to cook.

Daisy

Ideation for Daisy begun with the name and logo, the original inspiration for this was the song *Daisy* by *Pentagon*. However, to use the album cover would breach copyright laws and therefore needed to be changed/edited, this was achieved through Adobe Illustrator. From here Daisy used the logo for a colour palette and went through stages to ensure the accessibility of everything was acceptable, for example testing the colour palette in a colourblind checker as seen in figure 2.

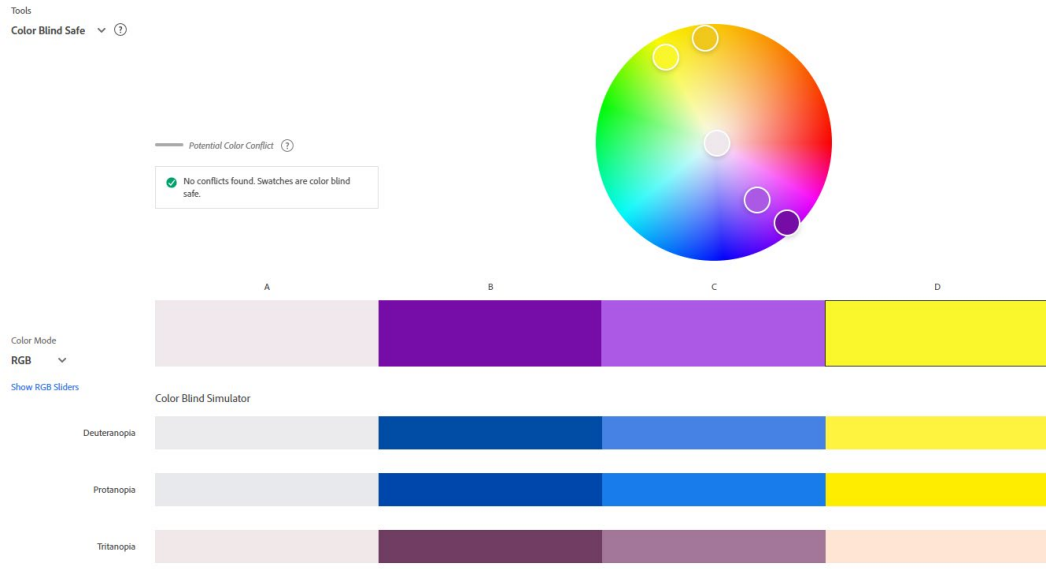

Figure 2: Colour Blind Checker

A persona was created based off one of the three GoodGrapes used as well as using a similar user journey scenario. Daisy's origins are from the many ideas of GoodGrapes and therefore has numerous similarities, such as the traffic light system and positive reinforcement. These were key design recommendations for Daisy, as it aims to encourage users to be sustainable and many participants from the initial interviews stated apps that make them feel good are more liked and remembered.

The user needs and design recommendations for Daisy shaped the app into an informative recipe app with a few twists such as the inclusion of a virtual pantry and social media. The social media aspect for Daisy was essential, especially to have a similar feeling to scrolling apps such as Tik Tok and Instagram as many interviewees stated Instagram to be their favourite app. The challenge for this came in designing a layout that would still inform users of sustainability while keeping interest in a scrolling app that users may look

[2] E. F. Sprake (Article) *Dietary patterns of university students in the UK: a cross-sectional study.* [online]
[3] G. Sogari (Article) *College Students and Eating Habits: A Study Using An Ecological Model for Healthy Behaviour*. [online]

at a post for a matter of seconds. The solution came from a competitor app which had a scroll bar at the top containing events happening globally, this inspired the inclusion of a scroll bar of articles placed at the top of the home page. This takes into consideration the Law of Uniform Connectedness that states, "Elements that are visually connected are perceived as more related than elements with no connection."[4] Users could then view and like articles they enjoy to keep getting information from a source they found reliable. Daisy aims to inform users with reliable information however it achieves this in a way of giving the user freedom to find credible sources for themselves in a pool of articles anchored towards them from Daisy's algorithm.

Daisy's app is to inform in a positive manner and the focus of this was through a community and scores to reflect the users progress especially with certain aspects, for instance each recipe contains a sustainability score that is traffic lighted to indicate how sustainable a meal is. With most meals being in the green naturally, users will feel encouraged to keep eating sustainable. In addition to this, each recipe page allows the user to find out more information on a specific ingredient and what about that ingredient is sustainable. The community will also inspire and encourage users through following one another and seeing recommendations or photos from their followed accounts. By feeling part of a team an individual can see and feel the impact of their decisions and how it helps the world around them.

Feedback towards Daisy made it apparent there were many flaws to the original work such as the visual appeal, lack of familiarity as well as lack of clarity. The visual appeal was adjusted with new backgrounds behind each page in the prototype which effectively utilised the colour palette of Daisy to full effect, this can be seen in Figure 3, another point of feedback I was told to improve on.

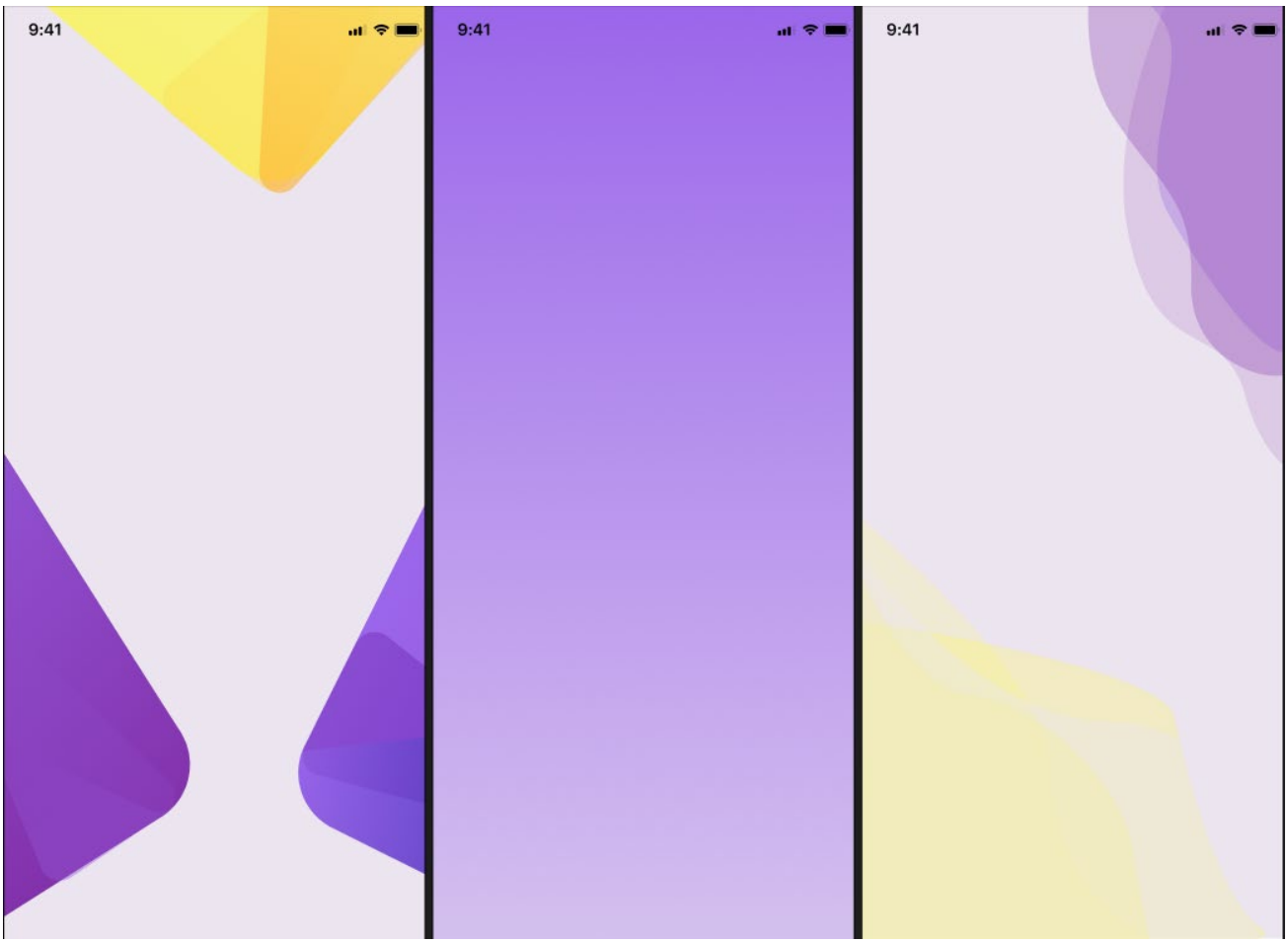

Figure 3: New Background for Daisy Prototype

This improved the scarce amount of branding in the original as well. The Aesthetic-Usability Effect states, "Users often perceive aesthetically pleasing design as design that's more usable, good designs give users

[4] Yablonski, J. (2022) Law of *Uniform Connectedness* [online]

the indication it will work better…"[5] these visual changes therefore aided in improving a user's sense of clarity as well. In addition to this, clarity is given to users at the beginning with onboarding instead of the initial learning curve users had to experience in the original. With onboarding being the opening to the app it inevitably, took on the role of the initial Peak-End Rule test, the onboarding was a key point of my feedback, so it was given a lot of attention and is therefore an interesting, fun but most importantly short experience for the user as they want to engage with the whole app. Moreover, clarity was achieved through condensing pages or combining pages into one, this gave the users less to look at and decrease intimidation. The inspiration behind this change was Miller's Law which says, "The average person can only keep 7 (plus or minus 2) items in their working memory."[6] The change was passed onto multiple pages with many looking familiar, thus adding a sense of familiarity, this was taken further with research and analysis of competitor apps to see what a familiar structure/layout to an app would look like as stated by Jakob's Law, "familiarity to other sites increase user likeability."[7] By embracing similar apps Daisy was able to achieve its final structural design, one that is unique but familiar to users at first glance.

Conclusion and recommendations

Overall, Daisy fulfils the criteria of being an informative recipe app with its standout unique features, and engaging app design/style which appeal to many users after being tested. It successfully attains a familiar feeling to similar apps especially Instagram with its scrolling and photo reel feature. This allows it to carry out the desire for a community feature and with the option of comments, users can interact with others and create friends as well as motivate themselves to be sustainable as individuals or together as a group. However, the app leans too heavily on the community aspect for positive reinforcement. The lack of or absence of positive reinforcement that a user would desire to feel motivated towards using the app more is a glaring problem with the work and is one of the main design recommendations, ranked as high in importance. This would be a future improvement which takes into consideration the Goal-Gradient Effect which states, "providing progress towards a goal will motivate users to complete a task"[8]. Successful implementation of this would be including collectible badges or achievements for a user to aim themselves towards. In addition to this, is the possible scarcity of information for the user, the drop downs for the ingredients inform the user of the use of an ingredient but could be improved with detailing to the user why it is sustainable. Furthermore, the filters page could be expanded upon to give more specifics for users and their desires. The future of Daisy would be to fine tune what is already there but expand and improve in directions such as usability and aesthetics, it is an ideal starting point for professionals and could be improved with outside suggestions and improvements.

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