KAMONCHANOK

Nielsen's Heuristic	Pros						Cons					
	Description	Severity	Frequency	Impact	Average	Ranking	Description	Severity	Frequency	Impact	Average	Ranking
1	Visibility of system status: Users know what function they are using through the contrast on an active tab in the navigation bar, know what action they are performing as every screen has a header, and know if their submitted action is successful through pop up messages. This supports the system's usability as users have confidence in navigating and using the system.	5	5	5	5	1	N/A					
2	Match between system and the real world: The system terms used to describe possible functions were easy to interpret. This positively affects the usability of this function as users are more willing to interact with unfamiliar functions if they understand their purpose (reducing learning and risk barriers).	4	5	4	4.33	2	N/A					
3	User control and freedom: There are clearly marked emergency exits for user inputs/actions. It is also possible to use the navbar to navigate away from a user input giving users with lower technological skills reassurance of control. In addition to this, there are clear ways to modify an expense/settlement once submitted. Firstly, this positively affects the usability of integral functions requiring user inputs (adding personal/shared expense overview) as users with low technological skills have greater control. Secondly, this positively affects the usability of the overall system as users can remedy incorrect inputs once submitted, ensuring confidence (necessary when dealing with finances).	5	5	3	4.33	2	N/A					
4	Consistency and standards: The system uses consistent layout throughout and is designed using Google's material design documentation to ensure the lowest possible learning barrier for users. This increases the usability of the system for users who have low technological knowledge, willingness to learn or are risk averse.	4	5	2	3.66	4	N/A					
5	Error prevention: The solution reduces user inputs by implementing drop-down boxes, checkboxes and toggle buttons. This supports the system's usability for those with low financial knowledge, insufficient technological knowledge, or are risk-averse.	4	5	3	4	3	N/A					
6	Recognition: All user inputs are displayed on the same screen. This means users do not have to recall previous inputs to confidently submit an action (essential to reassure users when dealing with money). This supports the system's usability for those with low financial knowledge, insufficient technological knowledge, or are risk-averse.	5	5	2	4	3	N/A					
7	N/A						Flexibility and efficiency of use: There are currently no methods to make inputs more efficient or customise the content to users. This negatively affects the system's usability as users may be frustrated that they have to add expenses repeatedly, or the solution may not suit every user's needs (e.g. text size too small, colour creates overstimulation).	4	5	4	4.33	1
8	Aesthetic and minimalist design: Each tab separates the functions by its associated category. There is sufficient space for each function on the page to reduce wordiness and barriers to use (e.g. language, dyslexia). Furthermore, the colour scheme is neutral but bold to maintain professionalism and suit the preference of the market of younger users. This increases the usability of our system as it ensures information can be easily consumed and the system engages with its targeted audience.	4	5	2	3.66	4	N/A					

Nielsen's Heuristic	Pros Description	Severity	Frequency	Impact	Average	Ranking	Cons Description	Severity	Frequency	Impact	Average	Ranking
9	Help users recognize, diagnose, and recover from error: Currently, a combination of colours and symbols is used to indicate incorrect fields. This increases usability by ensuring all users' inputs are valid to ensure a seamless experience (reduce system error), actions made correspond to user desires (reduce the need to edit input once submitted) and reduces barriers for those with a language barrier or colour blindness.	3	5	1	3	6	Help users recognize, diagnose, and recover from error: Currently, a combination of colours and symbols is used to indicate incorrect fields. Users are unable to progress through the input process until this is amended. Due to barriers such as insufficient technological knowledge, colour blindness and low vision, it may be better to indicate errors in a pop-up box with a more descriptive message. The current process may not be sufficient for users with specific needs. Therefore, this may act to reduce usability.	2	5	1	2.66	3
10	Help and documentation: There is help documentation in the account tab (help screen not depicted). This would reduce barriers for those who are risk-averse or have insufficient technological knowledge. Increasing usability	2	5	3	3.33	5	Help and documentation: We could improve usability for users with low technological skills or desire to learn new systems by creating a button on each screen that will create a pop-up box to communicate user instruction. The current process may not be sufficient for users with low technological knowledge, high-risk tolerance or low desire to explore new systems. Therefore, this may act to reduce usability.	2	5	3	3.33	2

JOES & CHARLES

Jet Finance												
Nielsen's Heuristic	Pros						Cons					
	Description	Severity	Frequency	Impact	Average	Ranking	Description	Severity	Frequency	Impact	Average	Ranking
1	N/A						Visibility of system status: It was difficult to determine a user's position from the depicted system. This results from no headers indicating where a user was within the system (e.g. creating a personal/shared finance overview) and no visible navbar (the system used a hamburger navbar) to visually display a user's position. This negatively affects the system's usability as users unfamiliar with technology, learning adverse or risk-averse are less likely to use a system if they are unsure of what they are viewing, what action they are submitting or if they successfully submitted an action.	5	5	4	4.666666667	2
2	Match between system and the real world: The system terms used to describe possible functions were easy to interpret. This positively affects the usability of this function as users are more willing to interact with unfamiliar functions if they understand their purpose, reducing learning and risk barriers.	4	5	4	4.333333333	1	N/A					
3	N/A						User control and freedom: There are no clearly marked emergency exits for user inputs. Using the hamburger navbar to navigate away from user input is possible, but this is not obvious to users with low technological skills. In addition to this, there is no clear way to modify a graph once submitted. This negatively affects the usability of integral functions requiring user inputs (adding personal/shared expense overview) as users with low technological skills may become frustrated with their lack of control. Additionally, this negatively affects the usability of the overall system as users cannot remedy incorrect inputs once submitted - resulting in a loss of confidence (important when dealing with finances/time).	5	5	3	4.333333333	3
4	Consistency and standards: The solution is relatively consistent and meets the standards of a website. This positively affects the usability of the system as learning barriers are reduced.	3	4	2	3	3	N/A					
5	Error prevention: Some user inputs are reduced using drop-down boxes. This reduces the possibility of users entering invalid values, reducing time consumption, knowledge barriers and risk barriers.	2	3	3	2.666666667	4	Error prevention: The solution requires an excessive amount of inputs. While it has implemented drop-down boxes in some inputs, there are thirteen different pages to enter a group budget overview and six different pages to enter a personal budget overview. This increases the probability of errors and decreases the system's usability to those with low financial knowledge, insufficient technological knowledge, or are risk-averse.	3	5	3	3.666666667	7

Nielsen's Heuristic	Pros Description	Severity	Frequency	Impact	Average	Ranking	Cons Description	Severity	Frequency	Impact	Average	Ranking
6	N/A						Recognition: All user inputs are displayed on separate screens (thirteen different pages to enter a group budget overview and six different pages to enter a personal budget overview). This means they must recall previous inputs to confidently submit an action (essential to reassure users when dealing with money). This decreases the system's usability to those with low financial knowledge, insufficient technological knowledge, or are risk-averse as it increases the likelihood of error, stress, and time consumption.	5	5	5	5	1
7	Flexibility and Efficiency: Save previous shared/personal overview submissions, which reduces user inputs. This increases usability for users by reducing time consumption.	3	5	3	3.666666667	2	Flexibility and Efficiency: Users cannot modify existing overviews, which means users have to repeat the entire input process to modify an existing graph. This decreases the system's usability to those who value time and convenience.	2	4	4	3.333333333	8
8	N/A						Aesthetic and minimal design: The colours used in this application are mainly greyscale tones (grey, black, and white are the main colours observed), may not be suitable to our younger audience and may act as a deterrent for a task already perceived as 'boring'. Additionally, the use of 'emoji' images does not convey an appropriate level of professionalism, especially in dealing with finances and personal information. This negativity affects the usability of the overall system as users may lose interest in the continual use of the system due to uninteresting colour scheme or may not trust the application enough due to its 'informal' imagery.	5	5	2	4	5
9	N/A						Help users recognize, diagnose, and recover from errors: There is no depicted function that may suggest an invalid input or the ability to go back to a specific input screen if the input is incorrect or invalid. This negativity affects the usability of the solution as invalid registration input may result in loss of account (registration/login), and there is no clear way to modify submitted expense/income (given the ability to modify existing graphs - the severity of this heuristic decreases).	5	5	3	4.333333333	4
10	N/A						Help and documentation: Does not contain a help screen nor documentation to assist users in navigating the functions of the solution. This negatively affects the system's usability as users unfamiliar with technology, learning adverse or risk-averse are less likely to use a system if they are unsure of how to operate it.	5	5	2	4	6

JASMINE, EMILIA & TODD

		JET FINANCE										
Nielsen's Heuristic	Pros						Cons					
	Description	Severity	Frequency	Impact	Average	Ranking	Description	Severity	Frequency	Impact	Average	Ranking
1	Visibility of system status: Some headers were used to indicate a user's position. This allows users to be confident they are navigating to the correct actions. This increases usability for users with low technological knowledge or those who are risk-averse	2	5	4	3.667	3	Visibility of system status: From the depicted system it was difficult to determine a user's position within the system. This is a result headers being missing for some functions, No visible navbar (team used hamburger navbar) to visually display a user's position, and no confirmation being given after submitting an input. This negatively affects the usability of the system as users who are unfamiliar with technology, learning adverse or risk adverse are less likely to use a system if they are unsure of what they are viewing, what action they are submitting or if they successfully submitted an action.	3	4	4	3.666666667	4
2	Match between system and the real world: Most of the terms used are related to real world actions. This positively affects the usability of functions by reducing learning and risk barriers.	3	3	4	3.333333333	5	Match between system and the real world: There are system terms used to describe possible functions, such as 'Pen and Paper' and 'Quick Finance' were hard to interpret. This negatively affects the usability of this function as users who are learning adverse or risk-averse may not want to navigate to an unknown function.	3	2	4	3	7

#	Left Heuristic						Right Heuristic					
3	N/A						User control and freedom: There are no clearly marked emergency exits for user inputs. Using the hamburger navbar to navigate away from user input is possible, but this is not obvious to users with low technological skills. In addition to this, there is no clear way to remove an expense/income once submitted. This negatively affects the usability of integral functions requiring user inputs (adding income/expense) as users with low technological skills may become frustrated with their lack of control. Additionally, this negatively affects the usability of the overall system as users cannot remedy incorrect inputs once submitted, resulting in loss of confidence/time (important when dealing with finances).	5	5	3	4.333333333	1
4	Consistency and standards: The solution is relatively consistent, increasing usability by reducing learning barriers created by inconsistency.	3	3	2	2.666666667	7	Consistency and standards: UX professionals (https://uxplanet.org/the-ultimate-guide-to-the-hamburger-menu-and-its-alternatives-e2da8dc7f1db) do not recommend implementing a hamburger navbar for mobile solutions. This is because hamburger navbars do not showcase features well (often used for unimportant functions), are hard to reach at the top of the screen (not often explored), and are incompatible for ios as it clashes with ios navigation. This negatively affects the system's usability as users who are unfamiliar with technology, learning adverse or risk-averse are less likely to use a system if they are unsure of how to navigate to a desired action.	2	5	2	3	6
5	Error prevention: The solution reduces user inputs by implementing drop-down boxes. This supports the system's usability to those with low financial knowledge, insufficient technological knowledge, or are risk-averse.	4	5	2	3.666666667	4	N/A					
6	Recognition: All user inputs are displayed on the same screen. This means they do not have to recall previous inputs to confidently submit an action (essential to reassure users when dealing with money). This supports the system's usability for those with low financial knowledge, insufficient technological knowledge, or are risk-averse.	5	5	2	4	2	N/A					
7	Flexibility and Efficiency: Save previous expense/income submission to reduce user inputs. In addition, it allows users to set suitable accessibility options. This supports the system's usability to those who value time and convenience.	4	5	4	4.333333333	1	N/A					
8	Aesthetic and minimal design: The colours used are professional and suitable to the functions of the solution. Additionally, functions are well organised. This supports the application's usability by presenting the solution in a trustworthy manner, allowing the users to be confident inputting personal information.	2	5	2	3	6	Aesthetic and minimal design: The application's dependency on greyscale tones (grey, black, and white are the main colours observed) may not suit our younger audience and may act as a deterrent for a task already perceived as "boring". This negativity affects the usability of the overall system as users may lose interest in the continual use of the system due to uninteresting colour scheme and dated illustrations.	3	5	2	3.333333333	5
9	N/A						Help users recognize, diagnose, and recover from errors: There is no depicted function that may suggest an invalid input. This negatively affects the usability of the solution as invalid registration input may result in loss of account (registration/login) and is especially important to implement in this system as there is no clear way to modify submitted expense/income (given ability to modify existing graphs - the severity of this heuristic decreases).	5	5	2	4	2

| 10 | | | | | | | Help and documentation: Does not contain a help screen nor documentation to assist users in navigating the functions of the solution.
This negatively affects the system's usability as users who are unfamiliar with technology, learning adverse or risk-averse are less likely to use a system if they are unsure of how to use the system. | 5 | 5 | 2 | 4 | 3 |
| | N/A | | | | | | | | | | | |

Nielsen's heuristics	
1	Visibility of system status
2	Match between system and the real world
3	User control and freedom
4	Consistency and standards
5	Error prevention
6	Recognition rather than recall
7	Flexibility and efficiency of use
8	Aesthetic and minimalist design
9	Help users recognize, diagnose, and recover from errors
10	Help and documentation

Key	
Severity	How good/bad is the issue?
Frequency	How much of the system is affected
Impact	How much of the system's core functionality is affected?

Ratings	
1	Lowest
2	Low
3	Moderate
4	High
5	Severe