

## 10 Steps to Improve Usability, Utility, and Desirability by Implementing Nielsen and Molich's UI Design Guidelines

Rule of Thumb	Is this rule being applied? How so?	Is this rule violated? How so?	How can this rule further improve usability, utility and desirability?
1. Visibility of system status	This rule is being applied because the actions that the system makes are less than 0.1s, therefore, no special indicators are needed.	This rule is not being violated.	If there are cases in our app where there is a delay of larger than 0.1 seconds, then this would serve to keep the user updated on how long the action is going to take, increasing the usability of the app.
2. Match between system and the real world	This rule is being applied as the symbols we use match real world conventions, such as a clock for a timer, the search symbol for the search functionality, and our system's language consists of basic English phrases and common cooking terms.	This rule is not being violated.	With each implementation to the system, we can check for the match between the system and the real world to ensure the usability stays high and that no system terms, or uncommon world conventions are used to decrease the utility of the application to the user.
3. User control and freedom	This rule is being applied, there are buttons that always allow the user to undo/redo their action.	This rule is being violated in certain pages as some of the search pages are redirecting the search functionality to the home screen instead of the home screen symbol to the home screen.	This rule can be applied to ensure that the user can always backtrack on their actions, and go back to the correct pages if they wish to do so.
4. Consistency and standards	The rule is being applied as most of the interface and buttons have internal consistency and it's consistent with external apps that are of a similar type.	Certain symbols such as the timer symbol do not match the symbol on the tools page.	This rule can be applied to change the timer symbol on the recipe pages to ensure uniformity between symbols in the app.
5. Error prevention	No this rule is not being applied.	This rule is being violated as we have no confirmation options before certain options such as stopping the timer.	This rule can be applied to ensure the user does not make actions that they fully do not intend on making, and to prevent errors from occurring.
6. Recognition rather than recall	This rule is being applied as all the symbols are uniform across different pages making it easy for the user to recognize where the actions they want to perform will be.	This rule is not being violated.	This rule has already been applied fully in our project.
7. Flexibility and efficiency of use	This rule is not being applied.	This rule is being violated because there are no accelerators that are present for the user to tailor their frequent actions.	This rule can be applied to streamline the actions of experienced users.

8. Aesthetic and minimalist design	This rule is being applied as our user interface follows a minimalistic design in terms of its colours and its design. There is no extra information posted in any of the slides that clutters and takes away from what the user would see.	This rule is not being violated.	This rule has already been applied fully in our project.
9. Help users recognize, diagnose and recover from errors	This rule is not being applied.	This rule is being violated as there are no error messages in our project.	This rule can be applied after creating error messages for procedures where the user could make a mistake.
10. Help and documentation	This rule is not being applied.	This rule is being violated as there is not help or documentation in our project to guide a new user.	This rule can be applied by creating documentation to guide new users on how to utilize the app.