Visibility of system status is not followed on the booking page. When the user wants to use the map to book an appointment, the user can see the locations of available vaccine spots but cannot see where the user’s current location i.e., the real time position of the user is missing from the map. In the logging in page there is no visual feedback after the user has logged in successfully like “logging in”, it directly takes the user to the homepage.

Match between system and the real-world heuristic is not followed as the icon for the policy and guidelines is not very concrete. Another place where this heuristic is violated is the profile page. The user has no option to change name or edit profile picture in the profile page.

User control and freedom heuristic is violated in dialog box for the booking page when the user selects a location. The dialog box for when the user selects a location for booking is missing a close button. Another place is in the policy and guidelines page, the back navigation button is missing, and the user has no way other way to return to the main page than using the home icon itself. The user has no option to sign out or quit the application from the homepage.

Consistency and standards heuristics is violated on proof of vaccination page. The page does not follow the color scheme that the application uses. The background for proof of vaccination is white and for the guidelines page it is grey. This shows that there is no consistency within the application. The pages like policy and guidelines, profile page, homepage is missing title these leads to inconsistency.

Error prevention is not followed on the homepage. The user clicks on the back button and is automatically logged out this shows there is no error prevention implmented. Another place where error prevention is violated is in the booking page when the user wants to reschedule, they are redirected back to the booking page this would be a problem if the user clicks on reschedule by mistake

Recognition rather than recall is not followed in the search option for the booking and guidelines pages. The user is not showed what they searched for last or like a search history of the places searched. This option will really be helpful in the booking page as the user will not have to recall the name of the places, they had searched for to check for appointment as they can just select the last place they searched for, and this would be very convenient.

Flexibility and efficiency of use is not followed in the homepage. The homepage should have quick shortcuts to view the proof of vaccination, book an appointment, summary of guidelines rather than having to click on the icons for navigation. The editing feature for user profile is missing on the profile page, the users cannot edit their personal details. There should be an option in the booking page for the map feature so that the user can view booking locations not just nearby but for a broad range of distance like all the booking location available in Halifax city itself. Right now, the user can only view the locations available nearby.

Aesthetic and minimalistic design is violated on the policy and regulations page as there is too much information being shown on the guidelines and the rules and regulations page. The homepage itself has a lot of information being provided to the user that if the user wants to book for an appointment there is no information on the homepage that is relevant to booking appointment and the user must use the icon to go the booking page instead. There is too much information on the homepage, and this violates the minimalistic design.

Help users recognize, diagnose, and recover from errors heuristic is not followed with the search feature for the booking and guidelines page. The user receives no message when they type something wrong or something that is not valid in the search box. An error message saying that wrong input or not found would be helpful for the user to correct their mistake.

Help and documentation heuristic is not followed as there is no help feature implemented or tutorial that the user can refer to about a particular feature they want to use. Each page of the application should have a help option like a “?” at the top so that users can click on it and find help information.

**Accessibility Heuristics**

In the application it was found that it didn’t have a speech to text feature. This is a major accessibility flaw. If someone don’t want to type the address or search for the guidelines by typing it in the search bar, then they cannot use the application.

This flaw is significant because most of the people now a days prefer to use the active voice assistant instead of typing. Suppose the user is driving a car and he is going to some restraunt then if the feature of voice recognition is already in the application, then the user can simply say what are the guidelines in this area and the app will return the desired result. This feature will make the usage of application so easy.

Now in the prototype we are implementing a speech to text feature in the appointment booking feature and the news and guidelines search feature. This will make the search function more accessible for the users.