

## Usability Evaluation

To ensure usability, we used Nielsen Norman Group's UI design usability checklist (<https://www.nngroup.com/articles/ten-usability-heuristics/>). We believe that our application's UI will successfully accomplish these heuristics. Here is our evaluation of each heuristic:

1. **Visibility of system status:** On the home screen, the user can see at a glance if their devices are in a healthy status or not by the circles exclamation point indicator next to them. The user can click the dropdown button on a device to see the 3 most important statuses: locked/unlocked, battery life and capacity.
2. **Match between system and the real world:** The vocabulary used in the app is simple and should not take a tech-savvy user to understand what information is being presented or what action a button will take.
3. **User control and freedom:** At any opportunity the user has to edit anything, there are confirmation and cancel buttons either on the same screen or in a pop up modal. Important actions will have an exclamation point beside them.
4. **Consistency and standards:** There is no ambiguity in the language used for actions throughout the app. Actions can only be performed from their designated page, e.g. editing your device name can only be done by navigating to that device's information.
5. **Error prevention:** Errors from the physical device will come through on the notifications screen. They are easy to identify by the big exclamation point icon and universal exclamation point beside the text. In addition, they will be highlighted red. All notifications will come through the phone's native notifications as well. Errors within the app will appear as a toast notification at the bottom of the screen. All errors will have meaningful descriptions.
6. **Recognition rather than recall:** With our simple design that has few screens to navigate the user should not have to recall where to find information or actions.
7. **Flexibility and efficiency of use:** We have all our core information and functionality on the home screen so that a novice user can easily perform tasks. Each device has a button that takes the user to a new screen where they can perform more actions on said device. Here they can edit the device name and, if they are the owner, control access to the device.
8. **Aesthetic and minimalist design:** Our interface is simple, with large text and buttons. There is no clutter and we make the most of the screen's real estate.
9. **Help users recognize, diagnose, and recover from errors:** As mentioned earlier, error messages are identifiable from the large exclamation point and red highlighting, with a meaningful description that will also suggest looking at the help screen.
10. **Help and documentation:** As mentioned above, there is a help screen with quick website links to how to complete common tasks and solve common errors. It also has buttons to see the full user guide online or download it as a pdf, as well as an 'Email us!' button.