**Project Description**

The Cap-Ice product will have a medium of accessing the capabilities of the device through a mobile app to control the device at the convenience of the user’s fingertips. The app should have the right number of features to turn the device on or off and control the speed of the cooling system, with a way of monitoring the battery percentage of the Cap-Ice as well.

**Requirements Summary**

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| --- | --- | --- |
| **MINIMUM REQUIREMENTS** | Processor Cores | Single Core |
| OS | Android 4.4 (KitKat) |
| RAM | 2 GB |
| **RECOMMENDED REQUIREMENTS** | Processor Cores | Quad Core |
| OS | Android 8.0(Oreo) |
| RAM | 4 GB |
| **OTHER REQUIREMENTS** | Permissions | Notifications and Storage |

Table 1. System Requirements

The application would not have any intensive resource requirements, so any device should suffice in order to be able to run the app.

**Prototype Description**

The device’s application prototype was made in Uizard:

<https://app.uizard.io/p/70218471>

**User Scenario**

Denji enjoys his time outside, going places and enjoying life in general. He faces a problem of high heat and sweat-inducing temperatures from living in a tropical country. To alleviate this problem, he decides to use the Cap-Ice to keep cool during the hot day. Denji pairs his device to the dedicated app and he controls the speed of the fan and monitors the battery.

**Prototype Design**

**A screenshot of a phone

Description automatically generated** **A screen shot of a phone

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Description automatically generated

The first screen welcomes the user to the app and prompts the user to press a button in order to get started. The user will then be directed to the pairing screen in which the user will connect the device to their phone. Once the device has been connected, the control screen will show, wherein the device’s battery is shown, as well as controls for turning on the device, and controlling the fan speed.

**Rationale**

The reason why TMG chose this prototype is to create an efficient and clean way to access the device without any complicated ways. The design of the prototype is seamless where you would only need to press a few buttons in order to get the desired outcome. Further improvements would have to be added to cater to more specific needs. The disadvantages of this would be for les tech-savvy users who do not understand how to utilize the interface, in which it could be improved in further testing, as well as a way to physically turn on the device without the use of an app.

**Changes to requirements**

In creating the device itself, I had initially thought of having a screen on the device itself, but it quickly came into fruition that it would not make much sense, as the user would not be able to see the screen when wearing the cap. A mobile application would be the best fit in this scenario, as it would be an easier way of interacting with the device.

**Initial Evaluation Plan**

For the application to cater better to the users of the device, testing and feedback from the users will be accepted in order for the team to find out what needs to be added and changed from the interface in order to create a seamless interaction between the user and the device.