Customer Requirements

**PO\_SAG\_CR\_Glasses**

**ـــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــــ**

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Document Status:

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| 1.0 | Reham Essam | [11-9-2022] | Initial Creation |
| 1.1 | Jana | [20-9-2022] | Edit Key Elements |
| 1.2 | Omnia | [23-9-2022] | Add key elements and features |

Project Description:

Definition:

The Design of the project is glasses closed around the head, between the two lenses of the glasses there is a camera, on the right hand there is a power button , flash and mic , on the left side there are three buttons and a speaker.

Features:

* Glasses’ features can be controlled by the user.
* Glasses have two modes (Day mode - Night mode).
* Glasses can capture images.
* Glasses support the voice command.
* Glasses can speak.
* ECU protection and maintenance.
* The glasses' OS is a real time OS.

Key Elements:

* Glasses support the user's security as each user has his own voice signature on it, another option is using the fingerprint sensor.
* Glasses have a power button and three buttons that control Features.
* Glasses can work in Day / Night Mode.
* Glasses can detect the night mode using LDR.
* Glasses have a camera that supports real-time capturing.
* Glasses have a microphone through which it receives voice commands.
* Glasses have a speaker to play any audio (mp3 files are received from the machine learning models).
* Voltage and temperature level can be tracked.
* DC fan used to decrease heat.
* Generate a customized OS with specific configurations.

**Requirements Mapping:**

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| --- | --- | --- | --- | --- | --- |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_001-V1.1 | **Covers** | Glasses support the user's security as each user has his own voice signature on it, another option is using the fingerprint sensor. | **Covers** | Glasses’ features can be controlled by the user. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_002-V1.1 | **Covers** | Glasses have a power button and three buttons that control Features. | **Covers** | Glasses’ features can be controlled by the user. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_003-V1.1 | **Covers** | Glasses can work in Day / Night Mode. | **Covers** | Glasses have two modes (Day mode - Night mode). |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_004-V1.1 | **Covers** | Glasses can detect the night mode using LDR. | **Covers** | Glasses have two modes (Day mode - Night mode). |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_005-V1.1 | **Covers** | Glasses have a camera that supports real-time capturing. | **Covers** | Glasses can capture images. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_006-V1.2 | **Covers** | Glasses have a speaker to play any audio (mp3 files are received from the machine learning models). | **Covers** | Glasses can speak. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_007-V1.0 | **Covers** | Glasses have a microphone through which it receives voice commands. | **Covers** | Glasses support the voice command |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_008-V1.2 | **Covers** | Voltage and temperature level can be tracked. | **Covers** | ECU protection and maintenance. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_009-V1.1 | **Covers** | DC fan used to decrease heat. | **Covers** | ECU protection and maintenance. |
| **Req\_ID** | PO\_SAG\_CR\_GLASSES\_010-V1.2 | **Covers** | Generate a customized OS with specific configurations. | **Covers** | The glasses’ OS is a real time OS. |