|  |
| --- |
| Photo displaying partial image of two pie charts on a canvas-textured page |
| PO3\_DGW  Hardware Software Interface Document |
|  |

Status table

|  |  |
| --- | --- |
| PO3\_DGW\_HSI | |
| Version | V0.0 |
| Status | Draft |
| Author | Bassem Ezzat (Architect)  Mohammed Elsayed (Developer) |
| Last updated | January 31, 2020 |
| Reviewer |  |

Table of history

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Author(s) | Date | Changes |
| 0.0 | - Bassem Ezzat  - Moahmmed Elsayed | January 31, 2020 | Create HIS document |

**Content**

[Status table 1](#_Toc31376205)

[Table of history 1](#_Toc31376206)

[1. Hardware requirements 3](#_Toc31376207)

[1.1. Block Diagram 3](#_Toc31376208)

[1.2. Components 4](#_Toc31376209)

[1.2.1. Display device 4](#_Toc31376210)

[1.2.2. Sound device 4](#_Toc31376211)

[1.2.3. User interacting device 4](#_Toc31376212)

[1.2.4. Control device 4](#_Toc31376213)

[1.2.5. Power source 4](#_Toc31376214)

[1.2.6. Casing and packaging 4](#_Toc31376215)

[1.3. Hardware connections 5](#_Toc31376216)

1. Hardware requirements

The hardware that system required illustrated in the following list:

* Display Device
* Sound device
* User interacting device
* Control device
* Power source
* Casing and packaging
  1. Block Diagram



Figure 1. block Diagram of Hardware requirements

* 1. Components

This section lists the requirements in details.

* + 1. Display device

A 16x2 Dot Matrix Liquid Crystal Display Controller will be used as display device.

* + 1. Sound device

A 5V buzzer will be used as sound drive for alarm mode.

* + 1. User interacting device

A three push buttons will be used to allow user to interact with the system.

* + 1. Control device

A microcontroller ATmega 8 will be used as controller device of the system.

* + 1. Power source

A 9V battery will be used to power the system up.

* + 1. Casing and packaging

Not specified

* 1. Hardware connections

This section will illustrate the hardware connection.