

**PO3\_DGW\_Digital watch**

**(SRS)**

**DOCUMENT HISTORY**

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| 1 | Initial creation of SRS Document | Marina Medhat  Ahmed Qandeel | 23/01/2020 | Draft |
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# INTRODUCTION

## Purpose

This is version 1 of the requirements specification for a simple Digital watch with alarm with settings and Stop Watch.

## Glossary

Definitions, acronyms and abbreviations

Digital watch consists of 3 main Functions:

1-Clock.

2.Alarm.

3.Stop Watch.

### clock:

a device that has its own value of time in hours, minutes and seconds, which it displays and which it maintains accurately relative to when the time was last reset.

In this document, a "conventional watch" means such a clockwork or electric device in the real world; "watch" means a computer operating system function that returns

at least an absolute or elapsed time as measured by the operating system.

### alarm:

a device which is a conventional clock with an additional time value setting and an attached alarm bell. When the clock time reaches the time of the "alarm setting" it rings the bell.

In this specification, "alarm clock" means the software application that imitates many of the functions of a conventional clock with an alarm.

### ring the bell:

the continuous alert sound (the term "audible signal" is too pedantic!) that an alarm clock can make. It may be a buzzer or chime or other tone

(compare mobile phone "ring tones" which no longer resemble a bell).

### clock time:

the time relative to the last reset of the clock.

## General description

The Digital Watch System that has A Clock with a simple alarm clock in an on-screen window and Stop watch. The user can select an option of the three options

(View Clock, setting stop watch, Setting alarm).

The clock provides an alarm and allows the user to set alarms and provide a Stop watch.

# FUNCTIONAL REQUIREMENTS

## Req\_PO3\_DGW\_SRS\_01\_V01

The user shall be able to change the current time.

## Req\_PO3\_DGW\_SRS\_02\_V01

The display style of the clock shall be any combination of a format, precision, and cycle length:

**precision**

hours and minutes values; or hours, minutes and seconds.

**cycle length**

12 hours.

## Req\_PO3\_DGW\_SRS\_03\_V01

The size of the display and its graphical and character elements shall be as large as possible within the display window.

## Req\_PO3\_DGW\_SRS\_04\_V01

The user shall be able to delete any alarm setting.

## Req\_PO3\_DGW\_SRS\_05\_V01

The user shall be able to inspect all alarm settings.

## Req\_PO3\_DGW\_SRS\_06\_V01

An alarm setting shall refer to a particular time on a 12-hour cycle.

## Req\_PO3\_DGW\_SRS\_07\_V01

The user shall be able to turn an alarm setting ON or OFF.

## Req\_PO3\_DGW\_SRS\_08\_V01

The alarm clock shall ring the alarm bell whenever alarm setting is active.   
An alarm setting is active when

1. the alarm setting is ON
2. the current time is equal to or greater than the alarm setting

## Req\_PO3\_DGW\_SRS\_09\_V01

The alarm’s buzzer should stop after 1 minute or after the user press a certain button.

## Req\_PO3\_DGW\_SRS\_10\_V01

The stop watch shall have just one setting.

## Req\_PO3\_DGW\_SRS\_11\_V01

The Software shall start incrementing its display from 00:00:00 referring to real time seconds, minutes and hours.

## Req\_PO3\_DGW\_SRS\_12\_V01

The Software shall save its last values and display it to the user.

## Req\_PO3\_DGW\_SRS\_13\_V01

The user shall be able to reset stop watch to count from zero.

## Req\_PO3\_DGW\_SRS\_14\_V01

The Software shall reset every value on the screen to zero and increment the next, it counts from 0 to 60 seconds and reset second part to zero and increment minutes to 1, it counts minutes from 0 to 60 and reset minutes’ part to zero and increment hours’ part to 1 and so on.

## Req\_PO3\_DGW\_SRS\_15\_V01.1

The software shall include a certain button to shift between the three modes (Digital-watch, alarm, Stopwatch)

## Req\_PO3\_DGW\_SRS\_16\_V01.1

The software shall include one button to start/stop the stopwatch if the user chose the Stopwatch mode.

## Req\_PO3\_DGW\_SRS\_17\_V01.1

The software shall include one button to reset the stopwatch if the user chose the Stopwatch mode.

## Req\_PO3\_DGW\_SRS\_18\_V01.1

The software shall include one button to adjust the hours and minutes if the user chose the alarm mode.

## Req\_PO3\_DGW\_SRS\_19\_V01.1

The software shall include one button to increment the hours and minutes if the user chose the alarm mode.

## Req\_PO3\_DGW\_SRS\_20\_V01.1

The software shall include one button to adjust the hours and minutes if the user chose the Digital-watch mode.

## Req\_PO3\_DGW\_SRS\_21\_V01.1

The software shall include one button to increment the hours and minutes if the user chose the Digital-watch mode.

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| Req\_PO3\_DGW\_SRS\_01\_V01 | Req\_PO3\_DGW\_CYRS\_01\_V01 | 23/1/2020 |
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