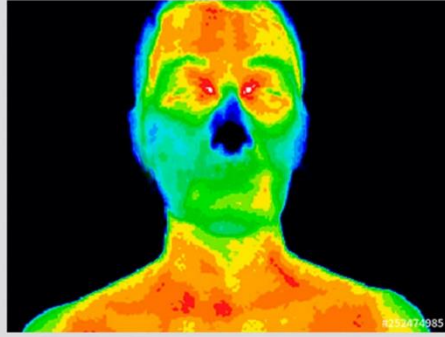


39°C



Smart Thermal Detection System
برنامج سمارت للكشف الحرارى



Smart temperature measurement:

It is a system for measuring temperature for those who has a frequent access to the organization using the latest information technology.

The system consists of two main components, the first is a camera that recognizes a person's temperature by just passing in front of them, and the second is a screen that displays the person's temperature.

This process is done with the highest accuracy.

System goals:

Ensuring protection from any infectious disease by measuring body temperature, which is a basic symptom of infected patients.

Preventing anyone from entering the establishment showing a display of high temperature.

Detecting the disease at an early stage, thereby increasing the chances of recovery from it.

Detecting people with the disease and thus limiting its spread.

Spreading reassurance among the founder's employees towards the visitors who frequent them.

Ensuring business continuity and not stopping at the crisis as long as security measures have been taken for it.

Maintaining a strong and secure corporate image through disease protection measures.

Measuring the temperature for all those entering the institution as soon as possible to ensure protection and at the same time without congestion or crowding.

System features:

The ultimate accuracy in displaying temperatures that are more accurate than any other device used for that.

Ease of use through a user-friendly interface.

The ability to distinguish temperature levels in colors, for example, the normal level, a green color, and the dangerous level, red color, and consequently.

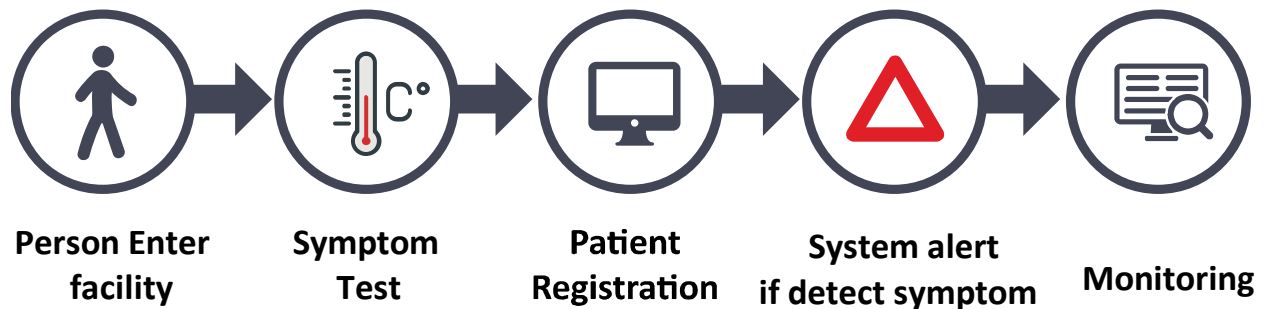
Avoid human errors as much as possible in noticing temperatures.

There is no need to approach a person to measure his temperature, and thus to ensure better protection and safety.

Duty cycle:

The duty cycle of the SMART temperature measurement system is represented as follows:

- The camera is connected in advance within the steps of installing the system at an angle that allows monitoring of all people passing through the gates.
- An account is created for the security official, which he opens every day with his name and password.
- The system features a user friendly interface from which the security official can open the screen responsible for displaying the temperature of people in front of the camera.
- The visitor passes in front of the camera.
- The visitor's temperature appears on the screen.
- The temperatures are colored red in the event that they are a degree higher than normal according to the degrees defined by the system officials.
- The temperatures are colored green in the event that they are within the normal range of body temperature according to the degrees defined by the system officials.



programming language:

The programming language used in the SMART system for conferences and events is Delphi, which was previously produced by Borland Corporation and is now being developed by a language company in the old forms of Embarkadero Technologies.

This language is based on the Pascal object language, which is considered a development, and Delphi is a visual language and one of the high languages. It is also classified within the strong and easy languages together.

Productivity is used by Delphi to develop programs and applications quickly, and therefore it is indicated that it has a characteristic of an integrated development environment DAR, and this characteristic means the development of programs quickly, i.e. Development Application Rapid, and this is achieved by using ready-made components and tools that coordinate in the required form and are programmed by writing several programs related to specific events of these components or elements.

This type of programming is referred to as event programming.

Programming with events is programming that depends on the occurrence of an event of an element in the application, meaning when a specific event occurs such as clicking a button or closing a window, a specific program that was previously written in the application is applied and it is understood that each object or element of one or more events can be linked to any of them with a certain procedure. In visual programming science, the object is called the object, and it is the object or component, and the elements are anything that was used in the program such as the frame or button, or the buttons use the text box or menu ... etc.

Each object has specific events associated with it, or in other words, events that happen to it at a specific time, for example in order to click on it, often visible as a click event, when clicking on a button, this visual programming language and this clicking process is referred to in programming science to apply the procedure Associated with this event which was previously programmed by the programmer. Also Delphi Writing inside the text box is an event and entry or exit from the text box is another event and hovering the mouse pointer over one of the elements is also an event that can be linked to a specific procedure (program) ... and so. Delphi programming language allows the programmer to design the required application using several elements placed On one or more frameworks depending on the form the application needs and then programs or procedures are written procedures for each event of the events to be programmed in the sense that if a button is used in the application it is natural that a procedure is written for the event of clicking this button. Procedures for implementation.

Database:

The database used is Microsoft SQL Server, a relational database management system that supports a variety of transaction processing and analytics applications in corporate IT environments. Microsoft SQL Server is one of the most leading database technologies on the market. The database was designed using SQL, a standard programming language used by database administrators and other IT professionals to manage databases and inquire about the data they contain.

