**Feasibility Study**

**Executive Summary:**

The purpose of this feasibility study is to determine the )Software) && (Sensor) required to make the robot able to deal with the affected person efficiently.

**will** be **created robot to deal with the injured person to reduce the deterioration of the injured person's condition**

**Defined Business Problem or Opportunity:**  
The problem: people do not perform first aid efficiently with the injured person, so the opportunity is: We will create robots to deal with the injured person with all efficiency, including first aid and send reports to the nearby hospital.

Requirements && purpose of the study:

Requirements are:

1 – Programmers to program the robot.

2- mechatronic engineers to build the robot’s body.

3- Doctors specializing in first aid, to instruct programmers on how to program the robot.

purpose of the study:

to put a plan how to build and program the robot to be highly efficient when dealing with the infected person.

Description of the options assessed:

There are many types of sensor, but in order for the robot to do its job sufficiently, three types of sensors will be used together:

1- sensor camera.

2- breathing sensor.

3- touch sensor.

The sensor camera will continue to be used to detect the person falling to the ground or being unbalanced, but the person may be asleep, so other types of sensors must be used with it,

In case a person sleeps without injury this sensor will measure the oxygen level to ensure that the person is asleep and not injured. The last type of sensor will be used, which is a touch sensor, because if there is no injury, the person will touch this sensor until the robot does not perform first aid operations.

**Assumptions Used in the Study:**

The assumption is that hospital staff cannot deal with the report`s robot , so will do courses to how to deal with robot.

**Audience Impacted**:

This robot will affect all people that existing with this robot in the same place.

**Financial Obligations:**

This project will cost :$700,000.

Robot structure:$100,000.

Programming the robot&&testing&& Catalog for user :$180,000.

three sensors:$120,000.

GPS:$30,000.

database:$45,000.

training:$50,000.

Salaries of project employees:$175,000.

**Recommended Action:**

(general overview)

Once the sensor detects that the person is injured, he will go directly to him and will do first aid for him and send the medical report to the nearest hospital, but if he is not injured, the person will touch the touch sensor until the robot stops.

(**Recommended Action**)

1- touch the touch sensor in case of no injury

2-Read the catalog after purchasing the robot and before using it

3-Do a lot of tests to make sure that the robot is running at its best