world of robots

Team members Names

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Robot definition :-

A robot can be called a robot in Arabic, and a robot is a mechanical machine capable of carrying out programmed work, either with a direct signal and control from a human or with a signal from computer programs. The jobs that the robot is programmed to perform are often heavy, dangerous or delicate work, such as searching for mines and disposing of radioactive waste, or delicate or arduous industrial work. The word "robot" first appeared in 1920, in playwright Karl Chapek's play "Rossum's Men of the Global Mechanism". The word “robot” in the Czech language symbolizes hard work, as it is derived from the word “rebot” which means forced or compulsory labor, and the creator of this word is Josef Chapek, the brother of the aforementioned playwright, who invented it in an attempt to help his brother invent a name What for live machines in theatrical work. Starting from this date, this word began to spread in science fiction books and films that, over the years, presented a number of ideas and perceptions of these machines and their relationship to humans, which would have opened great horizons for inventors to innovate and develop as many of them as possible

Android components :-

Transponders: Its structure is made up of transponders such as arms, legs, hands, and feet.

Sensors: They are the parts that resemble a sensory device, which detects things around them, such as heat, light, etc., and then converts the information collected by the sensors into codes that computers can read.

Computer: The computer in the robot works like the brain, and it controls the movement of the robot through the instructions inside it called algorithms.

Equipment :-

The mechanical tools and structures that make up the robot.

Robots between prose and cones :-

If we talk about robots at beginning ,we maybe surprise because we haven’t seen a complete photo being in our brains by medias and distance or a gap among us and the fact. and that happened because of many reasons …you will know some of it now

Advantages :-

1-robots is very comfortable as it limit time and effort.

2-it can do many things ideally more than human.

3-it can develop it selves thanks of manufacture.

4-intelligence and self learning.

Disadvantages :-

1-it needs to height cost in most times .

2-it have still being less than human in many fields .

3-manufacture intelligence and self learning still disabled to reach creativity.

Utilization of robots :-

Traffic regulation :-

in the capital of the Republic of the Congo, Kinshasa, a robot was used to regulate traffic, as this robot can rotate, and it is equipped with lights from the front and

back in red and green colors, as the red color indicates stopping traffic, while green allows passage, and contains On cameras that enable it to analyze the walking situation, and this robot is considered economical; Because it runs on solar energy.

Surgical operations :-

The robot is used in operations to either perform some tasks during the operation or all tasks, and its use in hospitals was accepted in the year 2000 AD by the American Food and Drug Administration, and since that time many hospitals in Europe and the United States of

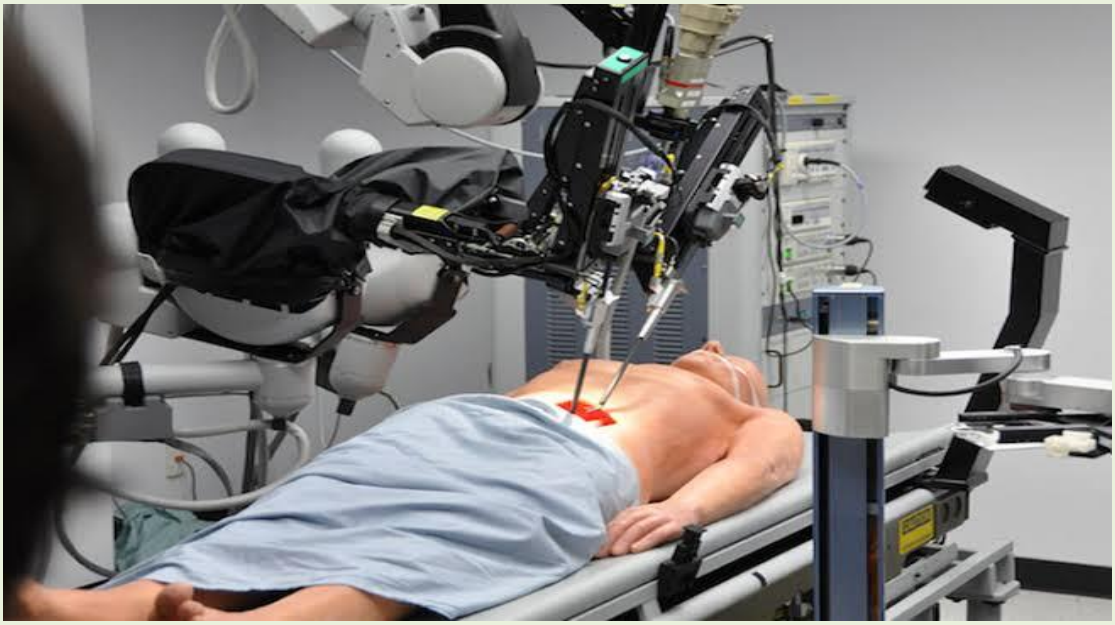
America have been provided, where the robot is back The patient has many health benefits, including :

a faster recovery.

Reducing pain and blood loss during the operation.

Reducing the effects of the wounds resulting from the operation .

Reducing the possibility of infections .



Demining :

A robot in the form of an armored vehicle is used to remove mines (in English: Minesweeping), some of

which may be explosive, as some of these robots pull the mine inside and then make it explode in an isolated environment. This robot is given commands through a remote control device, and the D3 robot , which is one of the examples of these robots, can scan a thousand square meters per hour .

Famous types of robots :-

Joseph Engelberger, a pioneer in the robotics industry, says, "I can't find a specific definition of a robot, but I can tell which one when I see it." Where everyone has an idea of what a robot represents, and you may have heard about many famous robots:

1. R2D2, C3 - EPO: Intelligent robots that talk with humans in the Star Wars movie.

2. Sony's AIBO: A robot dog that learns by interacting with humans.

3. Honda's ASIMO: A robot that can walk on two legs like a human.

4. Industrial robots: automated machines that operate on manufacturing lines in laboratories.
5. Data: A hybrid between a human and a robot, as in the Star Trek movie.

6. BattleBots: Remote-controlled flying robots that explode on the battlefield.

7. Curiosity: NASA's robots on Mars.
8. HAL: The automated, self-driving spaceship in A Space Odyssey.

9. Robomower: a lawn mowing robot .

Artificial intelligence :-

When we talk about robots, it is necessary to refer to the most exciting part in this field, which is the science of artificial intelligence (AI), where everyone agrees that robots can work in the manufacturing line, but there is no consensus about whether this robot is able to Having a kind of intelligence someday, in the end artificial intelligence could be a re-manufacturing of the human being and his mechanism of perception and this includes the ability to learn, the ability to think and the ability to use language and formulate main ideas, we may not have reached this level in our time but we are

achieving Huge progress over time, as some artificial intelligence robots can repeat some movements, and solve problems in certain areas, as the basic algorithm used to solve problems using artificial intelligence is very simple, so solving the problem begins by collecting data in the surrounding environment and the internal environment through sensors and inputs Then the computer or the robot controller compares this data with its counterparts stored in memory to decide what this data means, then the robot will process the information in a set of procedures Parallel to expect any work will be the most successful is based on data and processing results. Of course, the computer can solve only the problems that it is programmed to solve. Chess playing devices are the best examples of this type of computer .