2 DIMENSION MOVING INSERTION NEEDLE/PUNCTURE HOLE (MEDICAL ROBOTIC)

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ABSTRACT

This project involved developing a medical robotic using an articulated robot running on an x, y, z-axis. The research concentrated on studying the localization of a needle puncture tool. A robot traveling movement is controlled by a manual controller which is a joystick and a user friendly interface implemented as well. The joystick controls the robot traveling x, y, z-axis movement and controls significant function (emergency stop).

Overall in this project went as planned, the main aim was met successfully. The medical robot is capable of performing various movements and result show that the localization algorithm and interactive interface developed is capable of using this unique robot configuration to perform to the desired task.

In conclusion, the project was a success as the main aim of the project was met along with all other aims.

Keyword: **Medical Robotic**
          x- axis
          y- axis
          z- axis