Robotic   arm

the main motivation of us doing this project is learning as we want to learn something new from this project . we will encounter many new things during the completion of this project such as new languages ,new softwares such as matlab ,microcontrollers and many more .

our robotic arm will be controlled with our hand gestures. the hand will transmits signals which will be received by the receiver then processed by the microcontrollers and then servos will act according to that.

implementation of project:

First of all we will try to note the changes in hand gestures with the help of gyrosensors and accelerometers .then after doing this we will move towards a simplified part of the project and try to make out some part of project.

then we will move towards the complete part.

basic and expected timeline:

1st and 2nd week:

we will try to learn and research about the things we are using in our project. for example ,arduinos and coding in arduinos .and try to collect everything which we will be using in our project.

To list and buy all the necessary parts .

to make a scaled down project.

designing a mechanical part simpler

3rd and 4th week:

in this week we will be focusing firstly on the mechanical part of the arm, assembling it and then fixing one or two servos and debug it.

then we will complete the coding part.

5th week :

then we will try to make some changes like we will try to expand it to grab things .

Components required & Estimated cost:

 1.ACRYLIC sheet Rs. 735

 2.(12V,5A)Adapter,LM338 Rs. 500

 3.Resistors,Led's,Bondite,Multimeter Rs. 200

 4.Nuts,Bolts,Connecting wires,etc Rs. 200

 5.Servo Motors around 6 Rs. 2000

6.Arduino Rs. 1000*2 =2000

 7.Xbee Rs.1300*2= 2600

 8.gyrosensors Rs.900 Approximate cost

Rs. 6000(last year also some of students try to make this and cost was around 5300)