**ROBOTICS SPIDER**

**TITLE OF THE PROJECT**: Design and development of a Robotic Spider

**RATIONAL OF THE PROJECT**: The project will be helpful in Intelligence programs like spying, Search and rescue, Mines pre-analysis.

**OBJECTIVES OF THE PROJECT**: After the completion of the project we are able to:

1. Collect the relevant Data for the given project
2. Develop the computer program by using OpenCV- Python Libraries and Machine Learning using Python.
3. Design the steps involved in Mechanical Structure of the Robot.
4. Handle the motion of the robot in specific ways.
5. Develop an attitude of working in a team.

**PROBLEM DESCRIPTION**: In this project we propose a ROBOTIC SPIDER for intelligence work. Our system uses robot for spying in vulnerable areas and in the analysis of dangerous places like underground mines, tunnels. This bot is remote controlled autonomous being programmed using machine learning interface.

**RESOURCES AND MATERIAL REQUIRED**:

1. **Mechanical**

* Wood chassis
* Nuts and Bolts

1. **Electronics**

* Arduino UNO
* MPU 6050 Gyro sensor
* HC-05 Bluetooth module
* Power supply
* USB cable

1. **Motors**

* Servos

1. **Tools**

* Soldering iron
* Soldering Wire
* Screw drive
* Drilling Machine
* Saw

1. **Software**

* Arduino IDE
* OpenCV-Python

**ESTIMATED COST**: Rs.7000/-

**TEAM MEMBERS:**

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