**The martials**

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| --- | --- | --- | --- | --- | --- |
| **Items** | **Function** | **Price** | **Picture** | **No. of Items** | **Total Cost of Items** |
| Arduino mega | The main control board | 500 |  | 1 | 500 |
| LEDs | produce light up to 90% more efficiently than incandescent light bulbs | .75 |  | 6 | 5 |
| Buzzer | provide an audible alert or notification | 5 |  | 1 | 5 |
| Relay | allow low-power microcontrollers to handle circuits that uses much higher power than what the board can handle directly | 20 |  | 1 | 20 |
| Solar panels | convert sunlight into electrical energy | 150 |  | 1 | 150 |
| Soil moisture sensor | indicates whether the soil moisture level is within the limit | 50 |  | 1 | 50 |

Proposed Work (Cont.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Servo motors | turn to a specified position | 85 |  | 3 | 225 |
| Esp32cam | wireless video monitoring,Wi-Fi image upload, QR identification | 400 |  | 1 | 400 |
| MQ gas sensor | to detect a wide variety of gases like alcohol, smoke, methane, LPG, hydrogen, NH3, Benzene, Propane etc. | 50 |  | 1 | 50 |
| Water rate sensor | display the volume of water that has passed through the valve | 40 |  | 1 | 40 |
| Water pump | to turn the pump on and off, as well as to control the flow rate and direction of the water | 85 |  | 1 | 85 |
| Ultrasonic sensor | measure an object's distance and velocity | 45 | ‪Hc-SR04 Ultrasonic Sensor at Rs 65/piece | Ultrasonic Sensor Module in  Thane | ID: 18101779448‬‏ | 1 | 45 |

Proposed Work (Cont.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bluetooth module HC 05 | to connect small devices like mobile phones using a short-range wireless connection to exchange files | 150 |  | 1 | 150 |
| DC motors | converts electrical energy into mechanical energy | 50 |  | 6 | 300 |
| Motor driver | amplifying electrical signals to power and control the motor | 90 |  | 1 | 90 |
| Total | | | | | 2560 |