Specification

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| Nr. | Short description | Long description | Rating (1-5) | Completed | Comment |
| 1 | The Cyberpaw should have the same axes of movement as an ‘IRL’ dog. | This means that one leg requires a total of 3 servomotors per leg.   * Calves * Thigh * Hip joint | 5 |  |  |
| 2 | It should be controllable by remote control. | Should via. Bluethooth so that an X-Box controller can be used, for example. | 5 |  |  |
| 3 | The body frame should be lightweight yet sturdy. | The frame should be designed to minimize weight using 3D-printed components while maintaining structural stability. | 4 |  |  |
| 4 | Modular design for easy upgrades. | Components such as servos, sensors, and control boards should be replaceable without redesigning the entire robot. | 5 |  |  |
| 5 | Basic walking functionality. | The Cyberpaw should be able to perform basic walking movements (forward, backward, turning) under remote control. | 5 |  |  |
| 6 | Power management system. | Implement a rechargeable battery system with sufficient capacity for at least 1 hour of continuous operation.   |  | | --- | |  | | 4 |  |  |
| 7 | |  | | --- | | Status indicators. | | Include LEDs or a small screen to display the system status (e.g., power level, connection status). | 3 |  |  |
| 8 | Obstacle detection.   |  | | --- | |  | | Integrate sensors (e.g., ultrasonic or infrared) to prevent collisions and provide basic autonomy.   |  | | --- | |  | | 4 |  |  |
| 9 | Documentation and user manual.   |  | | --- | |  | | Create comprehensive documentation for assembly, programming, and control instructions.   |  | | --- | |  | | 5 |  |  |
| 10 | Battery level monitoring. | Implement a system to measure and display battery charge levels to prevent sudden shutdowns.   |  | | --- | |  | | 1 |  |  |
| 11 | Camera integration   |  | | --- | |  | | Add a camera module for streaming video or enabling computer vision tasks.   |  | | --- | |  | | 4 |  |  |
| 12 | |  | | --- | | Object following. | | Use sensors and AI algorithms to enable the robot to follow a specific object or person. | 4 |  |  |
| 13 | Compact storage design. | Make the robot foldable or easy to disassemble for transport and storage. | 3 |  |  |