**Key Features:**

1. **Real-Time Temperature Monitoring**: Continuously monitors CPU temperature using a temperature sensor to ensure optimal operating conditions.
2. **Dynamic Cooling Control**: Adjusts the fan or cooling mechanism speed based on real-time temperature readings, providing energy-efficient cooling.
3. **Predefined Temperature Thresholds**: Automatically activates the cooling fan when the CPU temperature exceeds a set threshold, preventing overheating.
4. **Energy Efficiency**: Reduces power consumption by adjusting fan speed based on the actual temperature, rather than running at full speed constantly.
5. **Cost-Effective Solution**: Utilizes affordable components like Arduino microcontroller and temperature sensors, making it an economical option for cooling systems.
6. **Quiet Operation**: The system operates quietly, reducing noise compared to traditional cooling methods like air conditioners or constantly running fans.
7. **Easy Installation**: Simple setup and integration with existing systems, with clear instructions for both hardware and software setup.
8. **Adaptable to Various Devices**: Can be adapted for use in other electronic equipment, not just CPUs, making it versatile for different applications.
9. **Sustainable and Low-Maintenance**: Requires minimal maintenance and can function effectively in environments with limited access to technical support.
10. **Increased Equipment Longevity**: Prevents overheating, which helps to extend the life of CPUs and other electronic components.