

# PROJECT SANJEEVANI

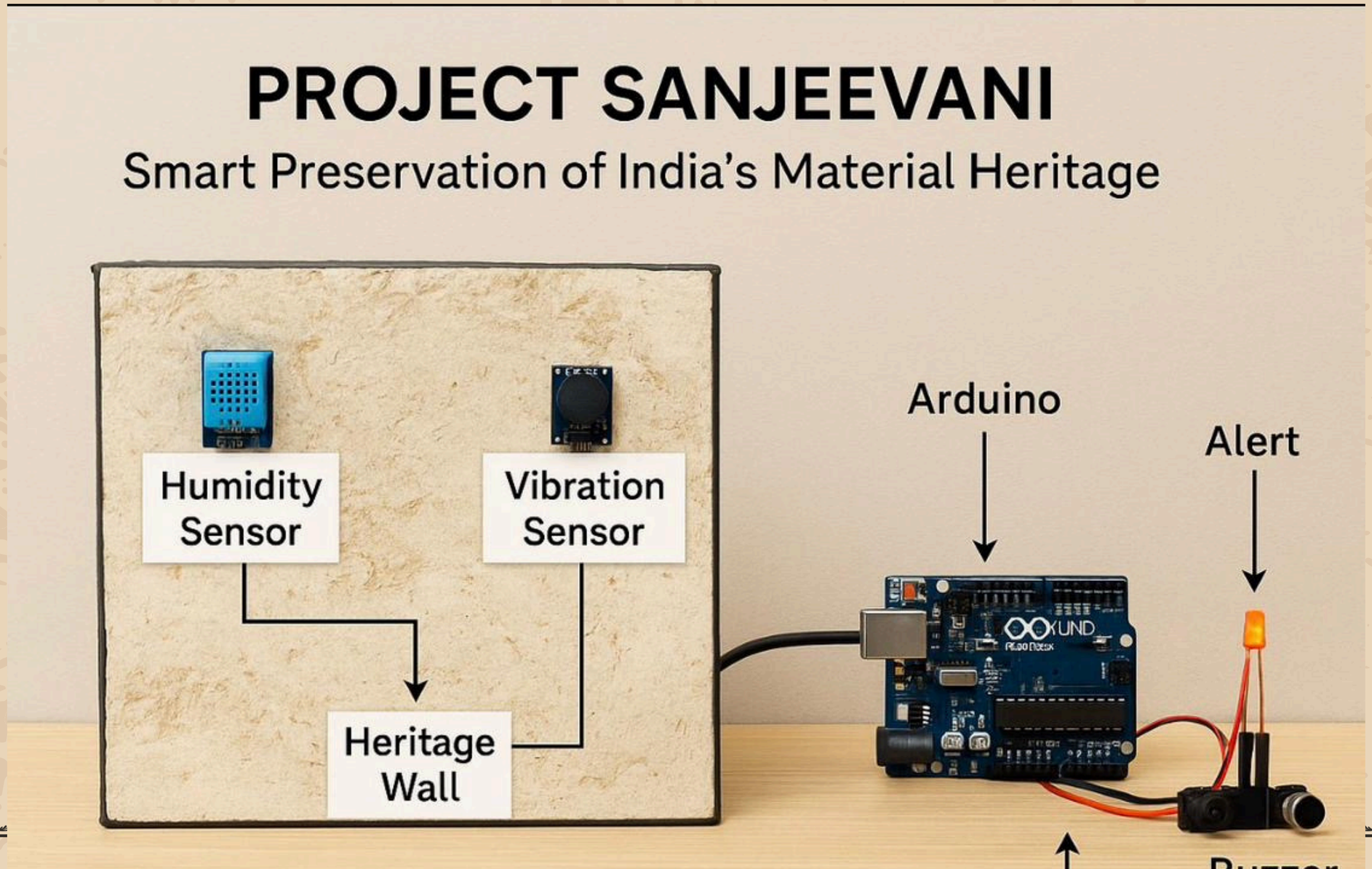
Smart Preservation of India's Heritage.

# ABOUT THE PROTOTYPE

The prototype is designed to protect heritage structures by detecting early signs of damage before they become visible. Since most heritage deterioration begins silently through moisture seepage and internal stress, this device provides continuous monitoring to prevent long-term structural decay.



# METHODOLOGY



# HOW IT WORKS?



1. It uses two sensors integrated with an Arduino microcontroller:
2. Humidity Sensor monitors moisture levels inside the wall. If humidity crosses 70%, it indicates seepage or weakening of the lime-plastered surkhi masonry.
3. Vibration Sensor detects abnormal micro-vibrations caused by internal stress, cracks, or foundation instability.
4. Both sensors send real-time data to the Arduino. When the readings exceed the safe threshold, the microcontroller immediately activates a buzzer/LED alert system, notifying caretakers of early risk.

# CONCLUSION

This system preserves the cultural memory embedded in our heritage by stopping damage before it becomes irreversible. Instead of waiting for cracks, collapse, or costly restoration, caretakers receive an early warning at the invisible stage of deterioration. This ensures that heritage is not only repaired after damage, but genuinely protected — sustaining its authenticity for future generations. e bridges traditional architectural wisdom with modern IoT-based monitoring, creating a new preservation model for India. By detecting stress at its origin, it prevents structural failure before it begins, making heritage sites future-ready and scientifically managed. It transforms conservation from an occasional intervention into continuous intelligent protection.

