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| Difference Between NAAC & NBA Accreditation - Haq Se EngineerPREC LONIJai Shriram Engineering College (@JSREC09) / Twitter**JAI SHRIRAM ENGINEERING COLLEGE**  **TIRUPPUR – 638 660**  Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  Recognized by UGC & Accredited by NAACandNBA (CSE and ECE) |

**DEPARTMENT OF**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

**IBM - Naan Mudhalvan**

**Internet of Things**

**Group 3**

**Phase 2 - Project Submission**

**PROJECT TITLE: SMART WATER SYSTEM**

**NAME : J.ARUN**

**NM ID : AU711221106004**

**YEAR : III**

**IoT Quality Monitoring:**

Implement IoT (Internet of Things) sensors to continuously monitor water quality in real-time. These sensors can detect contaminants, pH levels, turbidity, and more. Data can be transmitted to a central system for analysis and alerts.

**Smart Leak Detection:**

Develop a system that uses sensors to detect leaks in water pipelines. Machine learning algorithms can be applied to identify patterns and anomalies, helping prevent water loss.

**Automated Irrigation:**

Create a smart irrigation system that adjusts watering schedules based on real-time weather conditions, soil moisture levels, and plant types. This saves water and improves plant health**.**

**Water Recycling and Reuse:**

Implement technologies for treating and recycling wastewater for non-potable uses like irrigation, flushing, or industrial processes.

**Block chain for Water Management:**

Explore block chain technology for secure and transparent water usage tracking, billing, and peer-to-peer water trading in communities.

**Water Quality Prediction:**

Utilize machine learning and predictive analytics to anticipate changes in water quality based on environmental factors. This can help authorities take proactive measures.

**Real-Time Water Pricing:**

Implement dynamic pricing for water consumption, where prices change based on demand and supply. This can develop the water conservation during peak usage times**.**

**Water Usage Analytics for Industries:**

Facility of industrial facilities with tools for analyzing and optimizing water usage, helping them reduce waste and operational costs**.**

**Distributed Water Treatment:**

Exploring decentralized and modular water treatment systems that can be deployed in remote and disaster-stricken areas to provide clean water quick