## SMART WATER FOUNTAINS USING IOT

## INNOVATION:

- Water Quality Monitoring: Implement sensors to monitor the quality of the water, checking for impurities or contaminants. This data could be sent to a central system for analysis.
- Usage Tracking: Use IoT to track the frequency and volume of water dispensed.
   This could help in understanding usage patterns and potentially identify any wastage.
- Self-cleaning Mechanism: Incorporate a self-cleaning system that activates at regular intervals or when sensors detect a decrease in water quality.
- Real-time Alerts: Set up a system to send alerts or notifications when certain conditions are met, like if the water quality drops below a safe level.
- Touchless Operation: Use motion sensors or proximity detectors to enable touchless operation, promoting hygiene.
- User Feedback System: Allow users to provide feedback on the water quality or any issues they encounter. This could be integrated with a mobile app.
- Automatic Refill: Integrate a mechanism for automatic refilling of the water supply when it runs low.
- Solar Power Integration: Implement solar panels to power the fountain, making it
  more environmentally friendly and reducing dependency on external power
  sources.
- Integration with Weather Data: Connect the fountain to weather forecasts to adjust operations based on conditions like rain or extreme temperatures.
- 10. Remote Control and Monitoring: Provide a way to control and monitor the fountain remotely via a mobile app or a web interface.
- 11. Leak Detection: Use sensors to detect leaks or malfunctions and send alerts to prevent water wastage.
- 12. Water Temperature Control: Include a system to adjust the water temperature based on user preferences.