

PROJECT NAME: REAL TIME WATER QUALITY MONITORING AND CONTROL SYSTEM

TEAM ID: PNT2022TMID20975

<div>SCENARIO</div> <div>Testing and Experimenting with various water sources</div>	<div>PREREQUISITE</div> <div>This is a textbox...</div>	<div>PROJECT FLOW</div> <div>What do people experience as they begin the process?</div>	<div>WORKING</div> <div>In the core moments in the process, what happens?</div>	<div>BENEFITS</div> <div>What do people typically experience as the process finishes?</div>	<div>OUTCOME</div> <div>What happens after the experience is over?</div>
<div>Steps</div> <div>What does the person (or group) typically experience?</div>	<div>Approach</div> <div>Availability of Internet of Things and Remote Sensing</div> <div>Purpose</div> <div>To purify the Water Resources</div>	<div>location</div> <div>It is necessary to observe the water quality in a larger area such as lake/river and aquaculture.</div> <div>ACTION</div> <div>IoT and remote sensing techniques are used to aggregate and analyzing data from the remote locations.</div>	<div>MAIN IMPLEMENTATION</div> <div>An android application will be used to determine the sensor values and examined via cloud and warnings will be provided to user.</div> <div>The values are then compared with the threshold value</div>	<div>It can drop off the contaminants present in water</div> <div>It changes to a drinking water and right utilization of water resources</div>	<div>The related authorities can take measures to boost the water quality which makes it more usable for human purpose</div> <div>It has high frequency,high mobility,and low powered.</div>
<div>Interactions</div> <div>What interactions do they have at each step along the way?</div> <div><ul style="list-style-type: none">People: Who do they see or talk to?Places: Where are they?Things: What digital touchpoints or physical objects would they use?</div>	<div>Real-time data access can be done by using remote monitoring and Internet of Things(IoT) technology.</div> <div>Can be displayed in visual format on a server PC</div>	<div>To check water quality by analyzing the parameters such as Temperature ,pH and conductivity, and so on</div> <div>It supervising,congregate and analyzing data from the remote locations</div>	<div>if the acquired value is above the Messaging alert will be sent to the user</div>	<div>Using the IoT integrated Big Data Analytics will immensely help people to become conscious against using contaminated water.</div>	<div>It can be extended into an efficient water management system of a local area.</div>
<div>Goals & motivations</div> <div>At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")</div>	<div>Customer requires the system consist of several Sensors</div> <div>it is used to measuring physical and chemical parameters of the water.</div>	<div>The aim is to develop a system for continuous monitoring of river water quality at remote places using wireless sensor networks</div> <div>With low power consumption, need</div>	<div>The data will be stored in the cloud or local storage will be implemented</div> <div>Using the sensed parameters, the customer predicts the water quality</div>	<div>The customer requires a low cost system</div> <div>By the sensors, water contaminants must be detected.</div>	<div>The issue is that the traditional method, such as workers, need to go to each tank or river to collect data</div>
<div>Positive moments</div> <div>What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?</div>	<div>The project has successfully achieved its objective where water quality data(pH and temperature) can be monitored</div>	<div>Implementation by a reconfigurable smart sensor interface device for water quality monitoring system in IoT environment</div>	<div>It proposed the system collects parameters of water pH, turbidity on the surface of the water</div> <div>With high speed from multiple different sensor nodes.</div>	<div>It will immensely help customer to become conscious against using contaminated waste as well as to stop polluting the water.</div>	<div>It was satisfied by low-cost water quality monitoring systems has been developed for large area of coverage.</div> <div>It was attributed to its long duration operation, flexibility, and reproducibility.</div>
<div>Negative moments</div> <div>What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?</div>	<div>Customer felt that the sensors are installed very deep inside the water and their positions are fixed.</div>	<div>The sensors which work on power source may often required to be replaced in case of malfunctioning.</div>	<div>Mounted Sensors may get damage during natural disasters and often by aquatic animals.</div>	<div>The maintaining cost is also very high.</div>	<div>To test other Parameters, the new sensors can be included.</div>
<div>Areas of opportunity</div> <div>How might we make each step better? What ideas do we have? What have others suggested?</div>	<div>The design of a real time, and low cost water quality monitoring system.</div>	<div>Track whether protection and restoration measures are working.</div>	<div>Customer can analyse data continually and instantly alert users to changes in the systems.</div> <div>It reduces the need for unreliable and expensive sampling.</div>	<div>No need to compromise the water quality by the presence of infectious agents, toxic chemicals, and radiological hazards.</div>	<div>The system has wide applications and it is usable and affordable.</div>