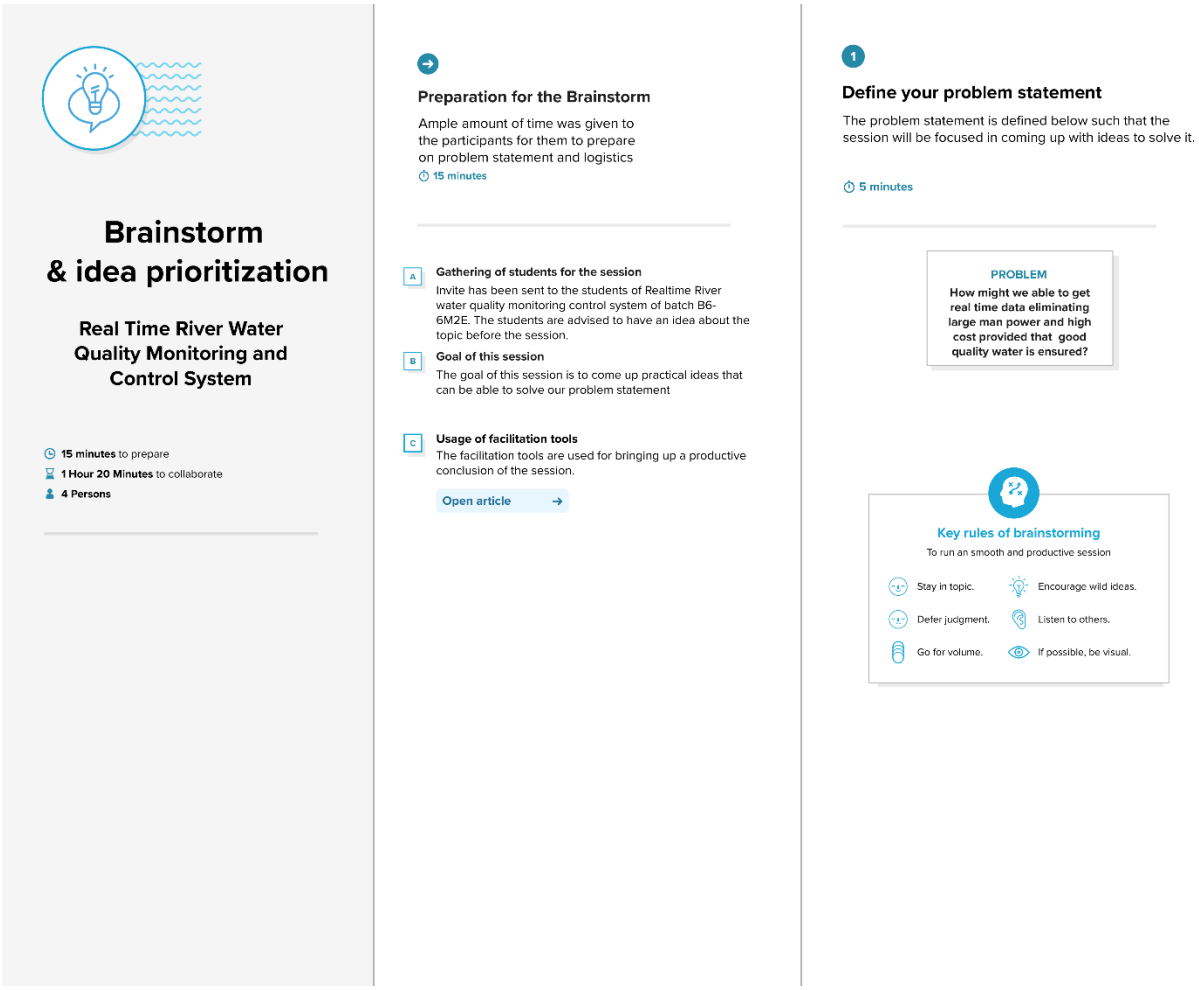
Ideation Phase

Brainstorm & Idea Prioritization

Date	30 September 2022
Team ID	PNT2022TMID12777
Project Name	Realtime River Water Quality Monitoring and Control System
Maximum Marks	4 Marks

Step-1: Team Gathering, Collaboration and Select the Problem Statement



Step-2: Brainstorm, Idea Listing and Grouping

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Brainstorm

Ideas that were put forwarded by the students have been listed out below.

20 minutes

Swetha S

- Setting of Sensors at remote places
- Since Sensors are used labor cost gets lowered
- Setting Std. threshold to ensure quality
- Immediate action is taken when there is any discrepancies in values

Kiruba Shankari L

- Real time Stream processing of Data
- Quality of water is measured periodically
- Comparative analysis of real time data with Std.
- Storage of real time data for future use

Praveen S

- Stored data can be used to train ML & AI models
- Solve and study the upcoming situations using trained ML models
- Based on the study we can create awareness
- Display the real time data using digital billboards for public

Sakthi J

- Efficient transmission of data from onsite sensors to base station
- Proper networking to ensure on time delivery of data to responsible person
- Publish - Subscribe model based design can be used
- Cloud based storage can be used instead of physical storage

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Group ideas

Ideas given by the students are grouped together based on the similarities in them and labels are given for each group.

20 minutes

Design Setup

- Setting of Sensors at remote places
- Real time Stream processing of Data
- Publish - Subscribe model based design can be used
- Storage of real time data for future use

Analysis

- Setting Std. threshold to ensure quality
- Comparative analysis of real time data with Std.
- Quality of water is measured periodically
- Study the upcoming situations using trained ML models

Storage

- Storage of real time data for future use
- Cloud based storage can be used instead of physical storage

Efficiency

- Since Sensors are used labor cost gets lowered
- Efficient transmission of data from onsite sensors to base station
- Proper networking to ensure on time delivery of data to responsible person

Public Usage

- Display the real time data using digital billboards for public
- Based on the study we can create awareness

Future Scope

- Setting Std. threshold to ensure quality
- Proper networking to ensure on time delivery of data to responsible person
- Stored data can be used to train ML & AI models
- Solve and study the upcoming situations using trained ML models

Step-3: Idea Prioritization

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Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes