# Project Design Phase-II

## Customer Journey

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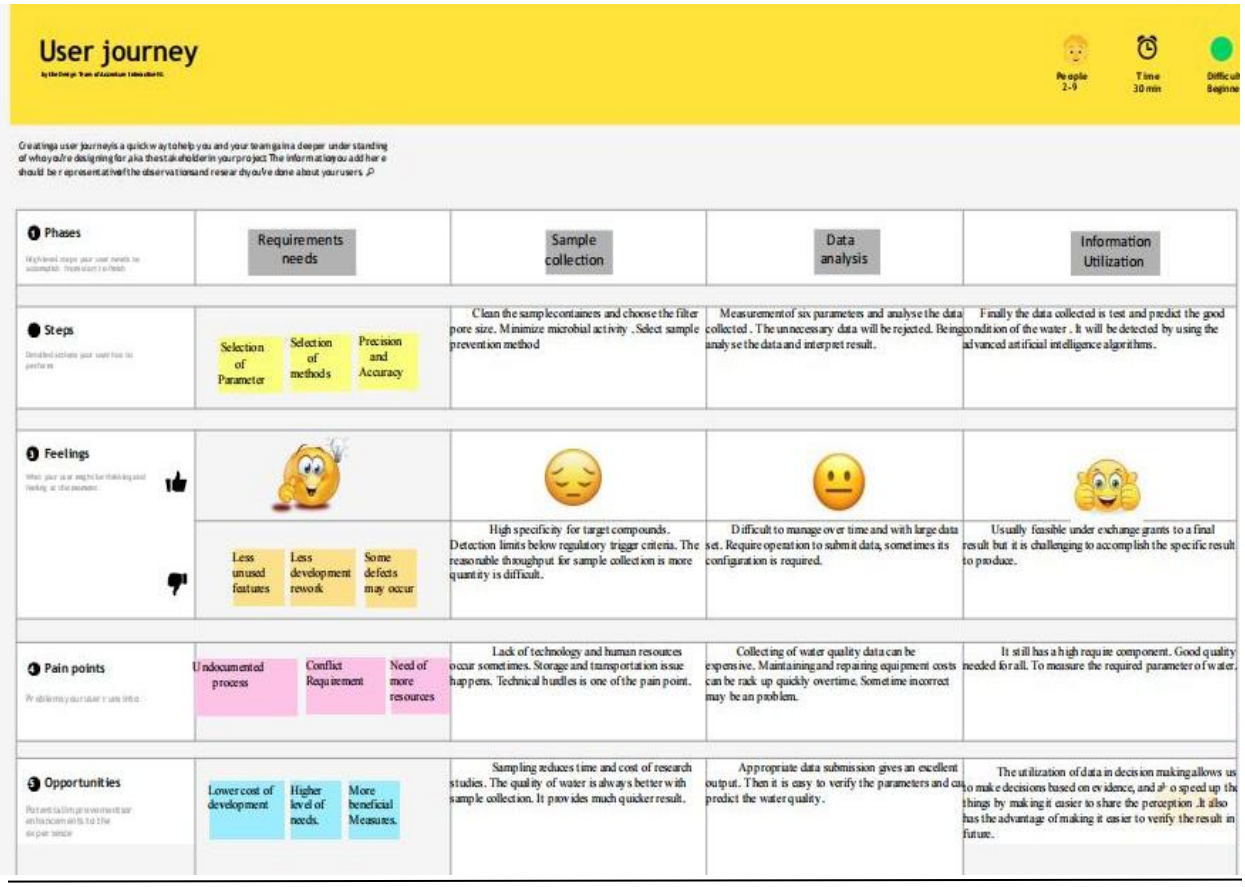
|---|---|
| Date | 20 October 2022 |
| Team ID | **PNT2022TMID04079** |
| Project Name | Efficient Water Quality Analysis and Prediction using Machine Learning |
| Team Leader | Rajaranganayaki R |
| Team Members | Rakshambika S, Vidhya P , Shanmuga valli S |
| Maximum Marks | 2 Marks |



User journey

People 2-9 | Time 30 min | Difficult Beginne

Creating a user journey is a quick way to help you and your team gain a deeper understanding of who you're designing for, aka the stakeholder in your project. The information you add here should be representative of the observations and research you've done about your users.

| Phases | Requirements needs | Sample collection | Data analysis | Information Utilization |
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| Steps | Selection of Parameter; Selection of methods; Precision and Accuracy | Clean the sample containers and choose the filter pore size. Minimize microbial activity . Select sample prevention method | Measurement of six parameters and analyse the data collected . The unnecessary data will be rejected. Being analyse the data and interpret result. | Finally the data collected is test and predict the good condition of the water . It will be detected by using the advanced artificial intelligence algorithms. |
| Feelings | | | | |
| | Less unused features; Less development rework; Some defects may occur | High specificity for target compounds. Detection limits below regulatory trigger criteria. The reasonable throughput for sample collection is more quantity is difficult. | Difficult to manage over time and with large data set. Require operation to submit data, sometimes its configuration is required. | Usually feasible under exchange grants to a final result but it is challenging to accomplish the specific result to produce. |
| Pain points | Undocumented process; Conflict Requirement; Need of more resources | Lack of technology and human resources occur sometimes. Storage and transportation issue happens. Technical hurdles is one of the pain point. | Collecting of water quality data can be expensive. Maintaining and repairing equipment costs can be rack up quickly overtime. Sometime incorrect may be an problem. | It still has a high require component. Good quality needed for all. To measure the required parameter of water. |
| Opportunities | Lower cost of development; Higher level of needs; More beneficial Measures. | Sampling reduces time and cost of research studies. The quality of water is always better with sample collection. It provides much quicker result. | Appropriate data submission gives an excellent output. Then it is easy to verify the parameters and can predict the water quality. | The utilization of data in decision making allows us to make decisions based on evidence, and also speed up the things by making it easier to share the perception .It also has the advantage of making it easier to verify the result in future. |