

Project Design Phase-I

Solution Fit

UAT Initiation and Design

Date	18 October 2022
Team ID	PNT2022TMID43271
Project Name	Efficient water quality analysis & prediction using machine learning
Maximum Marks	8 Marks

IT NPI: 3 - Design Phase



Entry Criteria: - Key Inputs	Design Phase: <u>Owner: IT-BSA</u> Complete solution design with clearly documented specifications and schematics. Prototyping, POC occurs to confirm design meets requirements.	Exit Criteria: - Key Deliverables
<ol style="list-style-type: none"> Final, detailed project plan, ROI, budget Signed off BRD Preliminary functional design and AS-IS/TO-BE process flows complete Initial infrastructure assessment Build vs. Buy decision 	<ol style="list-style-type: none"> New business process documentation and review Use case/testing strategy Fit/Gap analysis Functional and technical spec documentation Functional and technical design reviews Dev environment set up SOX controls impact assessment IT architecture review 	<ol style="list-style-type: none"> Functional & Technical Design Specifications Design review and sign off by business IT architectural approval SOX controls approval Testing plans/business use cases Infrastructure plan

Specification Number	Importance	Source (PRP, interview, etc)	Specification (Metric)	Unit of Measure	Target Value	Expected Date of Completion	Comments/Status	Link to plan	Concluded Condition
S1	9	interview	Create Droplet	Micro Liters	1± 5%	Week 4	Can be tested with S9	Link to S1 plan	
S2	3	PRP	Controlled Temperature Range	°C	5-25	Week 7		Link to S2 plan	
S3	3	PRP	Humidity Display Accuracy	% RH	+/-5%	Week 7		Link to S3 plan	
S4	3	interview	Temperature Display Accuracy	°C	+/-1	Week 7		Link to S4 plan	
S5	3	PRP	Maximum Test Set-Up Time	Minutes	10	Week 11		Link to S5 plan	
S6	9	interview	Safety Latch Functionality	On/Off	On	Week 10	Dependent on controls	Link to S6 plan	
S7	9	FD	Ability to View Under Microscope	Yes/No	Yes	Week 5		Link to S7 plan	
S8	9	FD	Ability to View Under Camera	Yes/No	Yes	Week 5		Link to S8 plan	
S9	9	DR	Evaporation After 30 Min	% Volume	<5%	Week 4	Requires S2 Completion	Link to S9 plan	
KEY for Concluded condition									
X	Does not meet expectation								
Δ	Caution-Undetermined if specification is met								
O	Meets specification								

Identify strong TR & EM

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