

ProjectDesignPhase-II
SolutionRequirements(Functional&Non-functional)

Date	10oct2023
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ProjectName	Solar Panel Forecasting

FunctionalRequirements:

Followingarethefunctionalrequirementsoftheproposedsolution.

FRNo.	FunctionalRequirement(Epic)	SubRequirement(Story/Sub-Task)
FR-1	User Registration andAuthentication	Usersshouldbeabletoregister Usersshouldabletcreateanaccount. Usersshouldbeabletologinsecurelyusingtheircredentials.
FR-2	Searchandimprove functionality	Usersshouldbeabletofindandbooktheirrespective searches with filters and able to view analysis of it
FR-3	CustomerSupport	Usersshouldbeabletoaccesshelpdocumentation Usersshouldbeabletoaccessfrequentlyaskedquestions.
FR-4	UserProfileandPreferences	Users should be able to create and manage theirprofiles,includingpersonalinformationandtravelpreferences.
FR-5	NotificationsandAlerts	Usersshouldbeabletocustomizetheirnotificationpreferences.
FR-6	PaymentIntegration	Usersshouldbeabletoentertheirpaymentinformation. Usersshouldbeabletoentertheircreditcarddetails, securely.

2Non-Functionalrequirements

FRNo.	Non-FunctionalRequirement	Description
NFR-1	Usability	The user interface should be intuitive and user-friendly, allowing energy operators and analysts to interpret forecasts easily and make informed decisions.
NFR-2	Security	Data confidentiality and integrity should be maintained, protecting sensitive information related to solar panel configurations, energy production, and weather data.
NFR-3	Reliability	The forecasting model should be reliable and consistent, providing accurate predictions under varying weather conditions and across different geographical locations.
NFR-4	Performance	The system should provide fast and accurate forecasts, ensuring real-time or near-real-time predictions for efficient energy management.
NFR-5	Availability	The forecasting system should be available 24/7, ensuring continuous monitoring and forecasting capabilities to support energy grid operations.
NFR-6	Accuracy	The system should strive for high accuracy in forecasting solar energy production, minimizing errors and ensuring reliable predictions for decision-making.
NFR-7	Scalability	The forecasting system should handle a large volume of data efficiently, accommodating an increasing number of solar panels and data sources without compromising performance.

