

# FUNCTIONAL REQUIREMENTS

## Machine learning-based predictive analytics for aircraft engine

S.No	Functional Requirements	Explanation
1	Business requirements	Products, systems, software and processes are ways of how to deliver, satisfy business requirements. 1. Identifying relevant stakeholders 2. Establish project goals and objectives 3. Elicit requirements from stakeholders 4. Document the requirements 5. Confirm the requirements 6. Prioritize the requirements
2	User Requirements	Specifies what the software should be able to do 1. They should bring valuable results with accurate prediction 2. Prediction must be on time and should be able to save lives 3. They need accuracy while predicting with pre-historical datasets
3	Product Requirements	It defines the product you are about to build 1. Its main goal is to predict whether an engine will be in working condition based on the provided sensor values 2. Its main feature is to give the exact remaining time an engine could run for an aircraft
4	Transaction handling	It means the user can access multiple data from the database without being interfaced by others 1. Historical data can be accessed without any issues 2. Technicians must have access with the database maintenance 3. Results must be accessible to anyone with the permission to predict the values
5	Business requirements and certification requirements	A proper certificate has to be provided for the project 1. It must be issued by the proper aviation industry management system under the control of the government 2. Certification enables it as a non-hazardous project. Thus it increases the trust among the general public