

**PROJECT DESIGN PHASE-II**

**SOLUTION REQUIREMENTS(FUNCTIONAL&NON  
FUNCTIONAL)**

DATE	24 MAY 2023
TEAM ID	NM2023TMID17750
PROJECT NAME	DEEP LEARNING MODEL FOR DETECTING DISEASES IN TEA LEAVES

**FUNCTIONAL REQUIREMENTS:**

FR NO	FUNCTIONAL REQUIREMENT	SUB REQUIREMENT
FR-1	IMAGE ACQUISITION	DATASET COLLECTION MANAGEMENT
FR-2	PREPROCESSING	MODEL DEVELOPMENT AND TRAINING
FR-3	DISEASE DETECTION	FEATURE EXTRACTION AND REPRESENTATION
FR-4	CLASSIFICATION AND LOCALIZATION	DISEASE DETECTION ALGORITHM

## NON FUNCTIONAL REQUIREMENTS:

FR NO	NON FUNCTIONAL REQUIREMENT	DESCRIPTION
NFR-1	USABILITY	THE MODEL SHOULD BE USABLE IN ITS EFFECTIVENESS AND ADOPTION
NFR-2	SECURITY	THE MODEL SHOULD ADHERE TO DATA PRIVACY REGULATIONS AND ENSURE THE SECURITY OF USER DATA
NFR-3	RELIABILITY	THE MODEL SHOULD BE RELIABLE IN DETECTING TEA LEAF DISEASES
NFR-4	PERFORMANCE	THE MODEL SHOULD EXHIBIT HIGH PERFORMANCE CHARACTERISTICS INCLUDING FAST INFERENCE TIMES AND EFFICIENT RESOURCE UTILIZATION
NFR-5	AVAILABILITY	THE MODEL SHOULD BE AVAILABLE FOR THE UNSEEN

		TEA LEAF AND VARAITION OF TEA LEAF
NFR- 6	SCALABILITY	THE MODEL SHOULD BE SCALABLE CPABLE OF HANDLING VARYING VOLUMES OF TEA LEAF IMAGE