

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

Date	06 May 2023
Team ID	NM2023TMID18418
Project Name	CancerVision: Advanced Breast Cancer Prediction with Deep Learning

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User	Sign in
FR-4	User	Sign up

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	To perform classification or segmentation on large complex images, a common strategy involves the use of a classifier in sliding window fashion to recognize local patches on an image to generate a grid of probabilistic outputs.
NFR-2	<b>Security</b>	Detection of tumor cells in a histologic section is the first step for the pathologist when diagnosing breast cancer (BCa). In particular, tumor delineation from background uninvolved tissue is a necessary prerequisite for subsequent tumor staging, grading and margin assessment by the pathologist <sup>1</sup>
NFR-3	<b>Reliability</b>	Invasive breast cancers are those that spread from the original site (either the milk ducts or the lobules) into the surrounding breast tissue

NFR-4	<b>Performance</b>	Digital pathology refers to the process of digitization of tissue slides. The process of slide digitization could enable more efficient storage, visualization, and pathologic analysis of tissue slides and could potentially improve overall efficiency of routine diagnostic pathology workflow.
NFR-5	<b>Availability</b>	These comprise roughly 70% of all breast cancer cases <sup>7,8</sup> , and they have poorer prognosis compared to the in-situ sub-types .
NFR-6	<b>Scalability</b>	A neural network is composed of artificial neurons that are arranged in layers and interchange information through connections.