

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

Date	03 October 2022
Team ID	Project - PNT2022TMID24832
Project Name	Project - Real Time Hand Symbol recognition
Maximum Marks	4 Marks

**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 username and password.
FR-2	User Confirmation	Confirmation via Email
FR-3	Live streaming	* User should be taken to a screen where he can upload a video. * User should also be able to stream live video from his webcam.
FR-4	Storing Live stream	Incase of a live stream the video should be captured for later playback.
FR-5	Displaying the interpreted text	The interpreted text from the hand symbol within the each frame of the video should be displayed side by side as the video is being played.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The platform should be seamless in converting images to text with very little errors.
NFR-2	<b>Security</b>	Session Authentication should be used to secure users and their activity
NFR-3	<b>Reliability</b>	Platform should be reliable without bugs and api errors.
NFR-4	<b>Performance</b>	Since the interpreted text needs to be displayed real time, latency should be within 500 - 1000ms.
NFR-5	<b>Availability</b>	Platform should be highly available with multiple backend servers with load balancing.
NFR-6	<b>Scalability</b>	App should be scalable independently with frontend and backend servers. Frontend servers will take care of streaming the video to the backend server where model inference happens.