

## Requirement analysis

### Solution Requirements

Date	9 Feb 2026
Team ID	LTVIP2026TMIDS65841
Project Name	Translingua: ai-powered multi-language translator
Maximum Marks	4Marks

#### Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Language Detection	Automatically detect the source language of the input text accurately.
FR-2	Text Translation	Translate text from the source language to the selected target language using AI models.
FR-3	Translation Accuracy	Achieve high translation accuracy using neural machine translation techniques.
FR-4	User Satisfaction	Provide fast, reliable, and clear translations through an easy-to-use interface.
FR-5	Multi-Language Support	Support translation across multiple widely used languages.

### **Non-functional Requirements:**

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

<b>NFR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	Usability	The system shall provide a simple and intuitive web interface for entering text and viewing translated output.
NFR-2	Reliability	The system shall deliver consistent and accurate translations under normal operating conditions.
NFR-3	Performance	The system shall generate translations within 2–3 seconds with minimal latency.
NFR-4	Availability	The system shall remain operational and responsive during all active user sessions or demonstrations.
NFR-5	Scalability	The system shall support future expansion to additional languages and higher numbers of concurrent users.