Ideation Phase
Brainstorm & Idea Prioritization Template

Date	31 January 2026
Team ID	LTVIP2026TMIDS88360
Project Name	Civil Engineering Insight Studio
Maximum Marks	4 Marks

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Brainstorm & idea prioritization

Before you collaborate

A Team gathering

- **Radha Sri**: Responsible for technical feasibility, API integration, and ensuring linguistic accuracy across all scenarios.
- **Leela Krishna**: Responsible for session facilitation, idea prioritization, and designing user scenarios and UI layouts.

B Set the goal

- **Scenario 1 (Business):** Maintaining a professional "brand voice" instead of literal word-for-word translation.
- **Scenario 2 (Academic):** Preserving dense formatting and technical terminology in research papers.
- **Scenario 3 (Travel):** Optimizing the interface for high-speed performance on spotty mobile data.

C Learn how to use the facilitation tools

- **Leela Krishna** will act as the facilitator, setting a strict **5-minute timer** for each "How Might We" statement to maintain momentum.
- **Radha Sri** will use technical expertise to validate ideas in real-time, ensuring that suggestions like "Context Tags" are possible using the Gemini API.

1 Define your problem statement

How might we use Generative AI to provide context-aware, professional-grade translations that preserve the specific tone and formatting required for business, academic, and travel use cases?

Step-2: Brainstorm, Idea Listing and Grouping

Brainstorm

Radha sri

Context Tags: Allows users to specify if text is a legal contract or a casual chat.

Latency Toggle: A switch to move between high-speed basic translation and deep-reasoning accuracy.

Markdown/LaTeX Formatter: Automated tool to keep academic papers looking professional.

"Dual-Pane View: For researchers to see the original and translated text side-by-side."

Leela Krishna

Traveler's Quick-Key: A high-visibility interface with large buttons for urgent phrases like "Where is the station?".

Brand Voice Upload: A feature for businesses to upload a glossary of terms for the AI to follow.

AI Emotion Analyzer: A tool that displays the specific tone of the translated text.

Camera API Integration: Translating text directly from live images for travelers.

History & Favorites: A dashboard to save frequently used academic citations or business phrases.

Group ideas

A. Contextual Intelligence (The "Pro" Mode)

Instead of a standard translation button, the team proposed a **Context Selector**:
- **Radha Sri** suggested **Context Tags** (Legal vs. Casual) and a **Latency Toggle** for switching between speed and deep-reasoning accuracy.
- **Leela Krishna** added a **Brand Voice** upload feature so businesses can ensure the AI follows specific glossaries.

B. Adaptive User Interfaces

The group proposes a **Scenario-Based UI** that changes based on the user's immediate environment:
- **Leela Krishna** proposed a **Travel Mode** with a "Quick-Key" interface (large buttons, high contrast) and live camera API integration.
- **Radha Sri** proposed a **Research Mode** featuring a split-screen "Dual-Pane View" for side-by-side comparison of source and target text.

C. Reliability & Feedback Loop

To ensure professional-grade results, the team included quality control features:
- **Leela Krishna** suggested an **AI Emotion Analyzer** to detect and display the tone of the translated text.
- **Radha Sri** suggested a **Back-Translation** feature to verify meaning by translating the result back into the source language.

Step-3: Idea Prioritization

Prioritize

Importance

Contextual Mode

Streamlit Mobile-First UI

Tone & Accuracy Analyzer

Live Camera Translation

Feasibility