Project Design Phase-I Proposed Solution Template

| Date | 9 November 2023 |
|---------------|--------------------------|
| Team ID | Team-612739 |
| Project Name | Image caption generation |
| Maximum Marks | 4 Marks |

Proposed Solution Template:

| S.NO | Parameter | Description |
|------|--|--|
| 1 | Problem Statement (Problem to be solved) | In today's digital era, there's a pressing need for tools that translate images into contextual |
| | | textual descriptions, serving everyone from the visually impaired to content creators. |
| 2 | Idea / Solution description | A deep learning-based system combining CNNs and RNNs/Transformers to generate accurate and contextually relevant image captions. |
| 3 | Novelty / Uniqueness | Adaptive learning from user feedback, offering multiple captioning styles (formal to poetic). |
| 4 | Social Impact / Customer Satisfaction | Enhanced web accessibility, streamlined content creation, and educational applications. |

| 5 | Business Model (Revenue Model) | Freemium services with premium |
|---|--------------------------------|-------------------------------------|
| | | features, API licensing for |
| | | businesses, and an ad-supported |
| | | platform. |
| 6 | Scalability of the Solution | Infrastructure ready for user |
| | | growth, potential extension to |
| | | video captioning, and adaptation |
| | | for specialized fields like medical |
| | | imaging |