

Ideation Phase

Empathize & Discover

Date	7 November 2023
Team ID	Team-612739
Project Name	Image caption generation
Maximum Marks	4 Marks

Empathy Map:

Image Caption Generation:

Image caption generation is the process of creating a descriptive written caption that explains the key details of a given picture or image. This task involves generating a human-readable textual description based on the content of an image, such as a photograph. While this may seem straightforward for humans, it presents a significant challenge for computers, as it requires both understanding the image's content and the ability to translate that understanding into natural language.

In recent years, deep learning methods have emerged as the leading approach for automatically generating descriptions, often referred to as 'captions,' for images. This project explores how deep neural network models can be employed to automatically generate descriptive captions for images, particularly photographs. The project utilizes a combination of Convolutional Neural Networks (CNN) and Long Short-Term Memory (LSTM) networks to achieve this.

As the field of deep learning continues to advance, the availability of extensive datasets and computing power becomes increasingly vital in building robust models capable of generating image captions. This Python-based project leverages deep learning techniques, including CNN and RNN, to address this task.

