

# Define the Problem Statements

**Date:** 27 June 2025  
**Team ID:** LTVIP2025TMID45523  
**Project Name:** Enchanted Wings: Marvels of Butterfly Species  
**Maximum Marks:** 2 Marks

## Customer Problem Statement Template:

Enchanted Wings leverages transfer learning to classify 6499 images across 75 butterfly species, supporting biodiversity monitoring, ecological research, and citizen science. This template helps articulate customer problem statements to understand stakeholder needs, enabling the creation of effective solutions for species identification and conservation.

### Problem Statement (PS)

<b>PS-1</b>	I am a field researcher I’m trying to identify butterfly species quickly in diverse habitats But manual identification is time-consuming and error-prone Because I lack access to real-time, accurate tools in the field Which makes me feel frustrated and inefficient
<b>PS-2</b>	I am a citizen scientist I’m trying to contribute to butterfly conservation and learn about species But I struggle to identify butterflies accurately with available resources Because I lack an accessible, user-friendly tool with educational content Which makes me feel discouraged and disconnected from conservation efforts
<b>PS-3</b>	I am an ecologist I’m trying to study butterfly distribution and ecological patterns But collecting and analyzing large-scale data is labor-intensive Because there’s no integrated system for automated classification and data aggregation Which makes me feel overwhelmed and limited in research scope

