Problem - Solution Fit Template

Date: 27 June 2025

Team ID: LTVIP2025TMID33796

Project Name: Enchanted Wings: Marvels of Butterfly Species

Maximum Marks: 2 Marks

Problem – Solution Fit Template

Enchanted Wings leverages transfer learning to classify 6499 images across 75 butterfly species, enabling biodiversity monitoring, ecological research, and citizen science. This template identifies customer problems and proposes solutions that align with their behaviors, ensuring effective adoption of the butterfly classification system.

Purpose

- Address complex identification and data collection challenges for users.
- Enhance solution adoption by leveraging existing user behaviors (e.g., mobile app usage, field research).
- Refine communication to highlight benefits for conservation and education.
- Increase engagement by solving urgent needs like accurate species identification.
- Improve user experience by understanding current challenges and behaviors.

Template

1: Purpose - Address Complex **Challenges**

Enhance solution adoption by leveraging existing user behaviors, such as mobile app usage for photography or field research practices.

2: Purpose - Enhance Solution Adoption

Solve complex identification and data collection challenges for users of the butterfly classification system

> This purpose highlights the need to tackle difficulties faced by users

3. Purpose - Refine Communication

Refine communication to highlight benefits for conservation and education, making the system appealing to users.

4: Purpose - Increase Engagement

Increase engagement by solving urgent needs, such as accurate and rapid species identification for conservation efforts.

5.Purpose - Improve User Experience 6: Table Column - Customer

Improve user experience by understanding current challenges and behaviors to create a user-friendly system.

- Row 1: Citizen Scientist
- Row 2: Field Researcher
- Row 3: Ecologist

7: Table Column - Problem

Struggles to accurately identify butterfly species and contribute to conservation.

8: Table Column - Behavior

Takes photos with smartphones, participates in community science projects.

9: Table Column - Solution

Mobile app with real-time classification and educational content.