

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	IBM-Project-45191-1660728751
Project Name	Digital Naturalist - AI Enabled Tool for Biodiversity Researchers
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>Identifying different species of flora and fauna just based on human knowledge is impractical due to the sheer number of species that exist. Being able to identify flora and fauna around us often leads to an interest in protecting wild spaces, and collecting and sharing information about the species. Hence, it is necessary to be able to identify them accurately.</p> <p>To build a CNN-based model that can classify the different species of birds, mammals and flowers and get the prediction of the bird when an image is given. The classification model will be built as a web app with a simple UI for easy usability. This application can be used by naturalists to explore and identify the various species present in nature.</p>
2.	Idea / Solution description	<ul style="list-style-type: none">• Frequently update the database.• Get reviews from users.• Feedback through voice and message.• Language translation.• Show similar images with description.• Shows their habits, habitats, living and grouping.
3.	Novelty / Uniqueness	<p>Finding the plant just by scanning the leaves. No further details is essential.</p> <p>It shows the information like their habits, habitats, etc,...</p> <p>Field naturalists can use this web app from anywhere to identify the birds, flower, mammals and other species they see on their hikes canoe trips and other excursions.</p>

4.	Social Impact / Customer Satisfaction	Being able to identify the flora and fauna around us often leads to an interest in protecting the world species. Collecting and sharing information about the species we see on our travels is very useful for conserving groups like NCC.
5.	Business Model (Revenue Model)	Can make money through subscription based. Partnership with Laboratories and Researchers around the world.
6.	Scalability of the Solution	Can use the web app anytime and anywhere around the world. Database is updated Frequently. More than 2 Language Description is available. According to the customers review we can add extra information if they point out. If there is any issue in using the app we can sort out.