Project Design Phase-I
Proposed Solution Template

Date	03 Actober 2022
Team ID	PNT2022TMID39141
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)	To identify a species in a forest or in any other place, we need to carry a heavy book or seek a professional like botanist or zoologist or an ornithologist, but there should be a handy tool for them to capture, identify and share the beauty to the outside world.
2.	Idea / Solution description	A system is built by using the Image/object recognition and classification using (CNN) Convolutional neural network which while using this system, we can capture the image of any animals and plants and can obtain the information about the flora and fauna at any time.
3.	Novelty / Uniqueness	Use of transfer learning in pre trained models to increase accuracy and training time along with data augmentation to increase the dataset size which will in turn yield more accuracy
4.	Social Impact / Customer Satisfaction	The user can identify the type of species faster and easier without searching in books page by page. It is a useful product for all the research analyst, Ornithologist, Biologist and Marine drivers who can instantly capture images of different species and are able to get all the relevant information about those breeds.
5.	Business Model (Revenue Model)	The model could be open sourced, but we can get some revenue via ads. we will also add a few extra applications like storage and bookmarks permanently for a specific amount of payment.

6.	Scalability of the Solution	The system apart from researchers can also be used by students, hikers or other people who are very much interested in the wildlife. This can also help children learn about different species and their sub species of different flora and fauna which can only be found in the other part of the world.