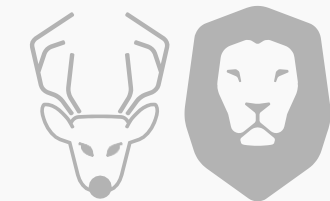# Digital Naturalist- AI Enabled tool for Biodiversity Researchers.

A naturalist is someone who studies the patterns of nature, identifies a different kind of flora and fauna in nature. Being able to identify the flora and fauna around us often leads to an interest in protecting wild spaces, and collecting and sharing information about the species we see on our travels is very useful for conservation groups like NCC. When venturing into the woods, field naturalists usually rely on common approaches like always carrying a guidebook around everywhere or seeking help from experienced ornithologists. There should be a handy tool for them to capture, identify and share the beauty to the outside world. Field naturalists can only use this web app from anywhere to identify the birds, flowers, mammals and other species they see on their hikes, canoe trips and other excursions. in this project, we are creating a web application which uses a deep learning model, trained on different species of birds, flowers and mammals (2 subclasses in each for a quick understanding)and get the prediction of the bird when an image is been given.

1 Define your problem statement
What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

PROBLEM

1. Identify the flora and fauna using deep learning techniques and to recommend the related information about them.
2. Provide dataset information for recognized flora and fauna.?

Key rules of brainstorming
To run an smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

2 Brainstorm
Write down any ideas that come to mind that address your problem statement.

10 minutes

Keerthana s
- endangered species library
- floral dependency
- online ornithologist
- dataset customization
- user friendly web application
- wildlife and santuaries locator

Ramya s
- medical documentary
- user contribution
- Geo habitat locater
- snake poison classification
- prediction classification on shapes
- online ichthologist

Abina A
- ebook
- animal sound detector
- individual pattern recognization
- DL based animal classifier
- sworn enimies(animal territorials)
- Fossil findings

Priyalakshmi P
- semantic links(linked open data)
- breed specializations
- foodchain classifier
- individual pattern recognization
- significant use dichotomous key
- dichromatic classification

Abina A
- bio-inspired algorithms
- online ornithologist
- leaf analysis(floral)
- season forecasting using migration
- delieverables from animals after decease
- footprint impression analyzer

3 Group ideas
Use this space to group similar ideas from the brainstorm. Each group should have a title that describes what the ideas have in common. If a group is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

20 minutes

CATEGORY 1
- floral dependency
- leaf analysis(floral)
- significant use dichotomous key
- DL based animal classifier
- Fossil findings

CATEGORY 2
- online ornithologist
- ebook
- user friendly web application
- online ornithologist
- online ichthologist

CATEGORY 3
- prediction classification on shapes
- snake poison classification
- foodchain classifier
- sworn enimies(animal territorials)
- dichromatic classification

CATEGORY 4
- Geo habitat locater
- wildlife and santuaries locator
- individual pattern recognization
- season forecasting using migration
- dataset customization

4 Prioritize
Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

Importance
If each of these tasks could be done without any difficulty or cost, which would have the most positive impact?

Feasability
Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

- online ornithologist
- online ichthologist
- footprint impression analyzer
- dataset customization
- endangered species library
- leaf analysis(floral
- Fossil findings
- animal sound detector
- user contribution
- individual pattern recognization
- breed specializations
- floral dependency