Project Design Phase-I
Solution Architecture

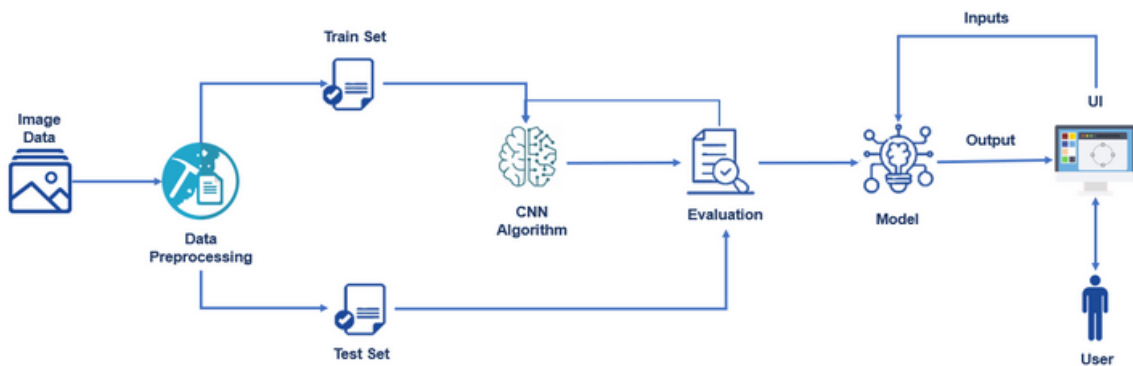| Date	19th Sept 2022
Team ID	PNT2022TMID52996
Project Name	**Digital Naturalist - AI Enabled tool for Biodiversity Researchers**
Max Marks	4

Fig : Solution Architecture Diagram

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions.

Its goals are to:

• Find the best tech solution to solve existing business problems.

• Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.

• Define features, development phases, and solution requirements.

• Provide specifications according to which the solution is defined, managed, and delivered.

Our Solution Architecture Describes the following :

Images of different flora and fauna are collected and preprocessed. This data set is then segregated into a training set and a test set. The training set is used to train a model using CNN algorithm. The test set is then used to evaluate the trained model to determine its accuracy. The evaluated model is integrated with UI. When the UI sends input (images in this case) to the model, it predicts the type of species in the image and sends the output back to the UI.

Reference:
https://aws.amazon.com/blogs/industries/voice-applications-in-clinical-research-powered-by-ai-on-aws-part-1-architecture-and-design-considerations/