



# ARCHITECTURE

## MUSHROOM CLASSIFICATION



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## Introduction :

To build a model to predict whether a mushroom is edible or poisonous , by looking at 23 species of gilled mushrooms we have to identify whether a mushroom is edible or poisonous

This dataset includes descriptions of hypothetical samples corresponding to 23 species of gilled mushrooms in the Agaricus and Lepiota Family Mushroom drawn from The Audubon Society Field Guide to North American Mushrooms (1981)

## Scope :

The architecture design document is a technical document describing the components and specifications required to support the solution and ensure that the specific business and technical requirements of the design are satisfied.

This process can be used for performing algorithms, building models and used to design required architecture. The main purpose of the architecture is to make a design where we can understand the model and flow of the model

## **Develop Code**

- **Importing data:**

Data Import joins the offline data you've uploaded with the default hit data being collected by Analytics from your websites, mobile apps or other devices. Imported data can be used to enhance your reports, segments and remarketing audiences in ways that reflect your own business needs and organization. The downloaded data file is loaded into python file with the help of pandas.

- **EDA and Data Cleaning :**

Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabeled.

Exploratory Data Analysis (EDA) is an approach to analyze the data using visual techniques. It is used to discover trends, patterns, or to check assumptions with the help of statistical summary and graphical representations.

- **Model Selection :**

Model selection is the task of selecting a statistical model from a set of candidate models, given data. In the simplest cases, a pre-existing set of data is considered. However, the task can also involve the design of experiments such that the data collected is well-suited to the problem of model selection.

## Local Git Repository :

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A Git repository is the .git/ folder inside a project. This repository tracks all changes made to files in your project, building a history over time. Meaning, if you delete the .git/ folder, then you delete your project's history.

## GitHub Repository :

A repository contains all of your project's files and each file's revision history. You can discuss and manage your project's work within the repository.

GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere.

## Render:

"Render" is a cloud platform that offers application hosting services for developers. It provides a simplified and scalable infrastructure for deploying and managing web applications, APIs, and other cloud-based services.

## Deployment :

There are multiple ways to deploy the project in the web one of the simplest way is to publish directly on Render cloud platform. One can easily publish the work in Render and it will open in web browser. The user can just open the link of Render cloud platform , and it is public you can share it via a link.

Deploying an application in Render is a straightforward process. After creating an account, you can easily connect your code repository, configure deployment settings, and initiate the deployment. Render takes care of building and deploying your application, handling dependencies, and configuring the necessary infrastructure. You can monitor the deployment progress in real-time and test your application once it's deployed. Render provides a user-friendly dashboard for managing your application, including custom domain configuration, scaling resources, and managing databases.