



Can We Eat It?

...

Classification of Edible and Poisonous
Mushrooms.



What are Mushroom?

- Mushroom are a type fungi that grow from the ground.
- Some are edible and some are not.

The Problem:

The problem is deciding on which mushroom are good to eat and which are not.

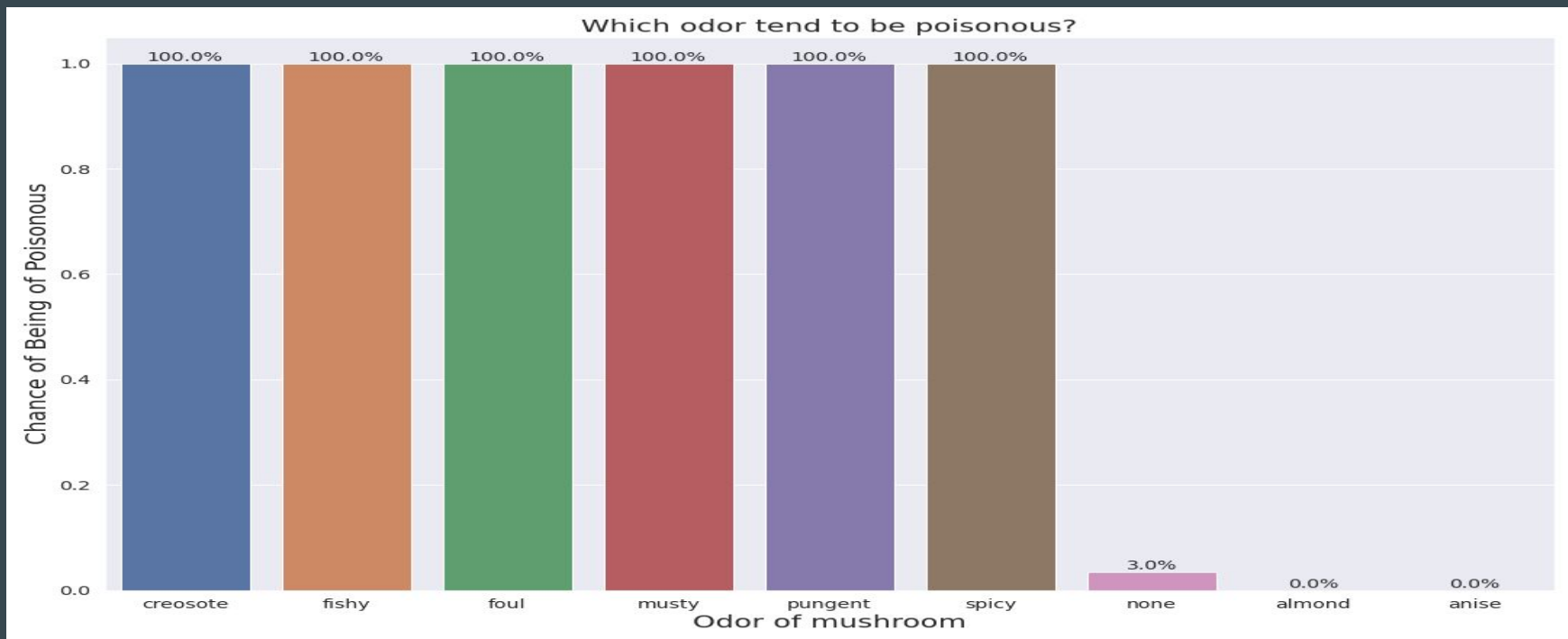
The Solution:

Create a machine Learning model that efficient at determining if a mushroom is edible or poisonous for production.

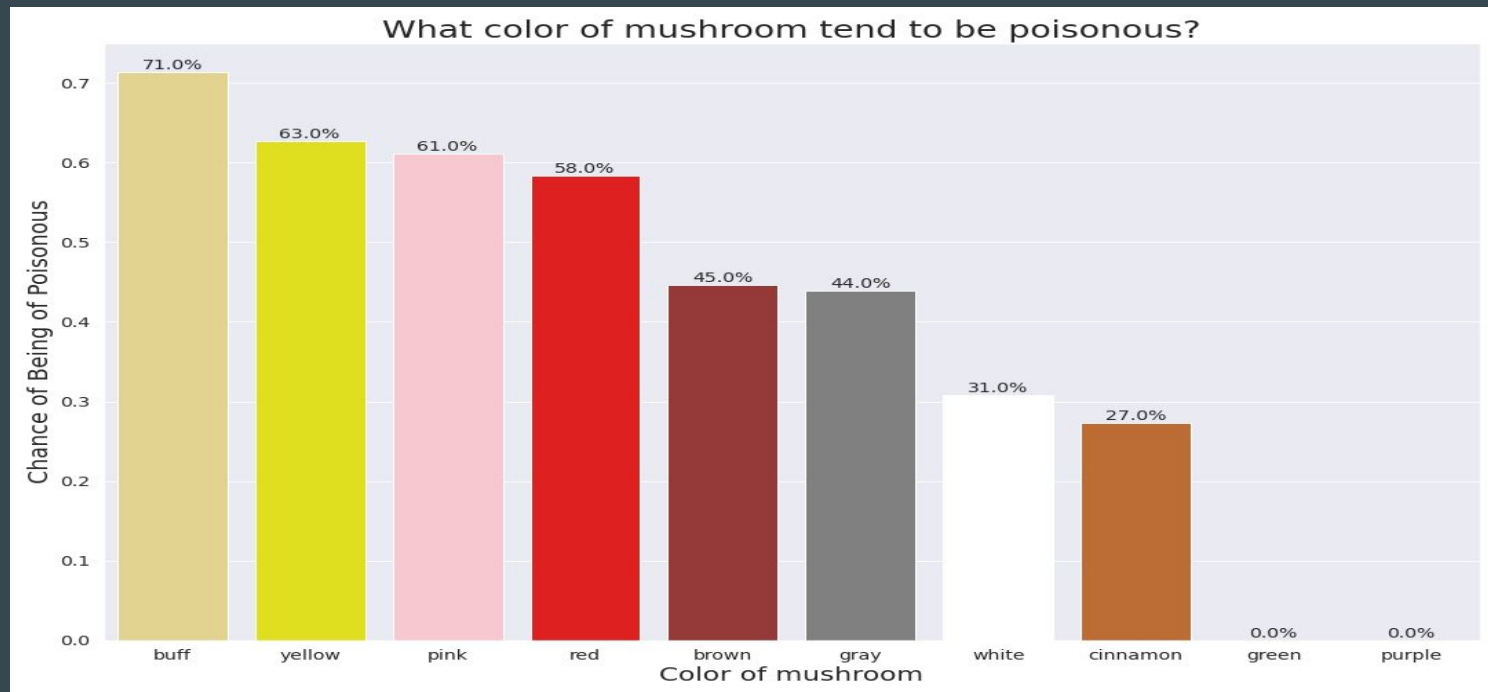
The Training Data

- We be training our model on UMI mushroom dataset.
- This dataset is make of hypothetical samples corresponding to 23 species of gilled mushrooms in the Agaricus and Lepiota Family Mushroom.

Insight from dataset



More Insight



Info on Model

- The model I recommend for production is a Logistic Regression that was hyperparameter tuned and preprocessed with the Principal Component Analysis algorithm to increase performance.
- The model has accuracy of 100%.

The reason for my recommendation

- The models is the fastest out all my model.
- It determine if mushroom is edible or poisonous with 100% precision.

Conclusion

In Conclusion, The goal is to make the most optimal model to determine if a mushroom is poisonous or edible based on a synthetic mushroom dataset. The final model was fastest and had accuracy of hundred percent, but because the dataset is based on a hypothetical dataset. I can not fully support putting it in production because I don't know how it will fare with real mushrooms.