MEDICINAL HERB CLASSIFIER

A website to identify the various types of medicinal herbs and provide a one-stop solution for everything related to medicinal herbs.

Presentation by Team We've Got Herbes

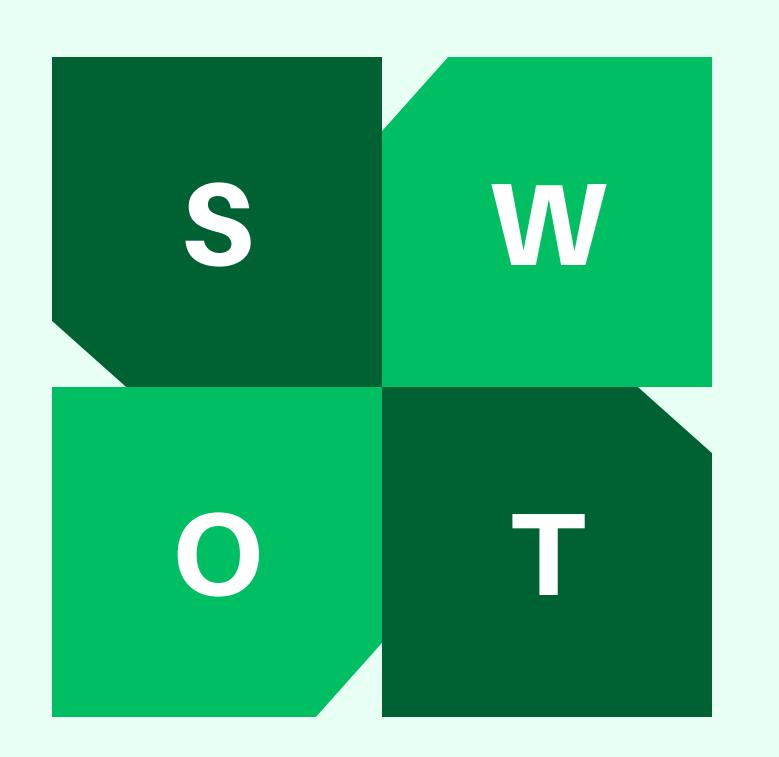


STRENGTHS

Easy-to-use interface that accurately classifies herbs for Ayurvedic companies, cosmetic companies.

OPPORTUNITIES

Incorporating computer vision to make it readily-available at the hands of everyone.



WEAKNESSES

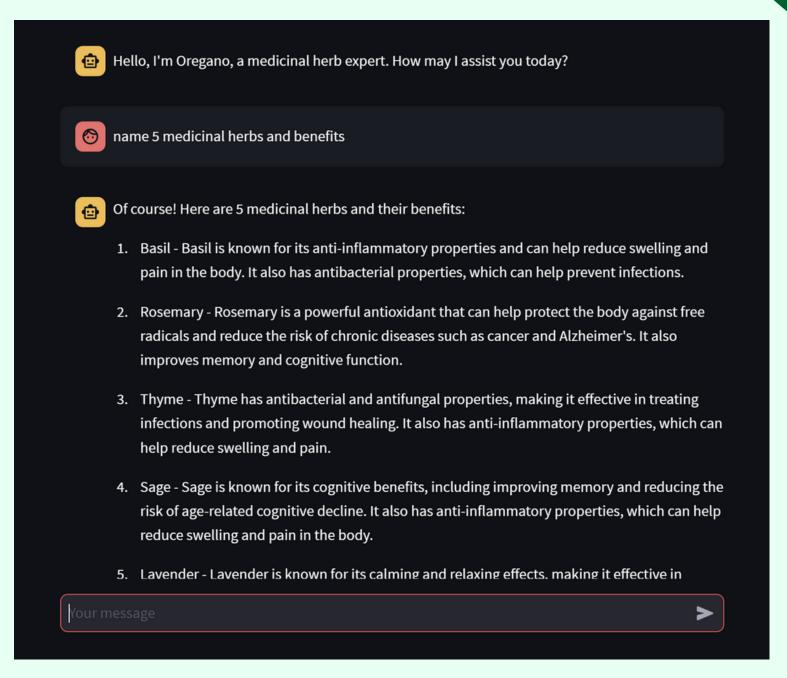
Lack of diverse database of medicinal herbs available to train the dataset on.

THREATS

Being open to the threats of corrupted and other incongruous files disrupting our model evaluation.

WHAT MAKES OUR PRODUCT UNIQUE?

Aside from fulfilling the requirements of the problem statement- we have implemented a **Language Learning Model**, that is tailor-made to answer all questions related to **medicinal herbs**, and provide in-site information regarding all classes and medicinal plant species.



REPORT

DL Transfer Learning Options on 2.72 GB dataset of 190 classes

Training Models	Accuracy	Time taken(hours)	Epochs	Parameters(built-in) (millions)	Comments
ResNet-50	60.54	8	50	25.6	low accuracy
Inception-V4	<mark>94.67</mark>	<mark>12</mark>	<mark>50</mark>	<mark>42</mark>	Best option, high enough accuracy, moderate time, and does regularization; and lesser parameters
EffecientNetB0	90.12	20	50	5.3	high time
AlexNet	73.52	24	50	61	low accuracy
MobileNet	89.21	13	50	4.2	high time
VGG16	97.44	30	50	138	good accuracy but time is more; and no regularization

An analysis and comparison of all the DL models implemented on the dataset.