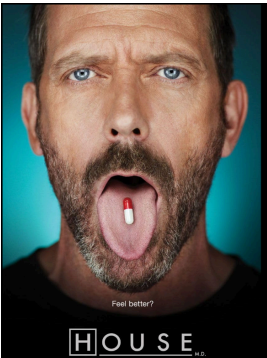


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HEALTHhOUSE: A dISEASE Discovery Tool

Project 4 Group 3 Proposal



: INSPIRATION

: [GITHUB REPO](#)

The TV show “House” served as inspiration for our group’s data science project, HEALTHhOUSE. We plan to combine our knowledge of Flask web application development, machine learning, algorithms and data visualizations to create a model that predicts diseases based on a pattern of symptoms. The plan for our predictive model is to assist users in identifying potential illnesses more efficiently, mirroring Dr. House and his medical team’s diagnostic prowess.

DATASET dETAILS:

- [Kaggle Link: Disease Prediction Using Machine Learning](#)
 - Access to prior code is available for this dataset. [Link](#)
 - This dataset includes 2 CSV files that contain 132 symptoms a person may experience and the possible prognosis based on the selected symptoms. There are a total of 42 diseases to which the symptoms may be attributed. The primary use for this dataset will cover the Machine Learning components used to create HEALTHhOUSE’s Discovery Tool Recommender.
- [Kaggle Link: Disease Prediction through Symptoms](#)
 - Access to prior code is available for this dataset. [Link](#)
 - This dataset includes 1 CSV file that contains 13 columns of information including the disease, symptoms, weight, height, intensity, severity, age, gender, BMI level, region, and season. The primary use for this dataset will be to create our HEALTHhOUSE Tableau dashboard/visualizations.

ROLES:

1. Shanara hawkins - Slide Deck, GitHub, JavaScript/Flask, Tableau, Write-Up,
2. Emmanuel presley - Machine Learning, Tableau, JavaScript/Flask, Slide-Deck, Write-Up
3. Ivette reese - Tableau, Machine Learning, Write-Up, Slide Deck, Write-Up
4. Jon unger - Tableau, Machine Learning, Slide Deck, Write-Up

TABLEAU

- **STORY:**
 - The Tableau Dashboard Story will provide an overall summary of disease patterns across various demographics and regions. It will include the count of symptoms per disease to provide insights on prevalent symptoms associated with each condition. Additionally, the dashboard will outline the distribution of diseases by region, highlighting geographical variations in disease prevalence.
- **VISUALIZATIONS:**
 - No immediate specific instances of Tableau visuals on this dataset were found. However, our professor shared an example dashboard that covered an adjacent topic, which will serve as an inspirational reference point when creating our dashboard and visualizations. Thanks Professor Booth! [Link](#)
 - Histogram - Stacked Bar Chart - Line Chart/Scatter Plot - Bubble Map
 - Venn Diagram - Pyramid - Box Plot

COLOR PALETTE OPTIONS:

