Dark Lord Chuckles The Silly Pig: Thomas Zhang, Lauren Lee, Diana Akhmedova
SoftDev Pd 7
P04 -- Health and Diet Recommendations
2023-04-28

Target Ship Date: 2023-05-23

Idea:

- Based on user input, determine the probability of the user getting a stroke or lung cancer
- Visualize the user's probabilities of getting a stroke and/or lung cancer using line charts
- Provide recipes for users trying to create a diet plan

Files Needed:

- HTML Files:
 - o register.html
 - login.html
 - o home.html
 - o stroke question.html
 - Health questions the user can answer (forms should avoid text response for easier matching with data sets) questions can be option-based to determine what information is considered
 - Questions such as age, gender, health habits
 - o results.html
 - Shows your inputted info in tables
 - Displays health results in line graphs
 - Graphs represent the probability of the user being diagnosed with a stroke or lung cancer over time based on health results
 - User can select which factors to account for
 - o recommendations.html
 - Enter an ingredient and receive recommendations for food/cuisine
 - Includes links to recipes

• CSS Files:

- o style.css
 - Extra CSS if needed

• JS Files:

- o script.js
 - Uses Chart.js for visualizations
 - Controls how the user interacts with the page

• Python Files:

- o heart.py, lung.py
 - Uses the questionnaire information to display the probability of being diagnosed with a stroke or lung cancer
 - Will use pandas to manipulate data
- o __init__.py
 - Flask app

• <u>SQLite Databases:</u>

o userinfo.db

User	Password
darkLord	sillyPig

o stroke.db

id	gender	age	disease	bmi	status	stroke
1	Male	15	yes	20	never smoked	4.73

o stroke_question.db

user	name	height	weight	sex	age	heart	smokes
darkLord	Chuckles	40	80	male	15	0	never smoked

o lung.db

id	age	gender	airpollution	alcoholuse	smoking	level
1	15	male	4	8	7	medium

o lung_question.db

user	name	height	weight	sex	age	alcohol	pollution	smokes
darkLord	Chuckles	40	80	1	15	8	4	7

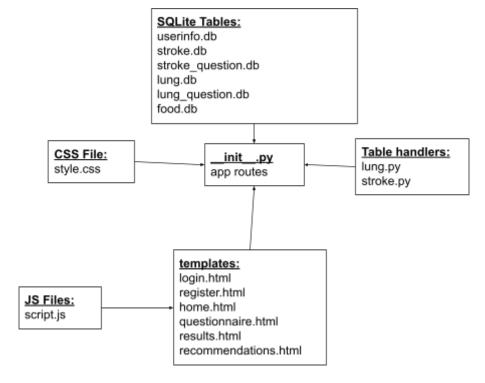
o food.db

user	label	calories	mealtype	cuisinetype	url	image
darkLord	chicken	1000	lunch	american	chickenrecipe.com	chicken.jpg

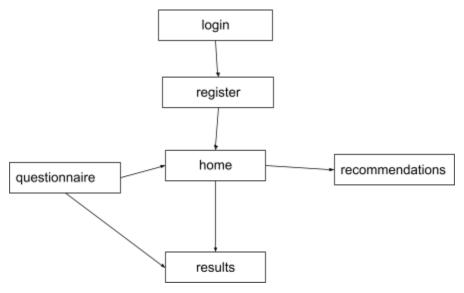
• API Files:

- o key_api0
- o key_api1

Component Map:



Site Map:



Front End Framework: Bootstrap

- Intend to incorporate Bootstrap cards
- Bad experience with Foundation last project

Tasks:

- ☑ Login Page (Thomas, Diana)
 - ☑ Create Account/Registration Page
- ☑ Home Page (Diana)
 - ☑ Style home page
 - ☑ Logout button
- ☑ Questionnaire Page (Lauren, Diana)
 - ☑ Stroke Ouestionnaire
 - ☑ Text: Name
 - ☑ Number: Height

 - ☑ Radio: Sex
 - ✓ Number: Age
 - ☑ Radio: Have you ever had a heart disease?
 - ☑ Radio: Have you ever smoked before?

☑ Text: Name ☑ Number: Height ☑ Number: Weight ☑ Radio: Sex ☑ Range: How would you rate your alcohol intake on a scale of 1-8 (1 = nondrinker, 8 = chronic drinker)? ☑ Range: How would you rate the air pollution of your living environment (1 = no pollution, 8 = severe pollution)? ☑ Range: How would you rate your smoking level from 1-9 (1 - nonsmoker, 8 - chronic smoker)? ☑ Results Page (Thomas, Lauren, Diana) ☑ Questionnaire form to SQLite table ✓ Stroke Graph: ☑ Integrate Stroke Prediction Dataset ☑ Display results as a graph visualization ☑ Integrate Lung Cancer Prediction Dataset ☑ Display results as a graph visualization ☑ Recommendations Page (Diana) ☑ Integrate EDAMAM Recipe API ☑ Display food as Bootstrap cards ☑ CSS - Make everything look nice and snazzy :D

APIs:

• EDAMAM Recipe API

Dataset:

- Stroke Prediction Dataset
- Lung Cancer Prediction Dataset

Ted Tools to Use:

• Pandas

Stretch Goals:

• Utilize the Google Calendar API to create a custom diet/exercise calendar for each user