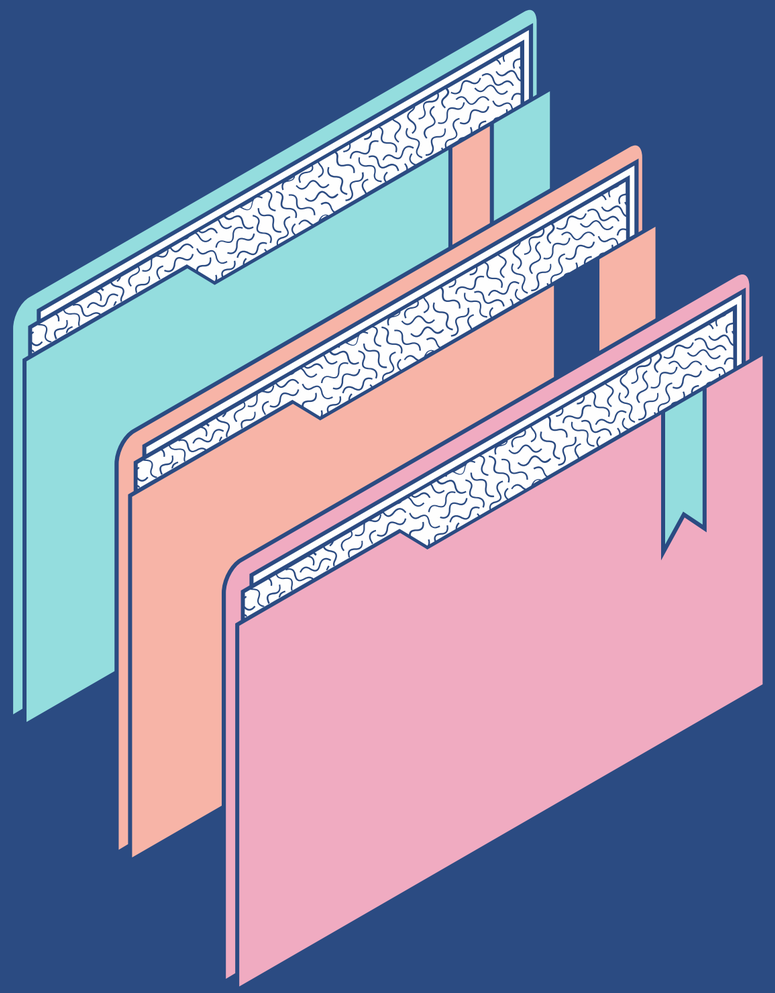
CE - 359

Software Group Project - IV

SWA-AROGYA

By:

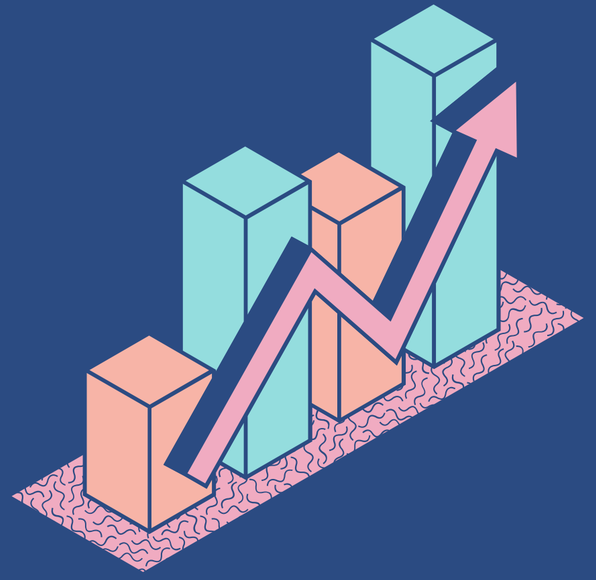
MARGIV AMIN (19CE002)
SAHIL BHUVA (19CE013)
NANDAN GADHETHARIA (19CE024)



Project Definition/Description

- A simple ML and DL based website which predicts/recommends if a person could be infected with different diseases or not.
- The principal aim of this project is to develop a ML web application with the help of Flask/HTML and various ML models helping possible patients of diabetes, cancer, and heart, kidney and liver diseases.
- It will be consisting of 5 ML modules/functionalities namely a Breast Cancer Prediction, Diabetes Prediction, Heart Disease Prediction, Kidney Disease Prediction, and Liver Disease Prediction.

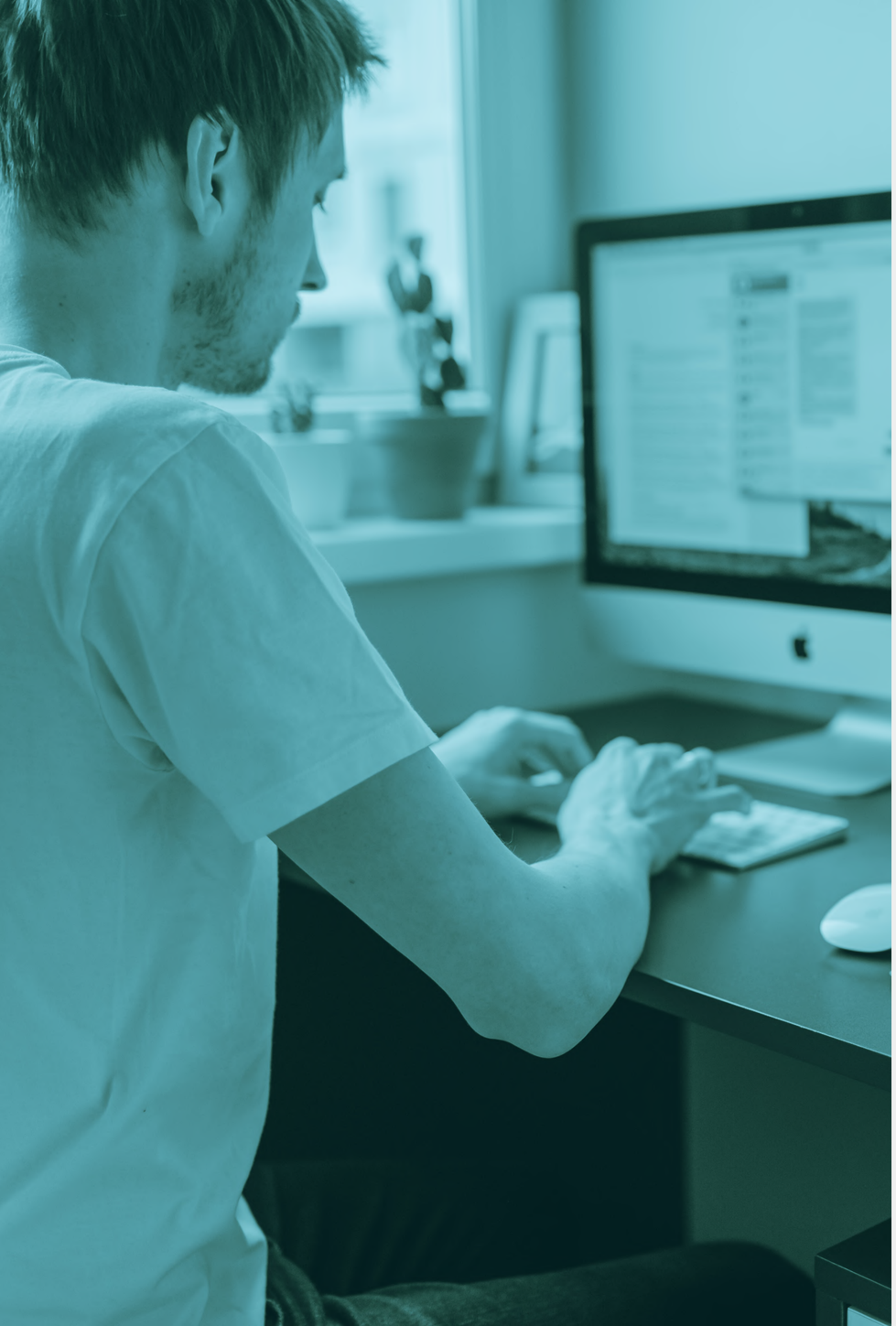
Motivation



- In the current scenario, the rate of encountering a disease have drastically increased in the past century, and sometimes we may not even know if we are even suffering from a disease.

- Many diseases affecting directly the heart, kidney and liver may be prevailing inside us asymptomatically that we may detect them only in a later stage when it is too late to be diagnosed with. Alongside, cancer and diabetes are also among such diseases go unrecognized by many people.

- To overcome these problems, we have developed a AI-empowered website named SWA-AROGYA to mitigate and help such people.



Technologies Used.

- FLASK (FRAMEWORK)
- HTML, CSS, JS, BOOTSTRAP
- GIT
- NUMPY, PANDAS, MATPLOTLIB,
- SCIKITLEARN
- JUPYTER NOTEBOOK
- AWS

GUI DESIGN APPROACH

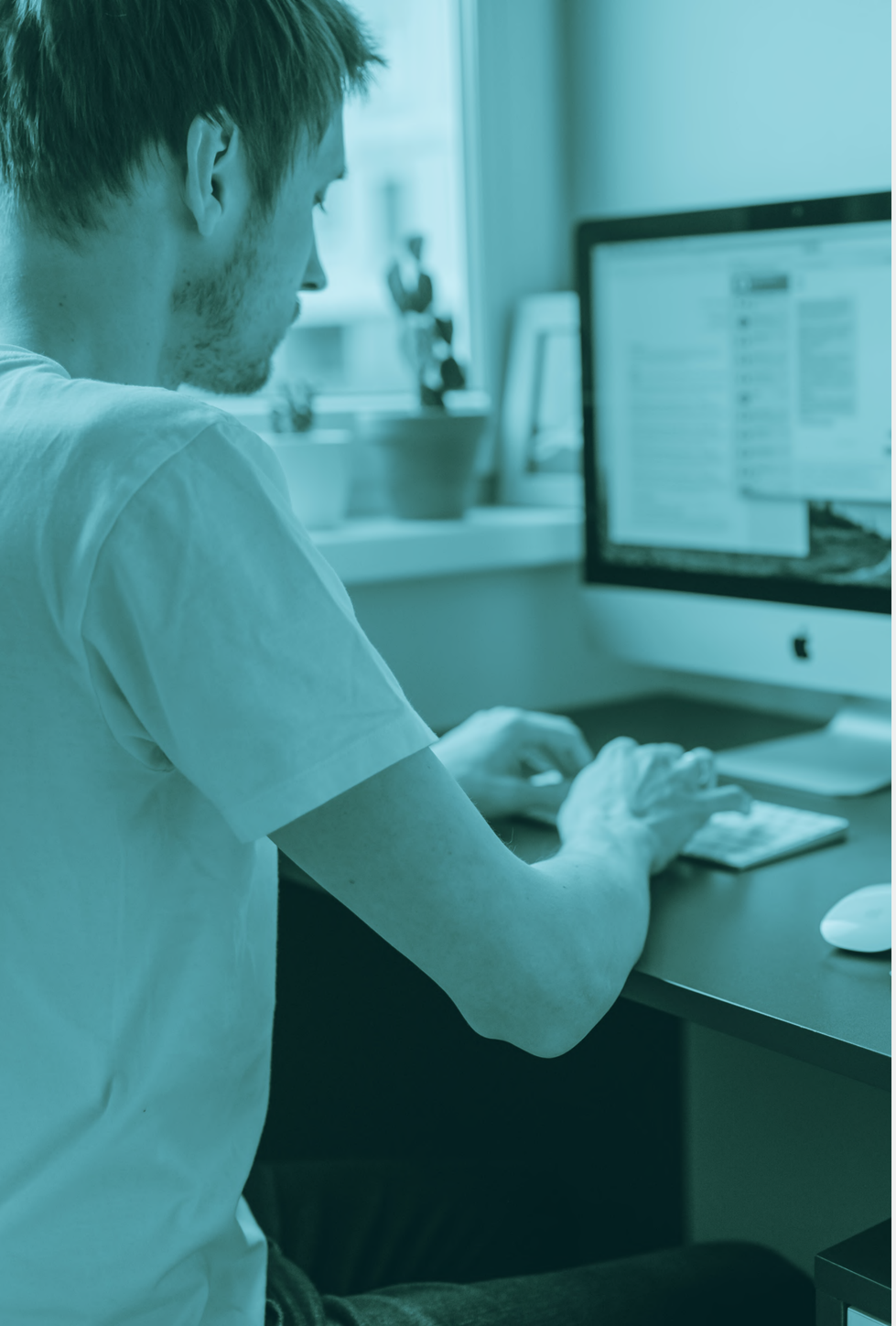
- Considering the range of people who will be using the functionalities we have created user-friendly GUI which can be understood and learn by any first user and for catchiness we also have added animations.

- Figma was used for creating the basic wireframes.

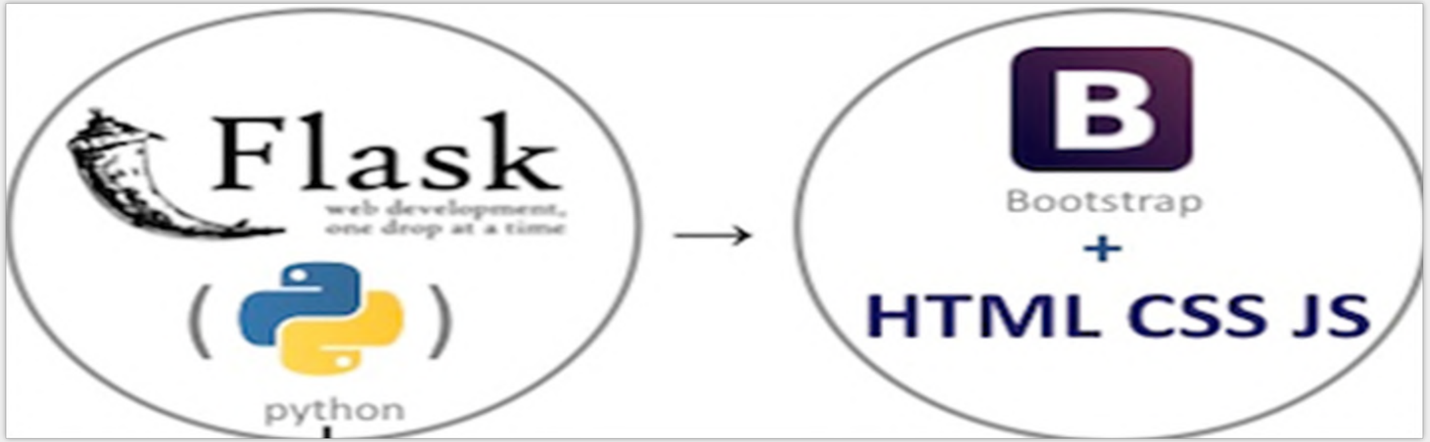
- Also we have created attractive SVG's in Figma and some other design components

GUI & DESIGN PRINCIPLES USED

- Strong Visual Hierarchy
- Proper Navigation
- Proper Placement
- Usability And Clarity
- Used current design trends
- Responsiveness



Developement Approach/Environment.

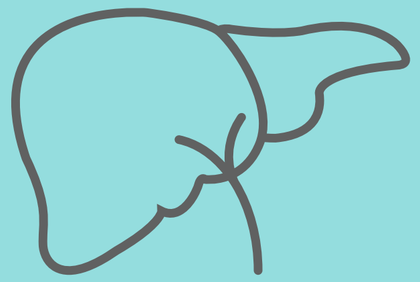


Project Features/Functionalities

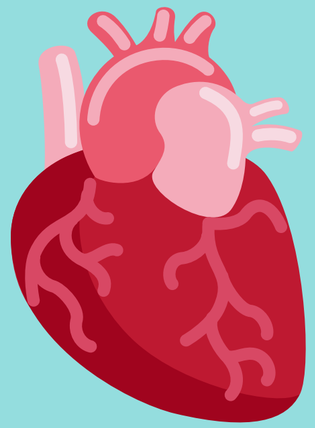
1. BREAST CANCER PREDICTION SYSTEM

2. DIABETES PREDICTION SYSTEM

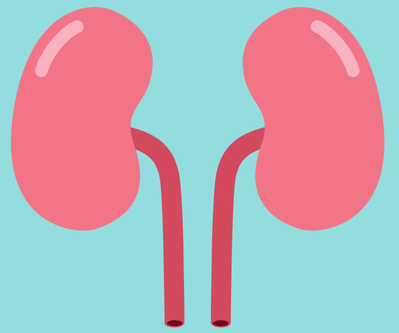
3. LIVER DISEASE PREDICTION SYSTEM



4. HEART DISEASE PREDICTION SYSTEM



5. KIDNEY DISEASE PREDICTION SYSTEM



Roles & Responsibilites

19CE002

- Data Scientist
- Tester
- Back-end (Flask)
- ML model training

19CE013

- Data Scientist
- Back-end (Flask)
- ML model training

19CE024

- Front-end Developer
- Tester
- Back-end (Flask)

Thank you