Health++

Team Starbugs

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01
Need & Requirements

Health Centre Today!

1. Booking Appointments

- Need to physically reach HC & show physical Health Booklet
- Receptionist manually maintains appointment schedule

Problems

→ Reliance on physical booklet – can get lost or damaged
→ Patient needs to visit or call the HC to book
→ Receptionist can be offloaded by automating scheduling tasks

Health Centre Today!

2. Viewing Prescription or previous Medical History

- Need to show physical Health Booklet to Doctor
- Need to give physical copy of prescription to pharmacist

Problems

→ Physical booklet can get lost or damaged – loss of data
→ Patient might forget carrying the booklet
→ Environmental cost

Health Centre Today!

3. Booking an Ambulance

- Patient needs to call up reception and give details
- Receptionist then calls up ambulance driver and gives instructions

Problems

→ Inefficient process causing delays in emergency
→ Susceptible to miscommunication at crucial times

Health Centre Today!

4. Applying for Medical Leave

- Patient needs to email DUGC with scanned health booklet entry
- DUGC recommends leave to SUGC
- SUGC approves and forwards email to DoAA office
- DoAA office sends email to all course professors

Problems

→ Inbox of DUGC/SUGC cluttered
→ Difficult to verify authenticity of medical record/catch forgery

Health Centre Today!

5. Emergency Blood Requests

- Patient's peers send email to Dean/DD
- Email is forwarded to campus mailing list
- Donors are supposed to read email and contact the patient's peers in time

Problems

→ Inefficient and too slow for medical emergencies
→ No tracking on whether donor is found or not

Health++ : User Profiles

1. Student

2. Doctor

3. Staff

4. Ambulance Driver

5. SUGC

Health++ Functionality

Online Appointment Booking & Allotment

- Patient: View available slots & book appointment
- Doctor: Can add or update available slots
- Staff: Can view appointment schedule

Digital Medical Records & Prescription

- Doctor: can add or view past medical entries
- Pharmacy Staff: can view past prescription

Ambulance Booking

- Patient, Staff: can book a new ambulance
- Can view ambulance queue to estimate time

Health++ Functionality

Medical Leave Application

- Patient: can request a medical leave
- Auto-forwarded to the DUGC
- DUGC: can accept or deny any requests

Blood Donation Facility

- Anyone: can raise request for blood
- Eligible Blood Group Students: can volunteer to donate blood against open requests
- Blood requester can view details

02
Implementation

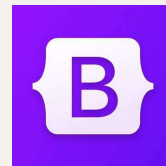# User Interface & Frontend

Figma
Designing UI/UX model

HTML

CSS
Implementing Designs

JavaScript
Implementing Animations

Bootstrap
CSS Framework

Tailwind CSS
CSS Framework for readily use of inline CSS

Backend

Django

For implementing
server-side logic and
integration

Jinja

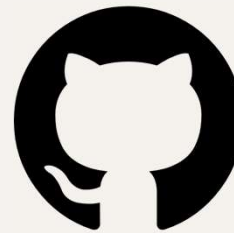Python Templating
Engine

SQLite

For managing
Databases

Collaboration

Git

For Version Control

GitHub

Code Collab Tool

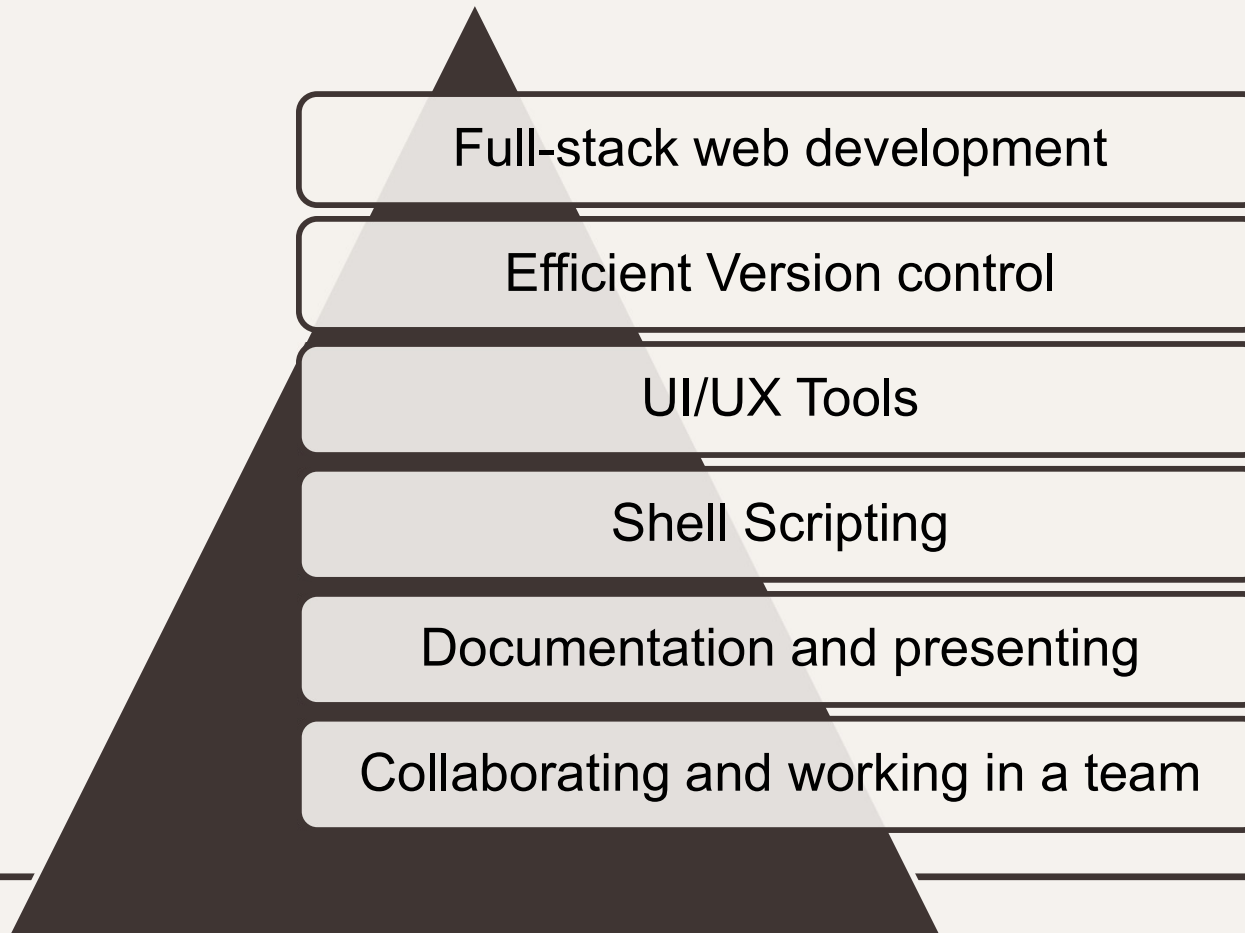

Live Share

For collaborating
together on code

03

Demonstration

04
Learnings & Way Ahead

Lessons Learnt

Full-stack web development

Efficient Version control

UI/UX Tools

Shell Scripting

Documentation and presenting

Collaborating and working in a team

Future Development Plans

Implement **more machine-readable health records** to enable ML models for diagnosis or risk prediction

Campus-wide **dashboard to track more diseases** and catch epidemics or spikes

Incorporating **GPS-based tracking feature for ambulances**

Integrating with **CC-servers for authentication**

Adapting the software to function as **mobile application**.

Improving Web Accessibility

Providing functionality for other languages as well

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Thanks!