

"AAROGYA" - A Healthcare Website

A REPORT ON PROJECT BASED LEARNING (SEMESTER -II)

Submitted by

10924 – Tirthraj Mahajan

10904 – Prajakta Humbe

10909 – Om Kumavat

10915 – Nihal Barkade

10918 – Chetana Thoke

FIRST YEAR ENGINEERING



**Society for Computer Technology and Research's
PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43**

A.Y. 2022-23

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43



- CERTIFICATE-

This is to certify that the work incorporated in the report entitled “**AAROGYA - A Healthcare Website**” is carried out by a group of students with Project Id **04A92023** under the subject ***Project Based Learning*** during A.Y. **2022-2023**.

Date:

Name & Sign of Project Guide

Place: PUNE

Name & Sign of PBL Coordinator

Name & Sign of Head of Department

Mr. N. P. Sapkal

Mr. E. M. Reddy

Abstract

In an era dominated by digital advancements, our society faces a pressing need to address critical health issues affecting the younger generation. To fulfil this need, we present "AAROGYA," a healthcare website that combines information dissemination and digital storage of medical logs with the noble intention of serving a social cause. AAROGYA strives to provide comprehensive information on three major domains impacting today's youth: Cancer, Depression, and Drug Addiction/Substance Abuse.

The first aspect of AAROGYA focuses on open access to vast information related to the three critical health domains. By offering an extensive array of details, ranging from types, global statistics, symptoms, causes, prevention, remedies, and research papers, we aim to empower the general public with knowledge to combat these challenges effectively. Even without requiring a login, users can access this invaluable information, making it readily available to those seeking answers and guidance.

In addition to its informational component, AAROGYA addresses the practical aspects of healthcare through its Prescription History Digital Storage feature. By encouraging users to sign up and create accounts, we provide them with a secure platform to store their medical logs digitally. The user-friendly interface allows individuals to document essential medical data, including the dates of doctor visits, consulting physicians' details, prescription images, and any supplementary advice received during consultations. This storage system ensures seamless access to medical records across devices, thereby eliminating the burden of managing physical copies or scattered digital files. In situations away from home, users can conveniently retrieve past medical records, ensuring continuity of care and informed decision-making.

The implementation of AAROGYA leverages a sophisticated technology stack comprising HTML, CSS, and JavaScript for the frontend, and Python with Flask for the backend. The seamless communication between users and the backend.

In conclusion, AAROGYA emerges as a remarkable contribution to society, bridging the gap between health awareness and efficient medical record-keeping. With its user-friendly interface and accessible repository of valuable health information, AAROGYA endeavours to empower individuals in their pursuit of well-being.

ACKNOWLEDGEMENT

First and foremost, we would like to express our deep sense of gratitude and indebtedness to our supervisor. Prof. V.J. Damle for her invaluable encouragement, suggestions, and support from an early stage of this research and providing us extraordinary experiences throughout the work.

We would also like to extend our gratitude towards Dr Usha Polina for her guidance at the beginning stages of the project selection and development.

We would like to express our deepest gratitude to all those who have contributed to the development and success of the project website aimed at providing information about Cancer, Depression and Drug Abuse. This endeavor would not have been possible without the support, guidance, and contributions of numerous individuals and organizations.

Authors and Researchers: We would like to express our sincere gratitude to the subject matter experts, professors, and industry professionals who generously shared their knowledge and insights. Their expertise and guidance were invaluable in ensuring the accuracy and relevance of the information provided about the domains was very crucial. Their contributions have greatly enriched the website's content and educational value.

Lastly, we would like to express our profound gratitude to Mr. P.T. Kulkarni sir, Director of PICT and Mr. E.M. Reddy, HOD of First Year Engineering department for their contributions to the completion of our project.

Place:

Name of Student (in Capital) & Sign

TABLE OF CONTENT

Chapter No.	Title	Page No.
1	Introduction	7
2	Necessity of the Project and Research Papers	8
3	Implementation Details	10
4	Advantages of Project	17
5	Drawbacks and Future Scope	20
6	Output	23
7	Conclusion	31
8	References	33

LIST OF FIGURES

Figure No	Title	Page No
1.1	HTML Files	10
1.2	CSS Files	11
1.3	JavaScript Files	11
1.4	Code Snippet of CSS	11
1.5	Code Snippet of JavaScript	12
1.6	Code Snippet of HTML	12
2.1	Code Snippet of our Login Backend	14
2.2	Code Snippet of our “add log” mechanism	15
2.3	Code Snippet of our read and store prescription mechanism	16
3.1	Front Page of Aarogya	23
3.2 3.3	About “Aarogya” Section	23
3.4	Addiction Section	24
3.5	Information Section Of Addiction	24
3.6	Depression Section	25
3.7	Information Section Of Depression	25
3.8	Treatment of Depression Page	26
3.9	Cancer Section	27
3.10	World Data Section Of Cancer	27
3.11	Sign Up and Login Page	28
3.12	Profile Page After Login	28
3.13	Medical Log Page	29
3.14	Prescription Page After Clicking View	29
3.15	View Prescription Page: Where you view your existing Logs	30

Chapter 1

INTRODUCTION: “AAROGYA”

In an increasingly interconnected world, health awareness and access to reliable medical information have become pivotal factors in promoting a healthier society. The culmination of our efforts is "AAROGYA," a healthcare website designed to address two critical aspects of healthcare: information dissemination and digital storage of medical records.

The prevalence of health-related challenges, especially among the young generation, prompted us to focus on three major domains: Cancer, Depression, and Drug Addiction/Substance Abuse. AAROGYA serves as an information hub, providing comprehensive insights into these domains, including types, global data, symptoms, causes, prevention, remedies, and relevant research papers. The website offers this treasure trove of knowledge openly to the general public, empowering them with essential information to tackle these health issues effectively.

In addition to providing valuable information, AAROGYA emphasizes the importance of systematic and accessible medical record-keeping. To this end, the website incorporates a Prescription History Digital Storage feature. Users can register and create accounts, enabling them to securely store their medical logs digitally. The user-friendly interface facilitates the creation of detailed logs containing essential medical data, such as doctor visit dates, consulting physician information, uploaded prescription images, and additional advice provided during consultations. This digital storage system ensures easy retrieval of medical records from any device, ensuring continuity of care and informed decision-making, even when users are away from their primary healthcare providers.

In the following sections of this report, we present the details of AAROGYA's development, including the technologies employed, the implementation process, advantages, drawbacks, and potential future enhancements. With a focus on making healthcare information accessible, organized, and secure, AAROGYA endeavours to foster a healthier society and contribute meaningfully to the well-being of our community.

Chapter 2

Necessity of the Project and Research Papers

The significance of the "AAROGYA" healthcare website lies in its response to pressing health challenges that heavily impact today's younger generation. Cancer, Depression, and Drug Addiction are prominent issues that demand immediate attention, intervention, and awareness. With an increasing number of cases reported each year, it has become evident that a comprehensive and accessible platform for information dissemination and medical record-keeping is essential. The necessity of the project can be understood from the following points:

Health Awareness and Information Dissemination: In the digital age, access to accurate and extensive health information plays a pivotal role in promoting proactive healthcare practices. By providing valuable insights into the types, symptoms, causes, prevention, remedies, and research findings related to Cancer, Depression, and Drug Addiction, AAROGYA empowers individuals with knowledge to identify warning signs, seek early intervention, and adopt preventive measures.

Addressing Stigmas and Taboos: Mental health issues, like Depression, often carry social stigmas and taboos, leading to underreporting and inadequate support. AAROGYA breaks these barriers by providing comprehensive information about mental health, encouraging open discussions, and fostering a supportive environment.

Efficient Medical Record-Keeping: Traditional methods of preserving physical medical records are prone to misplacement, deterioration, or loss. AAROGYA's Prescription History Digital Storage ensures organized and secure digital logging of medical records. Users can easily access and share their medical history, aiding healthcare professionals in providing accurate diagnoses and treatments.

Empowering Personal Health Management: AAROGYA's user-friendly platform empowers individuals to take charge of their health by maintaining their medical records. It allows users to track their health progress, follow medical advice consistently, and make informed decisions about their well-being.

Research Papers Used:

Depression – A Review by Iyer K. and Khan Z.A.: This research paper sheds light on Major Depression as a mood disorder, its various symptoms, and the role of stress as a key mediator in its pathophysiology. It highlights the need for understanding the causes and developing effective treatments for depression.

Effects of Electroconvulsive Seizures and Antidepressant Drugs on Brain-Derived Neurotrophic Factor Protein in Rat Brain by C.

Anthony: This research paper delves into the effects of drug overdose on brains, emphasizing the importance of studying such effects to aid in developing better treatment strategies.

Cancer: An Overview by Garima Mathur, Sumitra Nain, and

Pramod Kumar Sharma: This comprehensive paper provides an overview of cancer as a prevalent life-threatening disease. It covers various aspects such as types, causes, and treatments, while emphasizing the need for early diagnosis and screening.

Cancer research and therapy: Where are we today? by Sampada

Sawant and Ranjita Shegokar: This paper discusses advancements in cancer therapies, focusing on nanotechnological platforms and complementary and alternative medicine. It highlights the potential of these approaches for the treatment and detection of cancer.

By incorporating the knowledge from these research papers into AAROGYA, we aim to equip users with the latest findings and advancements, strengthening their understanding of these health domains and promoting better health practices.

Chapter 3

IMPLEMENTATION DETAILS

The development of "AAROGYA" involved a meticulous implementation process to create a user-friendly and secure healthcare website. Leveraging a combination of frontend and backend technologies, we ensured seamless communication and efficient data management. Here are the key implementation details:

Frontend Technologies: HTML, CSS, and JavaScript

The frontend of AAROGYA was built using HTML, CSS, and JavaScript. HTML provided the structure for the website, while CSS was employed for styling, ensuring an appealing and intuitive user interface. JavaScript played a crucial role in adding interactivity to the website. It facilitated dynamic updates of webpage elements, responsive design, and user-friendly features like input validation and error handling.










 about.html	6/11/2023 11:02 PM	Chrome HTML Do...	9 KB
 addiction.html	7/17/2023 3:04 AM	Chrome HTML Do...	138 KB
 arrowNegative.svg	6/8/2023 11:22 AM	Chrome HTML Do...	1 KB
 cancer.html	7/6/2023 11:27 AM	Chrome HTML Do...	21 KB
 depression.html	7/17/2023 2:08 AM	Chrome HTML Do...	30 KB
 index.html	7/15/2023 5:41 PM	Chrome HTML Do...	7 KB
 login.html	6/11/2023 11:08 PM	Chrome HTML Do...	3 KB
 prescriptions.html	7/6/2023 2:51 AM	Chrome HTML Do...	2 KB
 profile.html	7/6/2023 8:11 AM	Chrome HTML Do...	4 KB

Fig 1.1: HTML Files

# about.css	6/11/2023 9:25 AM	CSS Source File	4 KB
# addiction.css	7/17/2023 3:04 AM	CSS Source File	11 KB
# cancer.css	7/6/2023 11:29 AM	CSS Source File	7 KB
# depression.css	7/17/2023 3:04 AM	CSS Source File	11 KB
# login.css	6/11/2023 9:04 PM	CSS Source File	3 KB
# prescriptions.css	7/6/2023 4:19 AM	CSS Source File	7 KB
# profile.css	7/5/2023 12:46 AM	CSS Source File	12 KB
# style.css	6/6/2023 11:36 PM	CSS Source File	10 KB

Fig 1.2: CSS Files

about.js	6/6/2023 11:28 PM	JSFile	2 KB
cancer.js	7/6/2023 9:12 AM	JSFile	2 KB
login.js	6/12/2023 12:30 AM	JSFile	6 KB
prescriptions.js	7/6/2023 4:18 AM	JSFile	3 KB
profile.js	7/6/2023 3:24 AM	JSFile	9 KB

Fig 1.3: JavaScript Files

```

.header-box{
    overflow-x: hidden;
    width: 100%;
    height: 300px;
    border: 1px solid #000000;
    border-bottom-right-radius: 50%;
    border-bottom-left-radius: 50%;
    background-image: url(img_cancer/cancer-header.jpg);
    background-repeat: no-repeat;
    background-position: center;
    background-size: 900px;
    background-color: #000000;
    position: relative;
    transform: translate(0px,0px);
    animation-name: header-box-animation;
    animation-duration: 1.5s;
}

```

Fig 1.4: Code Snippet Of CSS

```

document.getElementById('signupForm').addEventListener('submit', function(event) {
    event.preventDefault();

    var name = document.getElementById('name').value;
    var username = document.getElementById('signup-username').value;
    var email = document.getElementById('email').value;
    var password = document.getElementById('signup-password').value;
    var age = document.getElementById('age').value;
    var gender = document.getElementById('gender').value;
    var address = document.getElementById('address').value;

    var xhr = new XMLHttpRequest();
    xhr.open('POST', '/signup', true);
    xhr.setRequestHeader('Content-Type', 'application/x-www-form-urlencoded');
    xhr.onreadystatechange = function() {
        if (xhr.readyState === 4 && xhr.status === 200) {
            var response = JSON.parse(xhr.responseText);
            alert(response.message); // Display the server's response message
            window.location.href = '/indexHTML'; // Redirect to index.html
        }
    };

    var data = 'name=' + encodeURIComponent(name) +
        '&username=' + encodeURIComponent(username) +
        '&email=' + encodeURIComponent(email) +
        '&password=' + encodeURIComponent(password) +
        '&age=' + encodeURIComponent(age) +
        '&gender=' + encodeURIComponent(gender) +
        '&address=' + encodeURIComponent(address);
    xhr.send(data);
});

document.getElementById('loginForm').addEventListener('submit', function(event) {

```

Fig 1.5: Code Snippet of JavaScript

```

<div class="main">
  <input type="checkbox" id="chk" aria-hidden="true">
  <div class="signupClass">
    <form id="signupForm" action="{ { url_for('signup') } }" method="post">
      <label for="chk" aria-hidden="true">Sign up</label>
      <input type="text" id="name" name="name" placeholder="Name" required="">
      <input type="text" id="signup-username" name="username" placeholder="Username" required="">
      <input type="email" id="email" name="email" placeholder="Email" required="">
      <input type="password" id="signup-password" name="password" placeholder="Password" required="">
      <input type="number" id="age" name="age" placeholder="Age" required="">
      <select id="gender" name="gender" required="">
        <option value="male">Male</option>
        <option value="female">Female</option>
        <option value="other">Other</option>
      </select>
      <textarea id="address" name="address" placeholder="Address" required=""></textarea>
      <button type="submit">Sign Up</button>
    </form>
  </div>

  <div class="login">
    <form id="loginForm" action="{ { url_for('login') } }" method="post">
      <label for="chk" aria-hidden="true">Login</label>
      <input type="text" id="login-username" name="username" placeholder="Username" required="">
      <input type="password" id="login-password" name="password" placeholder="Password" required="">
      <button type="submit">Login</button>
    </form>
  </div>
</div>

```

Fig 1.6: Code Snippet of HTML

Backend Technology: Python with Flask

For the backend, we utilized Python with the Flask framework. Flask enabled us to create a robust and efficient backend server for handling user requests and managing data.

Flask's simplicity and flexibility allowed for smooth integration with other technologies, making it an ideal choice for our project.

Custom API Communication: JSON Files

The communication between the frontend and backend was facilitated by custom JSON files. These files served as a bridge for exchanging data and instructions between Python and JavaScript, enabling seamless interaction and dynamic webpage updates.

User Authentication and Data Storage

AAROGYA implemented a secure user authentication system, requiring users to sign up and create accounts with unique credentials.

To store user data, we utilized CSV files on the server side. Python, through file handling operations, managed data verification, user account creation, and updating medical logs.

Login System

During the signup process, Python checked the database to ensure that a user with the same email or username did not already exist. If a conflict occurred, the system prompted the user to retry with different credentials. The login system involved Python comparing the provided username and password with the data stored in the database. Successful authentication granted users access to their personalized dashboard.

Medical Log Creation and Storage

Upon successful login, Python facilitated the creation of medical logs for users. The user-friendly interface allowed individuals to record essential medical information, including the date of doctor visits, doctor details, uploaded prescription images, and additional advice received.

Once the user completed the log creation, Python permanently stored the log on the server side. This ensured that users could access their medical records from any device, eliminating the need for physical copies and enhancing data organization.

By adopting a well-planned implementation strategy and leveraging appropriate technologies, "AAROGYA" emerged as a comprehensive and efficient healthcare website. The seamless interaction between the frontend and backend, coupled with secure data management, facilitated smooth user experiences and contributed to the project's success.

AAROGYA's implementation serves as a testament to our commitment to delivering a socially impactful healthcare solution to the community.

```
main.py > ...
1 from flask import Flask, render_template, request, redirect, url_for, jsonify, send_from_directory
2 import csv
3 import os
4 import logging
5
6 app = Flask(__name__)
7
8
9 # Configure logging
10 logging.basicConfig(level=logging.DEBUG)
11
12 # Set the log level for Flask application logs
13 app.logger.setLevel(logging.DEBUG)
14
15
16 def check_existing_user(username, email):
17     with open('users/users.csv', 'r') as file:
18         reader = csv.reader(file)
19         # Skip the header row if it exists
20         header = next(reader, None)
21         if header is not None:
22             for row in reader:
23                 if row[1] == username or row[2] == email:
24                     # print(username, row[1], email, row[2])
25                     return True
26     return False
27
28
29 def store_user_data(data):
30     with open('users/users.csv', 'a', newline='') as file:
31         writer = csv.writer(file)
32         writer.writerow(data.values())
33
34 @app.route('/')
35 def index():
36     return render_template('index.html')
37
38 @app.route('/signup', methods=['POST'])
39 def signup():
40     ...
41
```

Fig 2.1 : Code Snippet of our Login Backend

```

172
173 @app.route('/', methods=['GET', 'POST'])
174 def add_log():
175     if request.method == 'POST':
176         # Get form data
177         date = request.form.get('date')
178         doctor = request.form.get('doctor')
179         description = request.form.get('description')
180         image = request.files['image']
181
182         # Create the folder path
183         with open('users/current_user.txt', 'r') as file:
184             username = file.read().strip()
185
186         folder_path = f'users/{username}/prescriptions'
187
188         # Create the folder if it doesn't exist
189         if not os.path.exists(folder_path):
190             os.makedirs(folder_path)
191
192         # Create the subfolder using date and doctor name
193         subfolder_name = f'{date}_{doctor}'
194         subfolder_path = os.path.join(folder_path, subfolder_name)
195         if not os.path.exists(subfolder_path):
196             os.makedirs(subfolder_path)
197
198         # Save the uploaded image with the name 'image.png'
199         image.save(os.path.join(subfolder_path, 'image.png'))
200
201         # Create the prescription_info.csv file
202         csv_path = os.path.join(subfolder_path, 'prescription_info.csv')
203         with open(csv_path, 'w', newline='') as csvfile:
204             writer = csv.writer(csvfile)
205             writer.writerow(['Date', 'Doctor', 'Description'])
206             writer.writerow([date, doctor, description])
207
208         # Append log entry to logs.csv
209         logs_path = os.path.join(folder_path, 'logs.csv')
210         with open(logs_path, 'a', newline='') as logs_csv:
211             writer = csv.writer(logs_csv)
212             writer.writerow([f'{date}_{doctor}'])
213
214
215
216     return render_template('profile.html')
217

```

Fig 2.2: Code Snippet of our “add log” mechanism


```

263 @app.route('/prescriptions')
264 def prescriptions():
265
266     with open('users/current_user.txt', 'r') as file:
267         username = file.read().strip()
268
269     log_folder_path = f'users/{username}/open_prescription.txt'
270
271     # Read data from open_prescription.txt
272     with open(log_folder_path, 'r') as log_file:
273         log_folder = log_file.read().strip()
274
275     csv_file_path = f'users/{username}/prescriptions/{log_folder}/prescription_info.csv'
276
277     # Read data from prescription_info.csv
278     with open(csv_file_path, 'r') as csv_file:
279         lines = csv_file.readlines()
280         data = lines[1].strip().split(',')
281         date = data[0]
282         doctor = data[1]
283         description = data[2]
284
285     # Create a dictionary with the data
286     response_data = {
287         'username': username,
288         'logFolder': log_folder,
289         'date': date,
290         'doctor': doctor,
291         'description': description
292     }
293
294     return jsonify(response_data)
295
296 # Serve static files from the 'prescriptions' folder
297 @app.route('/users/<username>/prescriptions/<log_folder>/<path:filename>')
298 def prescriptions_files(username, log_folder, filename):
299     return send_from_directory(f'users/{username}/prescriptions/{log_folder}', filename)
300
301
302
303 if __name__ == '__main__':
304     app.run()
305

```

Fig 2.3: Code Snippet of our read and store prescription mechanism

Chapter 4

ADVANTAGES OF PROJECT

1. Health Awareness and Empowerment:

AAROGYA disseminates valuable information about Cancer, Depression, and Drug Addiction/Substance Abuse. By providing comprehensive insights, it empowers individuals to recognize symptoms, understand causes, and adopt preventive measures. Increased health awareness contributes to early detection and better management of health conditions.

2. Accessible Information for the Public:

AAROGYA offers open access to its vast repository of health-related information, ensuring that anyone, regardless of their login status, can benefit from the valuable insights. This accessibility ensures that critical health knowledge reaches a broader audience, including those who might not have the means to sign up for an account.

3. Organized Medical Record-Keeping:

The Prescription History Digital Storage feature streamlines medical record-keeping. Users can efficiently log medical visits, prescriptions, and additional advice, ensuring that crucial medical data is well-organized and easily accessible.

By eliminating the need for physical records and scattered digital files, AAROGYA simplifies the retrieval of past medical information, allowing for seamless healthcare continuity and informed decision-making.

4. User-Friendly Interface:

AAROGYA boasts a user-friendly interface that is easy to navigate and interact with. Its intuitive design ensures that users of all ages and technological backgrounds can access and utilize the website effectively.

5. Privacy and Security:

AAROGYA prioritizes the privacy and security of user data. The use of a login system and server-side data storage ensures that sensitive medical information remains protected from unauthorized access. By implementing stringent security measures, the project instills trust in users regarding data confidentiality.

6. Contribution to Mental Health Awareness:

The comprehensive information on Depression offered by AAROGYA helps break the stigma surrounding mental health issues. By fostering open discussions and providing valuable insights into mental health conditions, the website actively contributes to mental health awareness and support.

7. Convenience and Portability:

AAROGYA's digital storage system allows users to access their medical records from any device with an internet connection. This portability

ensures that individuals can retrieve their health information conveniently, even when away from their primary healthcare providers.

8. Positive Impact on Public Health:

By promoting health awareness, organized record-keeping, and early intervention, AAROGYA has the potential to make a positive impact on public health. Increased awareness and access to medical records facilitate timely medical attention, ultimately leading to better health outcomes.

In conclusion, "AAROGYA" emerges as a powerful platform that merges information dissemination and digital medical record-keeping, presenting numerous advantages for both users and society at large. By leveraging technology to address pressing health concerns, AAROGYA serves as a beacon of hope, contributing to the well-being and informed decision-making of individuals seeking a healthier and more fulfilling life.

Chapter 5

DRAWBACKS AND FUTURE SCOPE

While "AAROGYA" stands as a commendable healthcare website, designed to address critical health challenges and promote efficient medical record-keeping, it is essential to acknowledge certain limitations and outline potential areas of improvement for future iterations. Here are the drawbacks and future scope of the project:

Drawbacks:

Limited Domain Coverage: AAROGYA currently focuses on three domains: Cancer, Depression, and Drug Addiction/Substance Abuse. Although these are significant health issues, the website's domain coverage can be expanded to include more diseases and health conditions, catering to a broader range of users' needs.

Data Privacy Concerns: While the project implements basic security measures for user data, it relies on server-side storage using CSV files. This method might not be sufficient to guarantee the utmost data privacy and security. Future iterations must implement more robust encryption techniques and consider using dedicated database technologies to ensure sensitive medical records remain completely safeguarded.

Absence of Real-time Interaction: While AAROGYA offers valuable information, it currently lacks real-time interaction with medical professionals. Incorporating features like live chat or video consultations with healthcare experts can enhance the website's value as a comprehensive healthcare platform.

Dependency on Internet Connectivity: AAROGYA's digital storage system necessitates internet connectivity for accessing medical records. In regions with limited internet access, users might face challenges in retrieving their data promptly. Offline access options or data caching features could mitigate this drawback.

Future Scope:

Integration with AI and Big Data Analysis: AAROGYA can benefit from AI-driven algorithms to provide personalized health recommendations based on user data and symptoms. Additionally, implementing big data analysis can help identify patterns and trends in health conditions, contributing to improved disease management.

Google Nearby Places API Integration: Integrating the Google Nearby Places API can enable users to locate nearby hospitals, clinics, and pharmacies swiftly. This feature enhances user convenience and facilitates prompt medical attention during emergencies.

Health Monitoring with IoT and Wearable Devices: AAROGYA's future scope can extend to incorporate IoT and wearable devices to track real-time health data, such as heart rate, blood pressure, and other vital parameters. This data can be stored on the website and accessed by users and healthcare providers for continuous monitoring and diagnosis.

Calendar Integration for Reminders: Adding calendar integration to AAROGYA can enable users to set reminders for medical appointments,

medication schedules, and other health-related events, promoting better adherence to healthcare routines.

Real-time Doctor Consultations: Introducing real-time chat or video call features with qualified medical professionals can facilitate timely consultations and advice for users, particularly those facing urgent health concerns.

Expansion of Health Domains: Expanding the domains covered by AAROGYA to include prevalent health conditions like AIDS, HIV, and other diseases would render the platform even more comprehensive and beneficial to a diverse user base.

In conclusion, while "AAROGYA" exhibits numerous advantages and makes significant strides in addressing health challenges and medical record-keeping, acknowledging its drawbacks and exploring future scope remains vital for continuous improvement and sustained impact. Embracing technological advancements and user feedback, future iterations of AAROGYA can elevate the platform's capabilities, providing an indispensable healthcare resource for users and contributing positively to public health and well-being.

Chapter 6

OUTPUT

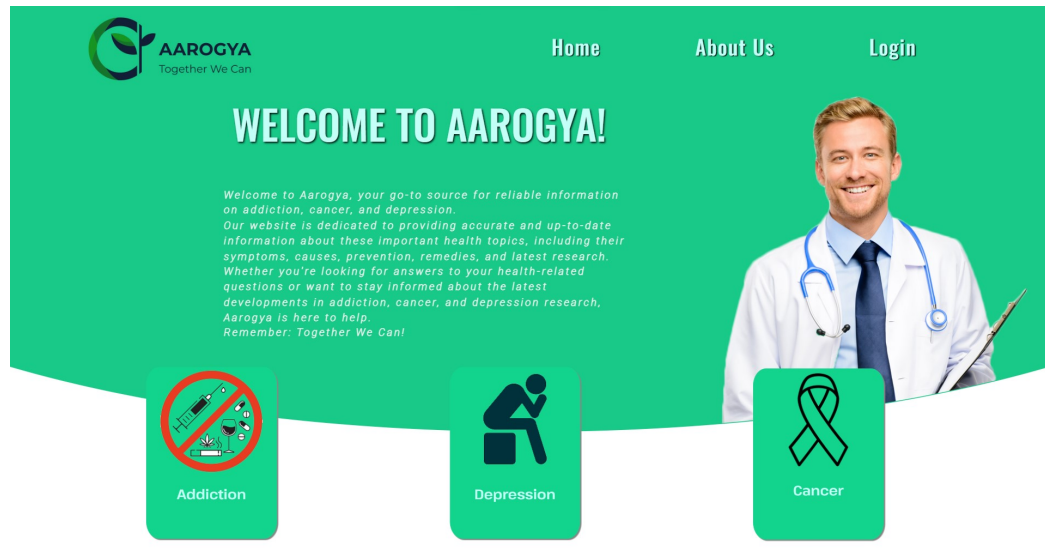


Fig 3.1: Front Page of Aarogya

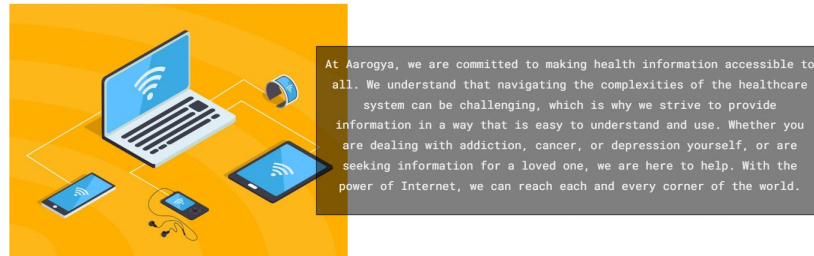
About Aarogya:



At Aarogya, we believe that access to accurate and reliable health information is essential to maintaining a healthy lifestyle. Our website is dedicated to providing comprehensive information about addiction, cancer, and depression, three of the most prevalent health issues in today's world. We strive to provide information that is easy to understand, yet based on the latest scientific research and medical best practices.

Our website features detailed information about the symptoms, causes, prevention, and remedies for addiction, cancer, and depression. We also provide links to credible sources for further reading and research. Our goal is to empower individuals with the knowledge they need to make informed decisions about their health, and to promote awareness and understanding of these important health issues in the broader community.





We are continuously updating and improving our website to ensure that it remains a reliable source of health information. We welcome your feedback and suggestions for how we can better serve you. Thank you for visiting Aarogya, and we hope you find the information you are looking for.



Fig 3.2 and 3.3: About “Aarogya” Section



Fig 3.4: Addiction Section

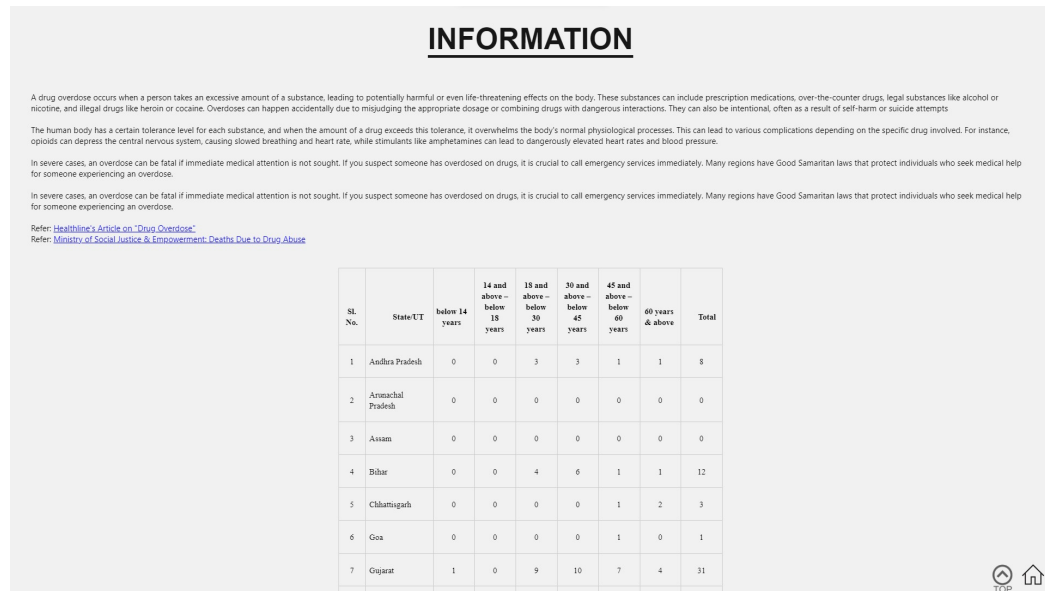


Fig 3.5: Information Section Of Addiction

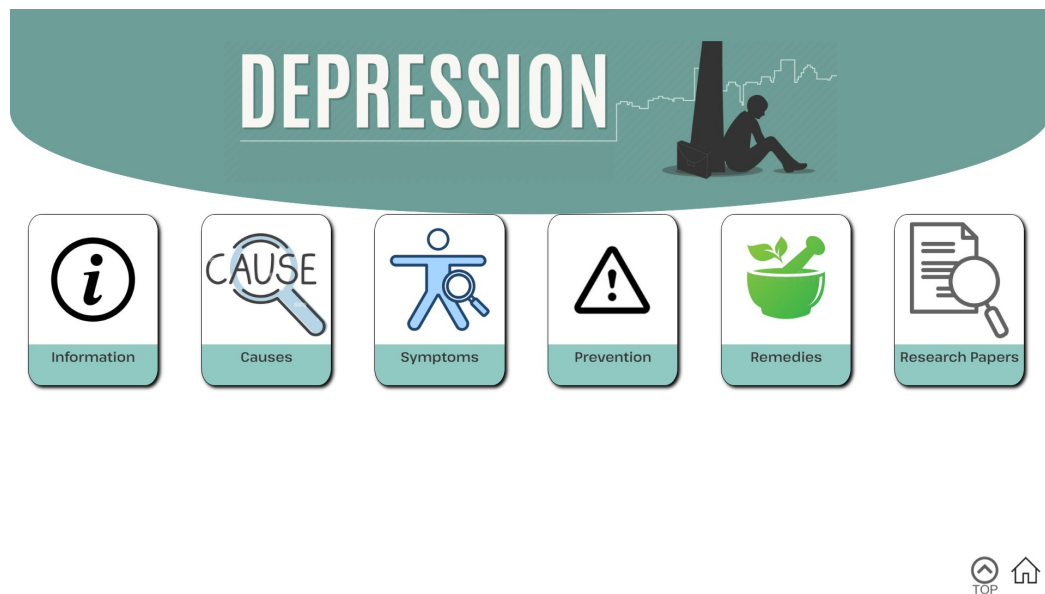


Fig 3.6: Depression Section

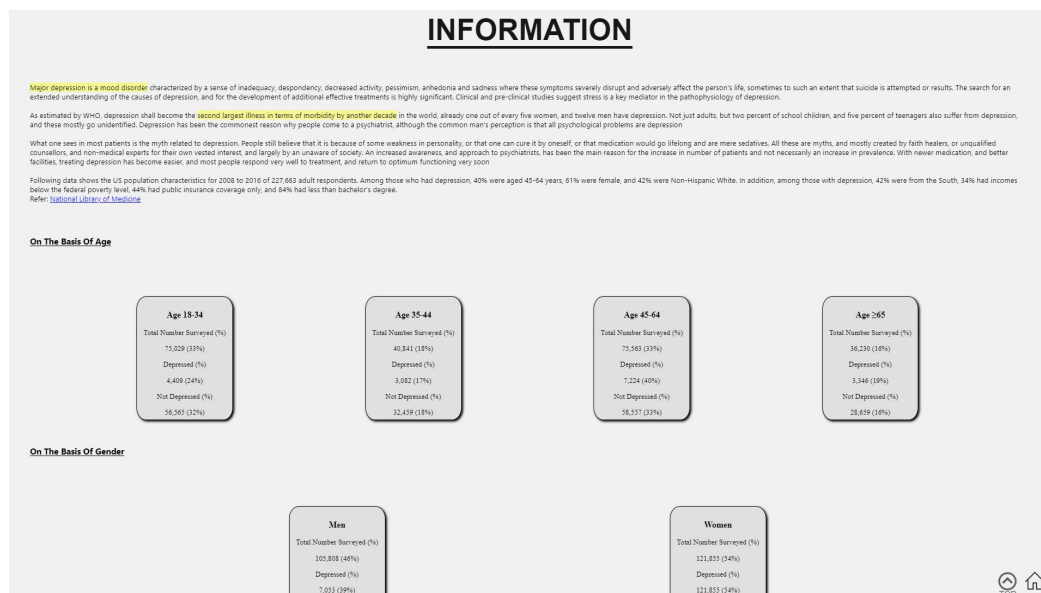


Fig 3.7: Information Section Of Depression

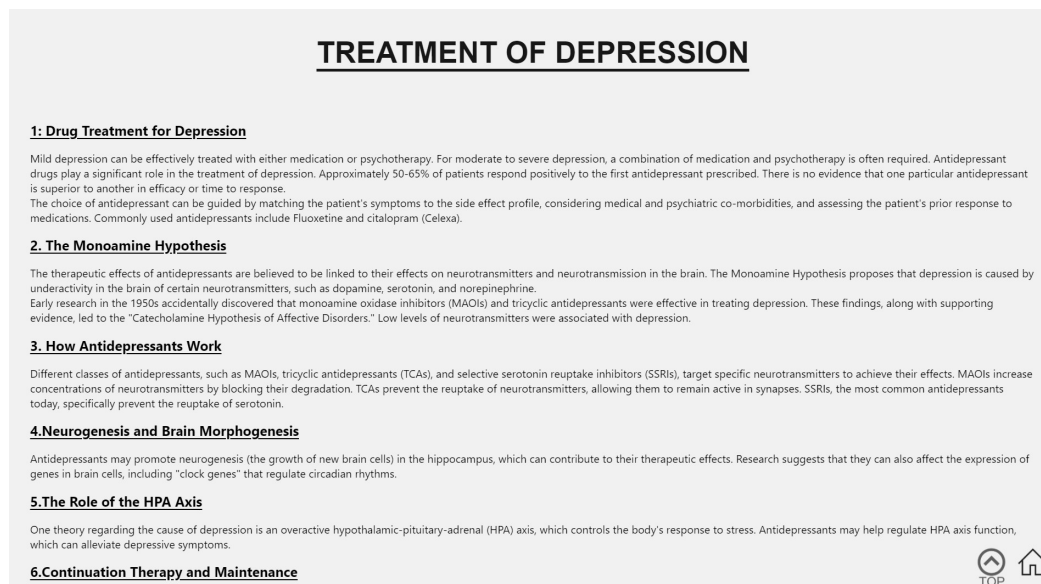


Fig 3.8: Treatment of Depression Page

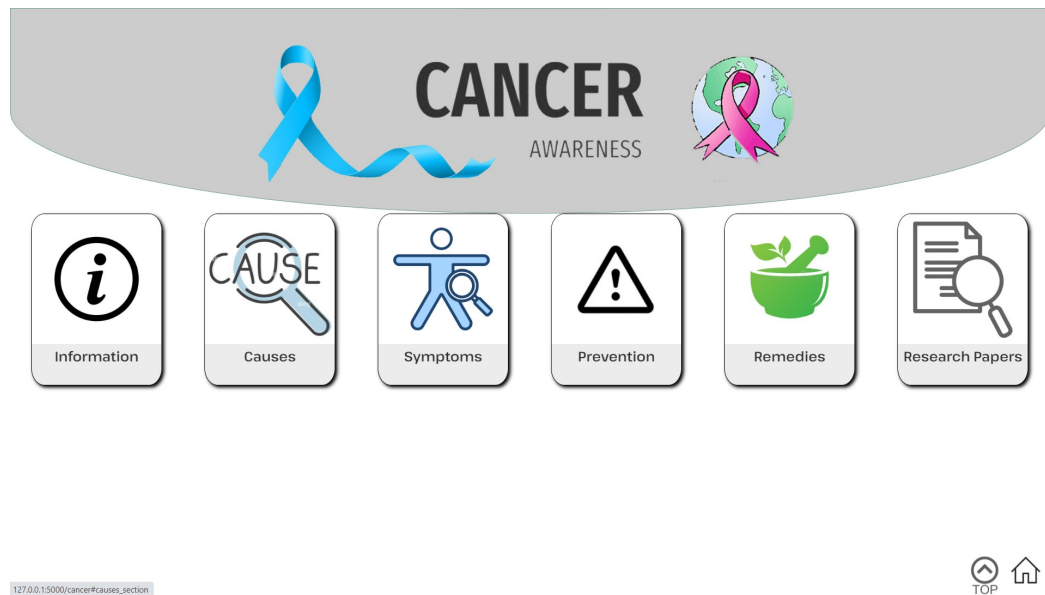


Fig 3.9: Cancer Section

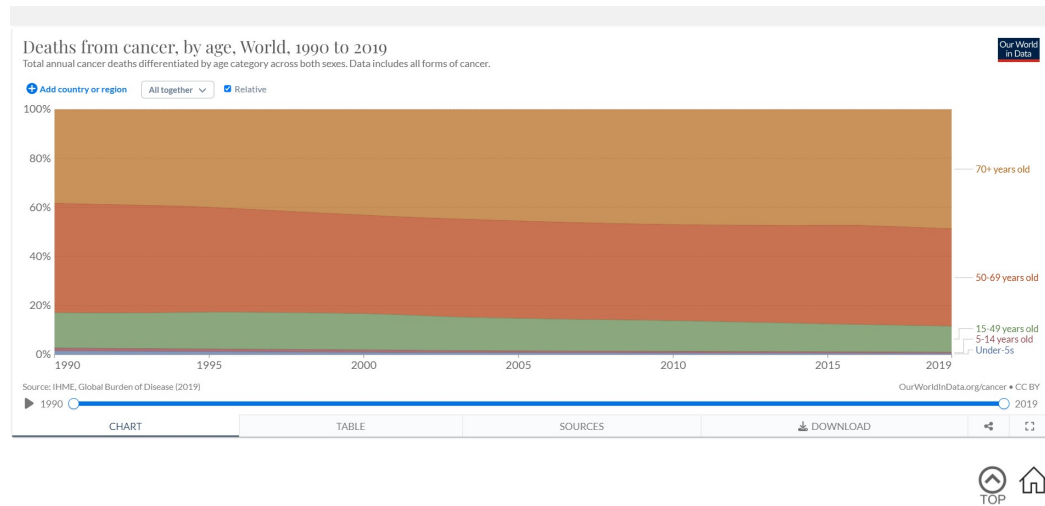
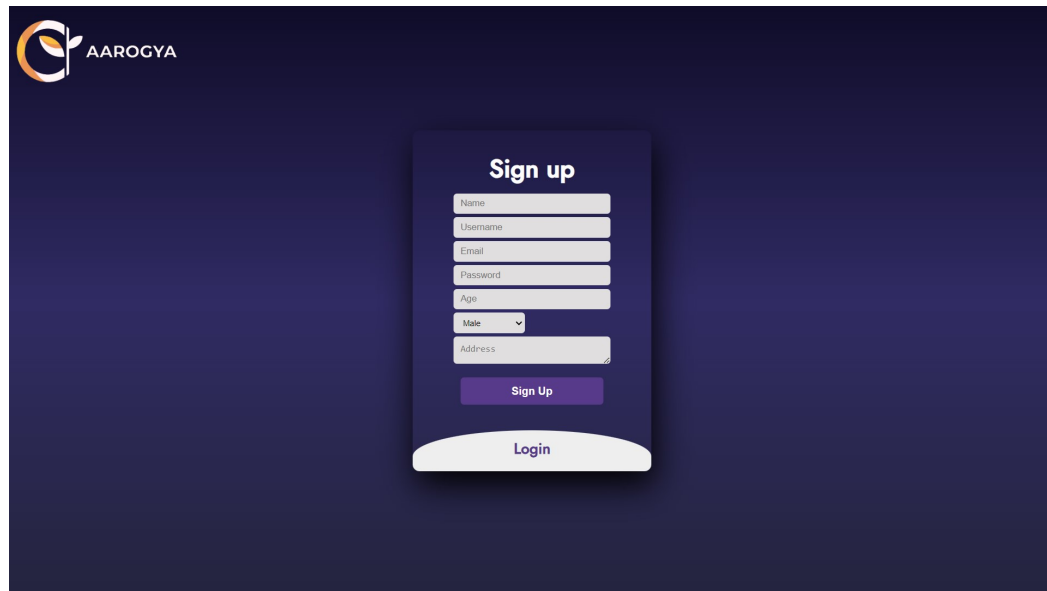


Fig 3.10: World Data Section Of Cancer



The image shows a dark blue background with the AAROGYA logo in the top left corner. In the center, there is a white rounded rectangle containing a 'Sign up' form. The form has input fields for Name, Username, Email, Password, Age, a Gender dropdown menu (set to Male), and an Address field. Below these fields are two buttons: a purple 'Sign Up' button and a white 'Login' button.

Fig 3.11: Sign Up and Login Page



The image shows a user profile page. On the left is a purple sidebar with the AAROGYA logo, a circular profile picture of a person with brown hair, and the text 'TIRTHRAJ JITENDRA MAHAJAN' and 'tirthraj2004@gmail.com'. Below this are links for 'History' and 'Home'. The main area has a light blue background with the title 'PERSONAL INFORMATION'. Below the title is a white rounded rectangle containing the following details:

Full Name:	TIRTHRAJ JITENDRA MAHAJAN
Email:	tirthraj2004@gmail.com
Username:	tirthraj07
Age:	19
Gender:	male
Address:	C-802.,Treasure Park, Near Walvekar Nagar, Sant Nagar, Padnavati, Pune

At the bottom center of the main area is a grey button with a white double arrow icon, and at the bottom right is a white house icon.

Fig 3.12: Profile Page After Login

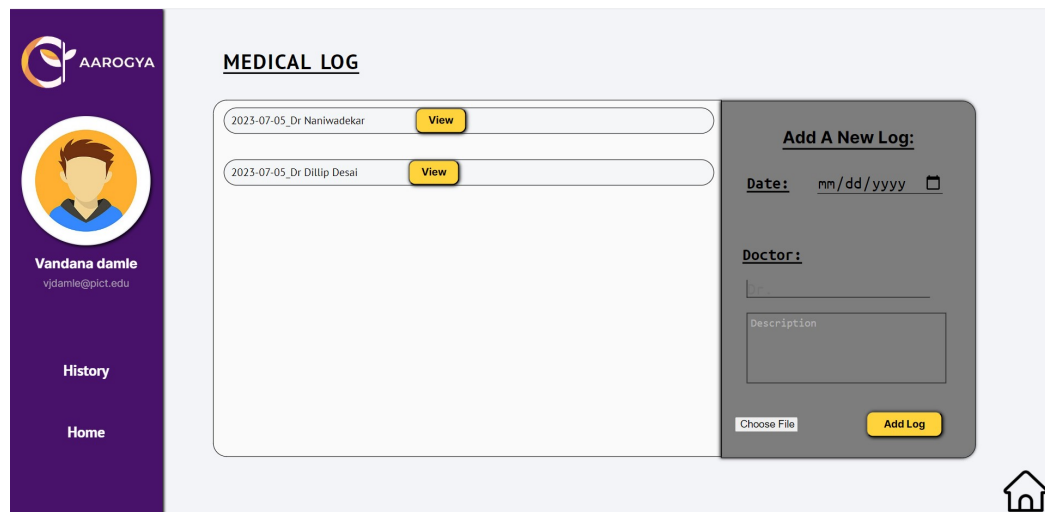


Fig 3.13: Medical Log Page



Fig 3.14: Prescription Page After Clicking View

[illegible]

Dr Dillip Desai

*Please Make Sure To Rest Well. Do not eat outside food.



Fig 3.15 View Prescription Page: Where you view your existing Logs

Chapter 7

CONCLUSION

The journey of developing "AAROGYA" has been one of dedication, innovation, and social responsibility. As a healthcare website, AAROGYA stands as a testament to our commitment to creating a positive impact on society through technology. The project's overall achievements and contributions are both noteworthy and far-reaching, revolutionizing healthcare accessibility and organization.

AAROGYA's primary objective of spreading health awareness has been realized through its extensive information dissemination on three major health domains: Cancer, Depression, and Drug Addiction. By providing comprehensive insights into the causes, symptoms, prevention, remedies, and research findings, it empowers individuals to take proactive measures towards their well-being. It serves as a beacon of knowledge for the general public, fostering informed decisions and early detection of health issues that can significantly improve health outcomes.

Moreover, AAROGYA has succeeded in breaking the barriers of mental health stigmas and taboos. The comprehensive information on Depression promotes open discussions, destigmatizing mental health conditions, and encouraging individuals to seek help and support without hesitation.

The implementation of the Prescription History Digital Storage feature has revolutionized medical record-keeping, providing users with a convenient and secure platform to manage their medical logs. The

website's user-friendly interface simplifies the creation and retrieval of medical records, enhancing healthcare continuity and facilitating informed consultations with healthcare professionals.

AAROGYA's positive impact on society lies not only in health awareness but also in addressing the prevailing healthcare challenges faced by the younger generation. By catering to critical health domains that significantly affect youth, the website supports early intervention and proactive health management, ultimately leading to a healthier and more resilient society.

Although AAROGYA has achieved commendable milestones, the project acknowledges certain limitations and considers future scope for improvement. Expanding the domain coverage, ensuring robust data privacy measures, and introducing real-time interaction with healthcare professionals are among the many avenues of growth to elevate the website's capabilities.

In conclusion, "AAROGYA" stands as an embodiment of our commitment to social welfare and technological innovation. With its focus on health awareness, knowledge dissemination, and efficient medical record-keeping, it has the potential to positively transform public health. As we continue to embrace advancements and user feedback, it will remain an indispensable healthcare resource, contributing to a healthier, informed, and empowered society. Together, we move towards a future where technology and compassion converge to build a world of well-being and hope.

REFERENCES

- [1] Altar, C. Anthony, Richard E. Whitehead, Ruoyan Chen, Gitta Wortwein, and Torsten M. Madsen. "Effects of Electroconvulsive Seizures and Antidepressant Drugs on Brain-Derived Neurotrophic Factor Protein in Rat Brain."
- [2] Iyer, K., and Khan, Z. A. "Depression – A Review."
- [3] Mathur, Garima, Sumitra Nain, and Pramod Kumar Sharma. "Cancer: An Overview."
- [4] Sampada Sawant, and Ranjita Shegokar. "Cancer research and therapy: Where are we today?"
- [5] Kane Ezki, Kalob Taulien, Radek Wilk. "The Ultimate 2023 Fullstack Web Development Bootcamp", Udemy