UNIVERSITY INSTITUTE OF COMPUTING

DIVISION- MCA

“Reviews Scrapper Project”

A Project Report

Submitted By

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(21MCI1242)

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BONAFIDE CERTIFICATE

This is to certify that the work embodied in this Project Report entitle “Reviews Scrapper Project” being submitted by Aakash Mittal(21MCI1242) 4TH Semester for partial fulfillment of the requirement for the degree of “Masters in Computer Application Specialization in AIML” discipline in “ Chandigarh University ” during the academic session Feb-May 2023 is a record of bonafide piece of work, carried out by student’s under my supervision and guidance in the “Department of University Institute of computing”, Chandigarh University.

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I would like to express my profound gratitude to Dr. Manisha Malhotra of UIC for their contributions to the completion of my project titled "**Reviews Scrapper Project**".

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ABSTRACT

“The main goal of the Reviews Scrapper Project project is to scrap data. It manages to fetch all the reviews on the page. The project is entirely administrative and therefore access is guaranteed only to the administrator. The project's aim is to develop an application system to minimize the manual work for scrapping data. It monitors all of the reviews and Group Right information and present to viewer”

The intension of this project is developing a supplemental web-based App. A Reviews Scrapper Project holds information about all the reviews that are present on the ecommerce websites it helps to group them all and keeps best relative reviews gathered as a result we get accurate information about the product.

However, the current system is limited on manual work. This has limitation on controlling the work securely, for declaring the result on time, and has a high consumption on resources. Web based Reviews Scrapper System is an online app to facilitate the co-ordination between scrapping reviews on various sites. The whole purpose of the project is bringing an online edge for product reviews and fetch them all at a single page.

This project aims at maintaining all the information pertaining products reviews, different reviews available on a single page helps to save the time of customer in a better way. Aim is to prove transparency in this field, make the process of obtaining reviews from different ecommerce websites. The main objective of this application is to automate the complete operation of scrapping reviews. They need maintain hundreds of thousands of records.This application is built such a way that it will fetch all related reviews on a single page.

Reviews Scrapper Project is one stop solution for different reviews to fetch them all at a single page. The management system helps in performing the tasks like accounting and inventory management, stock management and reporting of various data. It also has an online performance dashboard which lets them see the performance of the app on a daily basis.

CHAPTER 1. INTRODUCTION

INTRODUCTION

“The main goal of the Reviews Scrapper Project project is to scrap data. It manages to fetch all the reviews on the page. The project is entirely administrative and therefore access is guaranteed only to the administrator. The project's aim is to develop an application system to minimize the manual work for scrapping data. It monitors all of the reviews and Group Right information and present to viewer”

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In this app first user should login to the app then user have to search for the product in the

search bar to get reviews of that particular product. After entering name of the product user gets the reviews of the same product on a single pag

Reviews Scrapper Project is one stop solution for different reviews to fetch them all at a single page. The management system helps in performing the tasks like accounting and inventory management, stock management and reporting of various data. It also has an online performance dashboard which lets them see the performance of the app on a daily basis.

The Reviews Scrapper Project is designed to collect data by scraping reviews from various websites. The primary objective of the project is to gather all reviews available on the webpage and group them together. This application is solely for administrative purposes, and access is restricted only to the administrator. The goal of this project is to create an efficient system that can automate the process of data scraping, thus reducing the manual work. By monitoring all the reviews, the system can extract the relevant information and present it to the viewers in an organized manner.

The ultimate aim of this project is to develop a web-based application that can supplement e-commerce websites. With the Reviews Scrapper Project, we can collect information about all the reviews of a product, group them together, and extract the most relevant information. This process ensures that we get accurate information about the product and helps in making informed decisions.

1.1 CLIENT IDENTIFICATION AND RECOGNITION OF NEED

Client identification and recognition of need refers to the process of identifying the potential clients and understanding their requirements. It involves analyzing the client's needs, preferences, and expectations to develop a clear understanding of their requirements. This process is critical in any business as it helps in providing personalized solutions to the clients. To identify the clients, businesses can use various methods such as market research, customer surveys, and data analysis. Once the clients are identified, it is important to recognize their needs and expectations. This process involves understanding the client's problems, pain points, and requirements.
By recognizing the client's needs, businesses can offer tailored solutions that meet their requirements. It helps in building a strong relationship with the clients and enhancing their overall experience. Therefore, client identification and recognition of need is a crucial process in any business that aims to provide exceptional customer service and achieve long-term success.

- **Donor Registration and management:**

  The system will provide user a simple and effective way to register and manage their search result, and it can also give users a way to keep track of reviews into database so that user can make a wise decision.

- **Inventory management:**

  The system can track the inventory of reviews, ensuring that the data has sufficient and related stock of all reviews type and minimizing waste.

- **Reporting and analytics:**

  The system can generate reports and analytics on Reviews scrapping from various websites, helping customer to identify areas for improvement and make data-driven decisions.

Overall, a Reviews Scrapper system can improve the efficiency and accuracy of scrapping reviews helping to user that receive the time-saving reports that they need in a timely and safe manner.

1.1.2 RECOGNITION AND KNOWLEDGE OF RELEVANT CONTEMPORARY ISSUES

Recognition and knowledge of relevant contemporary issues is essential for individuals to understand the world around them and make informed decisions. It involves staying up-to-date with current events, political and social issues, and cultural trends.

Having a broad understanding of contemporary issues helps individuals to become more engaged in society, to participate in meaningful discussions, and to make informed decisions that impact their lives and the lives of others. It also helps individuals to recognize and challenge biases, stereotypes, and misinformation that may exist in their communities and in the media.

Furthermore, recognition and knowledge of contemporary issues are critical for professionals in various fields. For example, in the field of business, understanding current economic trends and emerging markets can help business owners make informed decisions about investments and growth opportunities. In the field of healthcare, knowledge of contemporary health issues and public health policies can help healthcare professionals provide better care to their patients.

Overall, recognition and knowledge of relevant contemporary issues are crucial for individuals and professionals alike. It helps them to understand the world around them, engage in meaningful discussions, and make informed decisions that can positively impact their lives and the lives of others.

- Recognition and knowledge of contemporary issues require a commitment to lifelong learning and staying informed about current events.
- The internet and social media have made it easier to access information about contemporary issues, but also pose challenges such as the spread of misinformation and fake news.
- Recognizing contemporary issues involves understanding how different factors such as politics, culture, and technology shape our world.

- Knowledge of contemporary issues can help individuals to be more empathetic and understanding towards others who may have different experiences and perspectives.

- In a globalized world, it is important to recognize and understand issues that affect people in different parts of the world, such as climate change, poverty, and human rights violations.

- Professionals in various fields, such as law, education, and journalism, need to stay informed about contemporary issues in order to provide effective and relevant services to their clients or audience.

- Recognizing and addressing contemporary issues in society can lead to positive social change and progress, such as movements for gender equality, racial justice, and LGBTQ+ rights.

- Ultimately, recognition and knowledge of contemporary issues require an open mind, critical thinking skills, and a willingness to listen and learn from diverse perspectives.

1.2 PROJECT IDENTIFICATION

Skills and knowledge required for this project is:

1. HTML:

HTML is an acronym which stands for Hyper Text Markup Language which is used for creating web pages and web applications.

- **HYPER TEXT:**

"Text within Text" is the definition of hypertext. A text that contains links is a hypertext. A hypertext link is one that when you click on it opens a new webpage for you. Two or more web pages (HTML documents) can be linked together via hypertext.

- **MARKUP LANGUAGE:**

A text document can be formatted and laid out using a markup language, which is a computer language. Text is made more interactive and dynamic using markup language. It can convert text into graphics, tables, links, and other formats.

- **WEB PAGE:**

A web page is a document which is commonly written in HTML and translated by a web browser. A web page can be identified by entering an URL. A Web page can be of the static or dynamic type. With the help of HTML only, we can create static web pages.

2. CSS:

CSS (Cascading Style Sheets) is used to style and layout web pages — for example, to alterthe font, color, size, and spacing of your content, split it into multiple columns, or add animations and other decorative features. This module provides a gentle beginning to your path towards CSS mastery with the basics of how it works, what the syntax looks like, and how you can start using it to add styling to HTML.

3. Python:

Python is a high-level programming language that is widely used in a variety of fields, including software development, data analysis, scientific computing, and artificial intelligence. It was first released in 1991 by Guido van Rossum, and has since become one of the most popular programming languages in the world.
One of the reasons for Python's popularity is its simplicity and ease of use. Its syntax is designed to be easily readable and understandable, even for beginners. This makes it an ideal language for teaching programming concepts, as well as for prototyping and building applications quickly.
Python is also known for its extensive standard library, which provides a wide range of built-in modules and functions for performing various tasks. In addition, there is a large community of developers who have created numerous third-party libraries and frameworks for Python, making it a versatile and powerful language for many different applications.
Another key feature of Python is its flexibility. It can be used for both scripting and object-oriented programming, and can be run on a variety of platforms, including Windows, Mac, and Linux. It also supports multiple programming paradigms, including procedural, functional, and imperative programming.
Python has been used in a wide range of applications, from web development and game development to scientific computing and machine learning. Its versatility, simplicity, and extensive libraries make it an ideal choice for many different projects and industries.
Overall, Python is a powerful and popular programming language that is well-suited for a variety of applications. Its simplicity, versatility, and extensive libraries make it an excellent choice for beginners and experienced developers alike.

4. Flask:

Flask is a popular web application framework for Python. It was created by Armin Ronacher in 2010 as a lightweight and flexible alternative to more complex frameworks such as Django. Flask is known for its simplicity, ease of use, and minimalistic approach to web development.
One of the key features of Flask is its modularity. It is designed to be a micro-framework, meaning that it provides only the core functionality required for web development, and can be extended with third-party libraries as needed. This makes it a popular choice for small to medium-sized projects where flexibility and simplicity are more important than scalability or complexity.
Flask also includes a built-in development server, which makes it easy to test and debug applications during development. It also supports a wide range of templating engines, which allows developers to easily create dynamic and responsive web pages.
Another advantage of Flask is its flexibility in terms of deployment options. It can be deployed on various web servers such as Apache, Nginx, or Gunicorn, and can be easily integrated with other technologies such as databases or cloud services.
Flask has a large and active community of developers who contribute to the development of new features, plugins, and extensions. This makes it a constantly evolving framework that is always improving and adapting to new technologies and use cases.
Overall, Flask is a powerful and popular web application framework that provides a flexible and minimalist approach to web development. Its simplicity, modularity, and ease of use make it an ideal choice for small to medium-sized projects, while its flexibility and scalability options make it suitable for a wide range of applications

5. MongoDB:

MongoDB is a popular NoSQL database management system that is designed to handle large volumes of unstructured data. It was first released in 2009 by 10gen, and has since become one of the most widely used NoSQL databases in the world.

One of the key features of MongoDB is its flexibility in handling data. Unlike traditional relational databases, which store data in tables with pre-defined schemas, MongoDB stores data in flexible, JSON-like documents. This allows for a more natural and intuitive way of organizing and accessing data, as well as making it easier to scale and modify the database as needed.

Another advantage of MongoDB is its scalability. It is designed to handle large volumes of data across multiple servers, and can easily scale horizontally as data grows. This makes it a popular choice for applications with high data volumes and high availability requirements.

MongoDB also includes a range of features such as full-text search, geospatial indexing, and data aggregation, which allows for powerful and complex queries to be executed on the database. In addition, it provides a range of drivers and APIs for popular programming languages, making it easy to integrate with a wide range of applications and technologies.

MongoDB has a large and active community of developers who contribute to the development of new features, tools, and libraries. This makes it a constantly evolving database system that is always improving and adapting to new technologies and use cases.

Overall, MongoDB is a powerful and flexible NoSQL database management system that provides a natural and intuitive way of organizing and accessing data. Its scalability, flexibility, and powerful features make it an ideal choice for a wide range of applications and industries.

1.3 TASK IDENTIFICATION

The task identification for your project, Review Scrapper Project, should include the following:

- Identify the websites to be scraped: Determine the specific ecommerce websites that the project will scrape for reviews.
- Determine the data to be scraped: Identify the specific data fields to be scraped for each review, such as the review text, rating, date, and reviewer information.
- Develop a web scraper: Create a Python script or application that will automate the process of scraping reviews from the identified websites. This may involve using a web scraping library such as Beautiful Soup or Scrapy.
- Store the scraped data: Decide on a database system, such as MongoDB, to store the scraped data in an organized and easily accessible manner.
- Develop a user interface: Create a user interface that allows the administrator to access and view the scraped data in a user-friendly manner.
- Test and refine: Conduct thorough testing to ensure the web scraper is collecting accurate and complete data, and refine as needed.
- Ensure security and privacy: Implement security measures to ensure that only the administrator can access the data, and that any sensitive information is kept private and secure.
- Consider scalability: Plan for potential future growth and scalability, such as the ability to scrape data from additional websites or handle larger volumes of data.
- Document the project: Create clear and comprehensive documentation that outlines the purpose, functionality, and technical details of the project, as well as any instructions or guidelines for its use and maintenance.

1.4 TIMELINE

The table shows the timeline of project development.

Weeks	Milestone
Week 1	Selecting tool & set up system
Week 2	Checking the module and its requirements
Week 3	Implementing the Basics
Week 4,5,6,7	Perform the Testing process
Week 8,9,10,11	Checking and resolving of errors
Week 12	Requirements Checks

1.5 GANT CHART/ ORGANISATION OF THE REPORT

	February				March				April			
Requirement Gathering												
Analysis												
Design												
Coding												
Testing												
Implement												
	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4

CHAPTER 2.
LITRATURE REVIEW/ BACKGROUND STUDY

2.1. Timeline of the reported problem

EXISTING SYSTEM PROBLEMS

In order to elicit the requirements and to identify the elements, input, output, subsystems and the procedures the existing had to be examined and analyzed in details. The constituted the system study. Record slips, procedures, rules etc. were examined thoroughly. The existing system was studied involving a complete co-operation from the employees who run the system at present.

In the current system documenting, writing, finding and searching of the specific information of the blood bank is done manually. Employer cannot manage the blood bank efficiently starting from the donor registration, blood screening, processing, and storage and distribution information.

Moreover, there are manual recording systems So that each process or workflow cannot be traced from the database. The current system cannot shows all the reviews, difficult for making comments about services, it becomes tedious for a seeker to search review in case of emergency, and it is difficult to know availability of reviews in stock. These types of system make the workers to document erroneous and redundancy information. The current system is also consumed the time of worker for completing specific task. The need to improve performance and the urgency to solve the above stated problems contribute to undertake this project into consideration.

- So much time consuming this application also one machine and one by one record stored.
- It leads to error prone results.
- It consumes lot of manpower to better results.
- It lacks of data security.
- Retrieval data take lot of time.
- Percentage of accuracy is less.
- Reports take time to produce

The existing system is manually operated. The main drawbacks of the existing system is it take a lot of time to record various data and keeping is also difficult procedure because it take large number of space to store details and difficult to create reports on basis of various condition and also the searching is difficult because of medium storage like files. So it take a lot of manual effort and time.

2.2. EXISTING SOLUTIONS

PROPOSED SYSTEM

When I get the study I knew that the existing manual system contains a lot of drawbacks like it take more manual effort and also it is very time consuming etc. So in the proposed system all the drawbacks of the system is get overcome and the work that is going over there is changed to computerized and this make the work more easy like the consent giving details and also stored the minimum requirements etc. can be stored in the data base and the checking is automatically done by the software itself and the details of the consent get filled. This increase the total productivity. The use of paper file is avoided and all the data are efficiently manipulated by the system. The new system facilitates more automation of the various processes in the organization. It is easy to generate the report to know the status and which is difficult in the existing system we can reduce error which is difficult in the existing system. So by using this proposed system we can reduce the error which is occurred manually so that is why we introduce this proposed system

ADVANTAGES OF THE PROPOSED SYSTEM

- User view all reviews information is product wise.
- User easily scraps reviews to check the product's efficiency.
- User easily request for reviews.
- In this system also supported inquiry for user

To overcome the drawbacks of existing system we proposed our system with following features:

Front-end Features:

- User registration
- User login
- Update user profile
- Product Reviews Request
- Search products

- Search reviews
- Add Product name
- Request Search
- List of Reviews

2.3 BIBLIOMETRIC ANALYSIS

When a new user comes to scrap reviews, they are required to fill out their personal information during the registration process before making a search. After the user authentication, the user is allowed to use the review scrapper app, since the system is only availablefor their use within the organization. This makes it difficult for users to make changes to their personal information within the system. That is, for users to update their personal information, such as password, they cannot update the information by themselves, but must contact the domain expert to update their information.

EFFECTIVENESS

It is easy to generate the report to know the status and which is difficult in the existing system we can reduce error which is difficult in the existing system. So by using this proposed system we can reduce the error which is occurred manually so that is why we introduce this proposed system.

1. User friendliness is provided in the application with various controls.

2.The system makes the overall protect management much easier and flexible.

3.Readily upload the latest updates" allows user to download the alerts by clicking the URL.

4.There is no risk of data mismanagement at any level while the protect development is under process.

4. It provides high level of security with different level of authentication.

DRAWBACKS

There are some limitation of work since the proposed system is only cover certain aspects.

1. The system only cover English language.

2. It did not support other languages.

3. There is no real time interaction between user and product in the system.

2.4. REVIEW SUMMARY

Literature Review

Reviews Scrapper is a Python-based web scraping project designed to automate the collection and organization of reviews from ecommerce websites. The project aims to reduce manual effort and provide accurate information about products by scraping all available reviews and presenting them in a user-friendly interface.
The use of MongoDB as a database system allows for flexible and scalable storage of the scraped data. The development of a user interface for administrators ensures easy access to the scraped data, and security measures are in place to protect sensitive information. Overall, Reviews Scrapper is a valuable tool for businesses and researchers looking to gather and analyze reviews for products or services.

- Ease of use: One of the key benefits of the Reviews Scrapper project is that it is designed to be user-friendly and accessible. The user interface is intuitive and straightforward, making it easy for administrators to access and view the scraped data. This can save time and effort compared to manually collecting and organizing reviews.

- Customizability: The Reviews Scrapper project is highly customizable, allowing administrators to tailor the scraping process to their specific needs. For example, they can choose which data fields to scrape, select which websites to scrape from, and even modify the code to add additional functionality.

- Accuracy and completeness: By automating the review scraping process, the Reviews Scrapper project can ensure a high degree of accuracy and completeness in the data collected. This can help businesses and researchers make more informed decisions based on the insights gained from analyzing the data.

- Time-saving: Since the Reviews Scrapper project automates the process of collecting and organizing reviews, it can save a significant amount of time compared to manual methods. This can allow businesses and researchers to focus on other tasks that require their attention.

- Potential for data analysis: The data collected by the Reviews Scrapper project can be used for a variety of purposes, including sentiment analysis, product research, and market analysis. With the use of data analysis tools and techniques, businesses and researchers can gain valuable

insights into consumer behaviour and preferences.

- Scalability: The Reviews Scrapper project is designed to be scalable, meaning it can handle large volumes of data and be easily expanded to include additional websites or data fields. This can be useful for businesses that are looking to grow or expand their product offerings.

- Overall, the Reviews Scrapper project has the potential to be a valuable tool for businesses and researchers looking to gather and analyse reviews for products or services. By automating the review scraping process, it can save time, improve accuracy, and provide valuable insights into consumer behaviour and preferences.

2.5. PROBLEM DEFINITION

Problem definition deals with observation, site visits and discussions to identify analyze and document project requirements and carry out feasibility studies and technical assessments to determine the best approaches for full system development. Addition of new features is very difficult and creates more overheads. In existing system , data are not maintained properly which leads the followed-ups slow and lack of reports. The changes in one module or any part of the system is widely affected in other part or section.

Keeping the problem definition in mind the proposed system evolves which is the user friendly, easy to update with the new in features, data is maintained and reports generated will be more useful for management to take quick business and so on.

Problems with conventional blood bank system

Lack of immediate retrievals: -

The information is very difficult to retrieve and to find particular information like-E.g. -To find out about the product's history, the user has to go through various registers. This results in inconvenience and wastage of time.

2.6. GOALS / OBJECTIVES

"The main goal of the Reviews Scrapper Project project is to scrap data. It manages to fetch all the reviews on the page. The project is entirely administrative and therefore access is guaranteed only to the administrator. The project's aim is to develop an application system to minimize the manual work for scrapping data. It monitors all of the reviews and Group Right information and present to viewer" The intension of this project is developing a supplemental web-based App. A Reviews Scrapper Project holds information about all the reviews that are present on the ecommerce websites it helps to group them all and keeps best relative reviews gathered as a result we get accurate information about the product.

The main objectives of using this Management System are as follows: -

1. CONTROL REDUNDANCY :

The System should identify existence of common data and avoid duplicate recording relationships of pointers should be used to locate data which are used many times selective redundancy is sometimes allowed to improve performance or far better reliability.

2. DATA INTEGRITY :

Consistency of data values and relationships must be preserved in order to achieve this the system must ensure validity of data by using good editing, synchronize updating and propagating changes to other related data element it also involves maintaining audit trails to enable recovery if errors are deleted.

3. DATA SECURITY :

This is concerned with protecting access to data protection is needed at many levels for access, modification, deletion or display access restriction may be for individual data items or group of items.

4. DATABASE PERFORMANCE :

The system should be able to provide timely information as required. The cost of storing and retrieving the data should be commensurate with the value of information provided.

5. MANAGEMENT CONTROL :

As the dependence of an organization on a database increases positive management controls should be exercised over addition, deletion, changes and disposition of data must be protected to start legal accounting and auditing requirements.

There are the objectives in this project to be achieve to make this project successfully complete:

- To design an application for publicize and advertise the advantage of scrap reviews to encourage people to save time.
- To develop an application that can manage reviews scrapping using mobile phone and records blood donationas the alternative to replace the traditional way of recording Red Book Certificate.
- To test the functionality of the developed application to meet the user requirement
- To provide synchronized and centralized reviews on the same page.
- • The main concern of this project is to improve the efficiency and effectiveness of the whole system and saves time of the user.

CHAPTER 3.
DESIGN FLOW/PROCESS

3.1 Evaluation & Selection of Specifications/Features

To evaluate the features identified in the literature for an online blood bank management system, we need to consider the following factors:

1. User requirements:

The system should be user-friendly and easy to navigate, with clear instructions for users at all levels of technical proficiency.

2. Security:

The system should be secure and protect the confidentiality of patient data and blood donor information.

3. Accessibility:

The system should be accessible from anywhere, at any time, and on any device with an internet connection.

4. Integration:

The system should be able to integrate with other healthcare systems and databases, such as electronic health records and laboratory information management systems.

5. Functionality:

The system should have all the necessary features to manage the entire blood donation process, from donor registration and blood collection to testing, storage, and distribution.

6. Customization:

The system should allow customization of forms, reports, and notifications according to the specific needs of the blood bank.

7. Reporting:

The system should provide comprehensive reports and analytics to help the blood bank analyze its operations and improve its services.

8. Communication:

The system should facilitate communication between the blood bank staff, donors, and recipients.

Based on the above factor, We have list of features which is ideally required in an online blood bank management system:

1. Home page:

The home page is a crucial component of a blood bank management system, as it is the first page that users will see when they visit the website. The home page should be designed to be user-friendly, informative, and engaging, and should encourage users to explore the other pages of the website.

2. User Registration Page/ Sign up page:

A user registration page or sign up page is a crucial component of reviews scrapping system. This page is designed to collect important information from potential users who are interested in searching of the reviews.

The registration page is created simple, user-friendly and in addition, the registration page should include a consent form that outlines the risks and benefitsof donating blood, as well as any restrictions or requirements that may apply to certain donors.
This ensures that users are aware of the process and understand what is expected of them.

3. Admin page:

An admin page is a crucial component of a reviews scrapping system that allows authorized personnel to manage the system's operations and data. This page is designed for the user administrators who have access to the system's backend and can perform various tasks related to reviews scrapping, inventory management, and reviews management.

The admin page should be accessible only to authorized personnel through a secure login system. Once logged in, administrators can access and manage different aspects of the system such as user profiles, donation records, inventory levels, and reports.

The admin page should also include features to add, edit, or delete donor profiles and donation records. This functionality helps administrators to maintain accurate and up-to-date information about donors and donations. The inventory management feature helps to track data inventory levels, including available reviews types, quantities, and expiration dates.

The admin page should also have a reporting feature that provides data and analytics on reviews, inventory levels, and other key metrics. This information can be used to monitor, track user engagement, and identify areas where improvements can be made.

Overall, an admin page is an essential component of a reviews scrapping system that provides the tools and functionality needed to manage the system's operations efficiently. It helpsto maintain accurate records, ensure proper inventory management, and monitor the system's performance to improve the overall effectiveness of the project.

4. Find User page:

A find user page is a component of reviews scrapping system that enables authorized personnel to search for potential users based on specific criteria. This page is designed to help user and meet their specific products requirements needed for scrapping reviews.

The find user page is created simple and user-friendly. It should include search fields that allow administrators to input specific criteria such as data type, user-password, and availability. The system should then return a list of potential donors who meet the search criteria.

In addition, the find user page should include user profile information such as name, contact details. This information can be used to contact potential user.

The find user page can also include features to filter or sort the search results based on various criteria such as proximity to the product, search history, and eligibility to search for a product.

Overall, a well-designed find user page is essential for the success of reviews scrapping system.

5. Request Page:

A request page is a component of a user management system that enables authorized personnel to request from potential users. This page is designed to facilitate the process of matching users.

The request page can also include features to track the status of the request, such as whether it has been fulfilled or is still pending. This helps to ensure that the requester receives the reviews they need in a timely and efficient manner.

6. Admin Dashboard page:

An admin dashboard page is a component of a reviews scrapping system that provides a summary of the system's key performance indicators (KPIs) and allows authorized personnel to monitor and manage various aspects of the system.

This page can also include features to track the status of the request, such as whether it has been fulfilled or is still pending. This helps to ensure that the requester receives the reviews theyneed in a timely and efficient manner.

7. Contact us page:

A contact us page is an essential component of a reviews scrapping system that allows users to get in touch with the staff. This page provides users with a platform to ask questions,report issues, or provide feedback on the system's performance.

8. News page:

A news page is a component of a reviews scrapping system that provides users with the latest updates, events, and news related to the reviews scrapping process. This pageis designed to keep users informed and engaged with the user activities and encourage them scrap data automatically.

9. Blogs page:

A blogs page is a component of a reviews scrapping system that provides users with educational and informative content related to reviews scrapping technique. This page is designed to educate users and encourage users to automate the process.

The blogs page includes a variety of articles, blog posts, or other educational content related to reviews scrapping system. The content should be presented in an easy-to-read format and should cover a range of topics.

10. Campaign page:

A campaign page is a component of a reviews scrapping system that provides users with information about ongoing or upcoming reviews scraping camp organized by the Web APP.This page is designed to encourage users to scrap reviews and participate in it.

3.2. Design Constraints

The Theory of Constraints is a technique for distinguishing the main restricting variable (i.e., requirement) that disrupts the general flow of accomplishing an objective and afterward deliberately working on that imperative until it is presently not the restricting component. In assembling, the requirement is regularly alluded to as a bottleneck.

The Theory of Constraints adopts a logical strategy to progress. It theorizes that each complicated framework, including fabricating processes, comprises of various connected exercises, one of which goes about as a limitation upon the whole framework (i.e., the requirement movement is the "most fragile connection in the chain").

So what is a definitive objective of most assembling organizations? To create a gain - both for the time being and in the long haul. The Theory of Constraints gives a strong arrangement of apparatuses for assisting with accomplishing that objective, including.

The Five Focusing Steps: a strategy for distinguishing and dispensing with imperatives

The Thinking Processes: apparatuses for investigating and settling issues

Throughput Accounting: a strategy for estimating execution and directing administration choices.

Design constraints are also important in the design of reviews scrapping system. They help to define the boundaries of the project and ensure that it meets the specific needs and requirements ofthe users. In this context, some of the design constraints that need to be considered include:

1. Regulatory Compliance:

The reviews scrapping system must comply with various regulatory requirements related todata privacy and security. This can include HIPAA regulations, GDPR compliance, and other relevant laws and standards.

2. Data Security:

The system must be designed to ensure that sensitive user and data is secure and protected from unauthorized access. This can include measures such as encryption, firewalls, and access

controls.

3. User Interface:

The user interface of the system must be designed to be intuitive, user-friendly, and accessible to users of all levels of technical proficiency.

4. Scalability:

The system must be designed to be scalable, so that it can accommodate an increasing number of users and data over time.

5. Integration:

The reviews scrapping system should be designed to integrate with other systems such as hospital information systems (HIS) and laboratory information systems (LIS), to ensure seamless communication and data exchange between different systems.

6. Accessibility:

The system must be designed to be accessible to all users.

When designing a reviews scrapping system, various economic, environmental, health, manufacturability, and safety constraints need to be considered. Some of these constraints include:

1. Economic Constraints:

The system must be designed to be cost-effective and feasible within the budget constraints of the organization. The cost of components and development must be considered to ensure that the system is affordable.

2. Environmental Constraints:

The system must be designed to minimize its environmental impact. This can include using energy-efficient components and designing the system to be eco-friendly.

3. Manufacturability Constraints:

The system must be designed to be easily maintainable and upgradeable. This can include using modular design principles and creating a clear maintenance plan.

4. Accessibility Constraints:

The system must be designed to be accessible to all users, including those with disabilities. This can include providing alternative text for images and using accessible design principles.

5. Regulatory Constraints:

The system must comply with various regulatory requirements related to data privacy and security. This can include HIPAA regulations, GDPR compliance, and other relevant laws and standards**.**

3.3. Analysis of Features and finalization subjects to constraints

Reviews scrapping system, there are several project requirements that need to be considered.The three main requirements are time, cost, and scope, which are also known as the triple constraint. Time refers to the specific deadlines and milestones that must be met throughout the project. Cost involves the budget and resources available for the project, as well as the total amount that can be spent. Scope refers to the specific goals and tasks that define the boundaries of the project.

In addition to these three requirements, quality is also an important consideration. Quality focuses on the characteristics of the deliverables and ensuring that they meet the defined attributes. Quality tolerance measures how closely the developed system matches the defined specifications.

Another important consideration is the benefits and risks of the project. Benefits refer to the positive outcomes that are expected from the project, while risks refer to potential negative consequences. Both of these elements must be considered and addressed throughout the project to ensure that the project is successful and has a positive impact on the organization.

Overall, managing these project requirements is critical to the success of the blood bank management system. It is important to balance these requirements and make decisions based on the priorities of the project and the organization.

3.4. Design Flow

The design flow for reviews scrapping system project report may include the following:

- **Project Definition:**

  The reviews scrapping Management System project aims to develop a web-based application to manage and organize the blood donation process, inventory management, and requests from users. The project's main objective is to ensure that the blood bank is well equippedwith the required amount and types of blood and to provide a fast and easy way for hospitals to request blood in emergency situations.

- **Requirements Gathering:**

  Collect and document the functional and non-functional requirements for the reviews scrapping management system. This should include the needs of the user, recipients, and the clients.

- **System architecture:**

  1. **User Interface:**

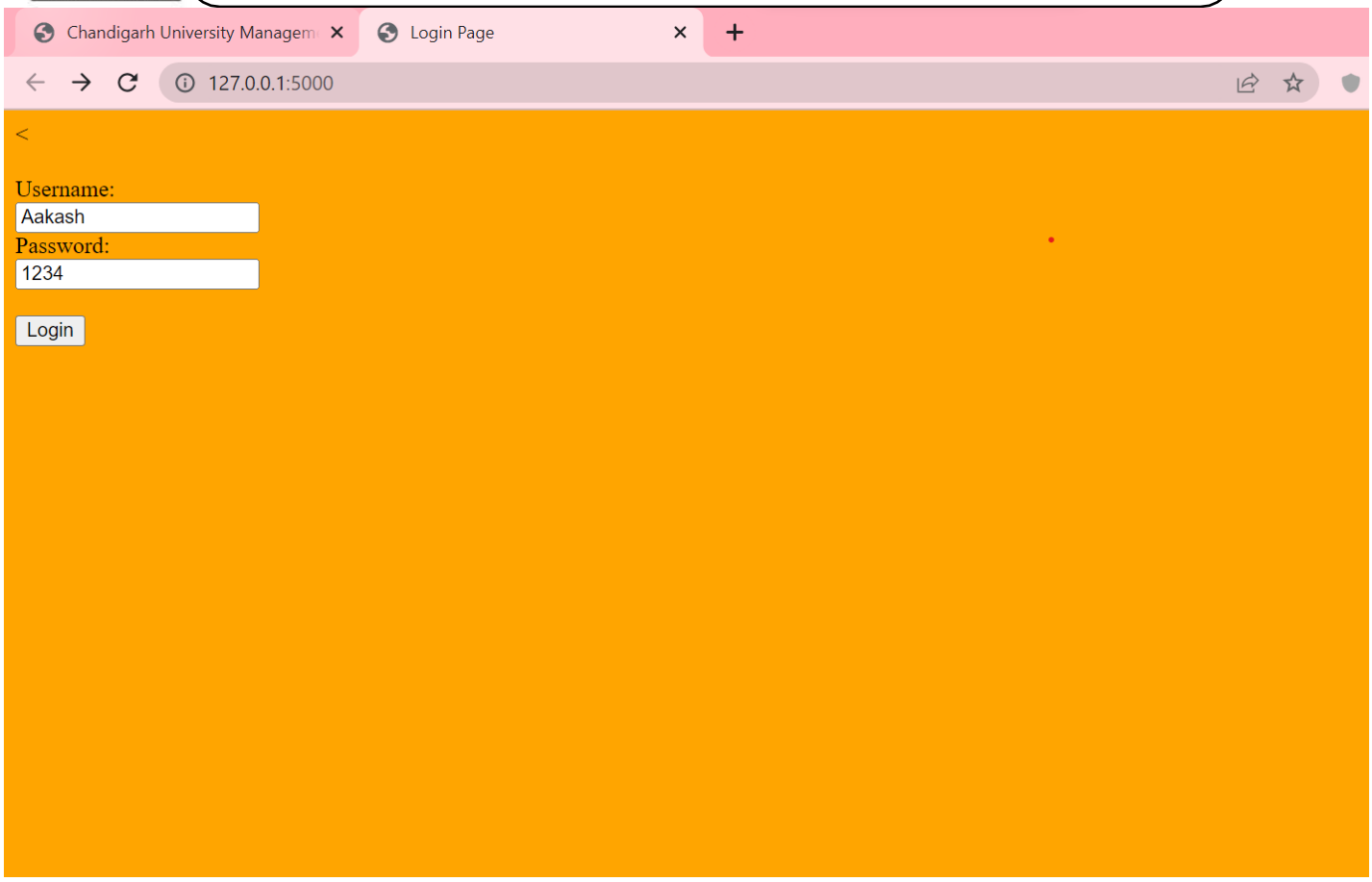
     This component includes the web-based interface that followed by 2 pages that is first one ‘Login Page’ and second one is ‘Search page of any product’ to access the system. It should be intuitive, user-friendly and secure.

  2. **Database:**

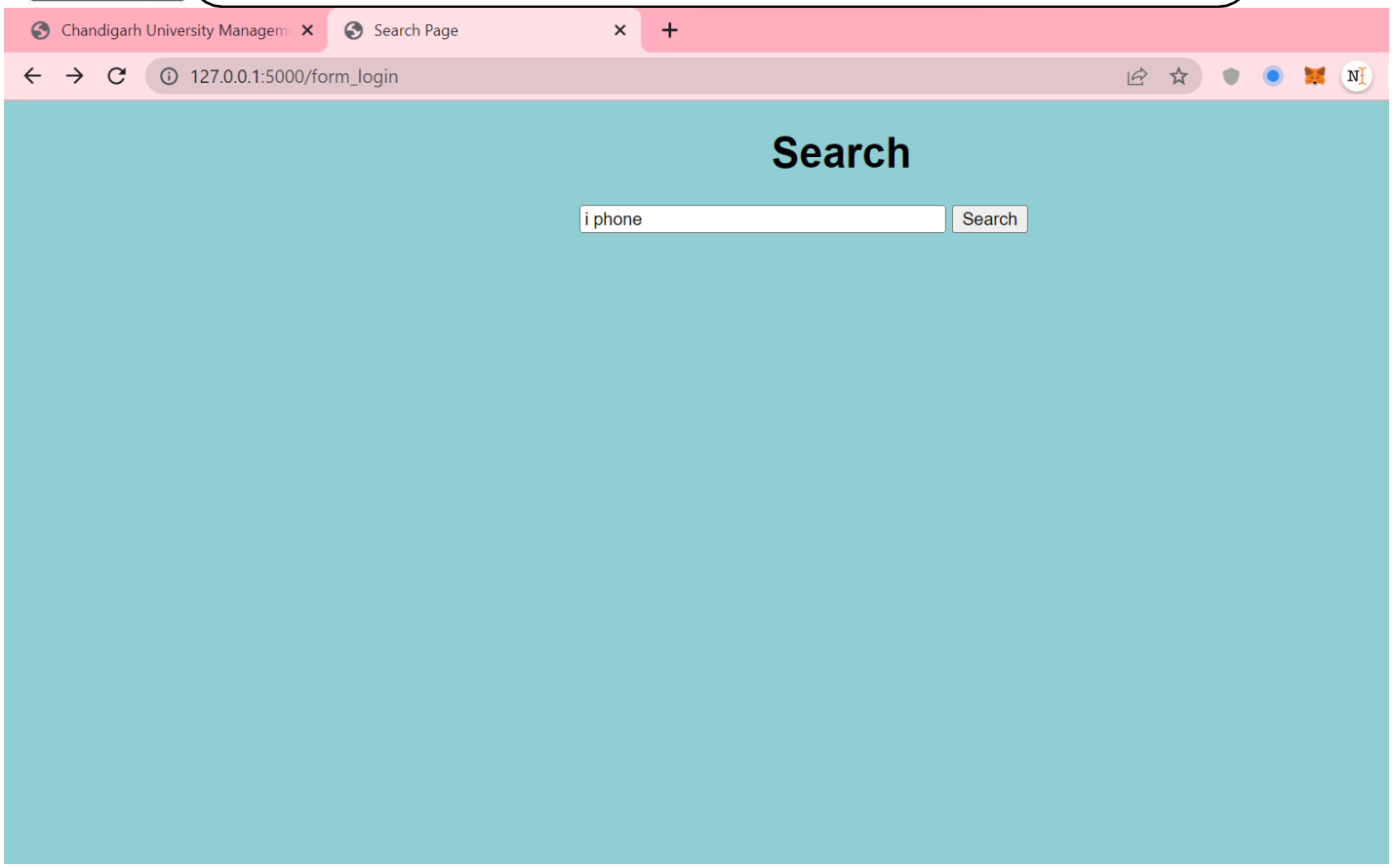
     The database is a critical component of the system architecture that stores and manages all the data related to user search and reviews. It should be robust, scalable, and secure.

  3. **User Management System:**

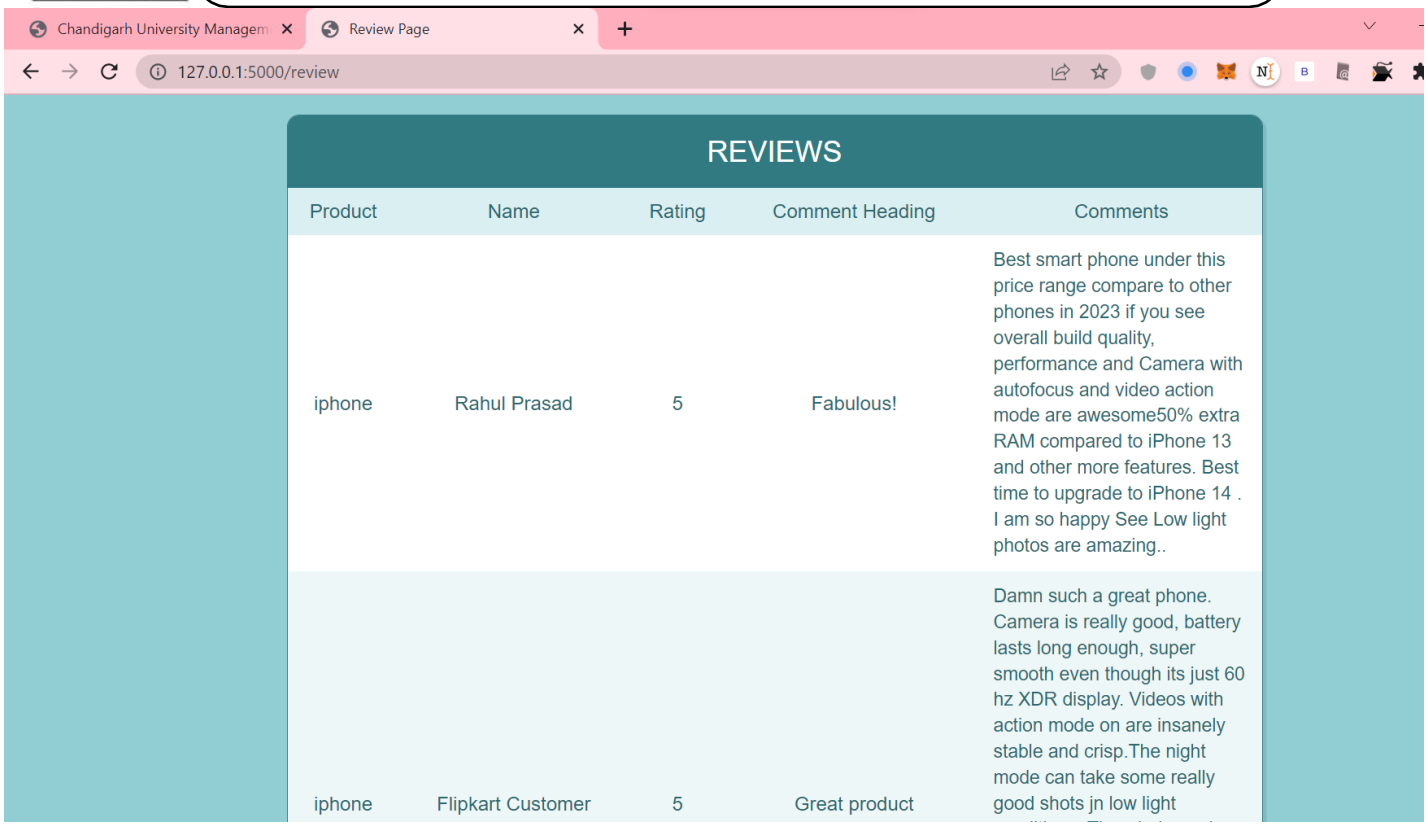
     This component is responsible for managing user data, including their personal information, data type, search history, and eligibility to access.



Page 1: Login/Signup page



Page 2: Search page (of any product from flipkart)



Page 3 : Review Page (scrapping reviews from ecommerce website)

4. **Inventory Management System:**

   This component manages the user inventory and tracks data storage, expiration dates, and current stock levels. It should be able to generate alerts when reviews are low and track all incoming and outgoing blood products.

5. **Reporting System:**

   This component is responsible for generating reports and analytics related to user data, data inventory, and usage. It should provide real-time data for making informed decisions.

6. **Security:**

   The system architecture should have security measures in place to ensure that all data is secure, and only authorized personnel can access it. This includes measures such as data encryption, firewalls, and access control.

7. **Integration:**

   The system should be able to integrate with other healthcare systems such as electronic health records (EHR) to streamline the process of blood donation and management.

- ## Implementation

The implementation phase of the blood bank management system project involves building the system based on the design specifications. This phase typically involves writing code, configuring the system components, integrating different modules, and testing the system to ensure it meets all the requirements.

The first step in the implementation phase is to set up the development environment. This involves installing the required software, frameworks, and libraries needed to build the system. In the case of the reviews scrapping system, this could include a programming language like Html, CSS , Python, MongoDB a NOSQL database management system.

Once the development environment is set up, the actual coding and configuration work can begin. This involves writing code to implement the different system features and integrating them together to form a cohesive whole. For example, the system might include modules for managing users, tracking inventory levels, and data storage.

As each module is completed, it needs to be tested to ensure it functions as expected. This involves both unit testing, where individual code components are tested in isolation, and integration testing, where different modules are tested together to ensure they work as a system.

Once all the modules are completed and tested, the entire system needs to be tested as a whole. This involves running the system through a series of tests to ensure it meets all the requirements and functions correctly in different scenarios. For example, the system might be tested to ensure it correctly updates inventory levels when new donations are received or that it sends out appointment reminders to donors.

After the system has been thoroughly tested and any bugs or issues have been addressed, it can be deployed to a production environment where it can be used by the users and information. Ongoing maintenance and updates may be required to keep the system running smoothly and to add new features or functionality as needed.

- **Deployment:**

Install and configure the system in the production environment.

3.5. Design Selection

Design is frequently given a role as a course of creating and testing. The assessment of potential plan choices actually guides the resulting age of new plans. Thusly, the choices produced help to shape the assessments used to browse among them. This coupling among age and assessment is an indispensable piece of the plan interaction and is maybe the main manner by which choice based plan can be separated from direction: Designers are accused of choosing the best plan choices, yet additionally with producing the choices from which they should pick.

Planning different choices will without a doubt produce squander in the event that you are not careful about the thing you are learning and attempting to make. Esteem is made being developed through the making of two things: Beneficial functional worth streams (item client values and assembling framework to deliver). Usable information that empowers the production of beneficial functional worth streams.

The originator ought to consequently know which option is ideal, disregard the costly and tedious iterative plan changes that quite often happen when a solitary plan is chosen early, and will probably bring about a sub-standard plan offering less benefit to the client. These are altogether squanders that contrarily sway client esteem. According to the point of view of augmenting esteem in making a beneficial functional worth stream, you should be boosting an incentive for the client in the item and your capacity to create it. Investigating various options matched with speedy learning empowers quicker time to market and more client esteem. Be that as it may, this possibly occurs assuming you assess the choices according to the viewpoints of the client and assembling framework. Assuming you are assessing options according to alternate points of view that the client doesn't esteem you could simply be creating more waste.

And afterward there is the other worth made being developed - usable information. While numerous options are investigated to advance the item and assembling framework, what be falls the information made while finding out about the elective plans? Assuming your viewpoint is only this one item and that information gets disposed of, it's anything but a waste.

Design selection for a blood bank online management system would depend on various factors such as the project requirements, budget, timeline, and technical expertise.

Here are some possible design options for a blood bank online management system:

1. **Custom-built system:**

   This involves developing a custom solution from scratch that is tailored to the specific needs of the blood bank. It requires a team of experienced developers and designers who can understand the requirements and design a scalable and secure system. While this option may provide the most flexibility, it can be expensive and time-consuming.

2. **Open-source solution:**

   An open-source solution such as OpenMRS or OpenClinic can be customized to fit the needs of a blood bank. This can be a cost-effective solution, but it may require technical expertise to modify and maintain.

3. **Commercial off-the-shelf (COTS) solution:**

   A pre-built system designed for blood bank management may be available from a vendor. This option can be a quicker and more cost-effective solution than a custom-built system, but it may not be as flexible and may not fully meet the specific requirements of the blood bank.

3.6 Implementation Plan/ Methodology

Design and implementation is the fourth period of the venture cycle, resulting to esteem chain choice, esteem chain investigation and planning the intensity system. While is it helpful to isolate these stages for the motivations behind conversation, by and by a lot of people of the methods and abilities utilized in determination, investigation and methodology improvement are ceaselessly applied during execution. Further, while these phases of the venture cycle are successive, they are not straight: it is fundamental that examination go on during the execution stage, to direct adjustments to the intensity methodology in light of changes on the lookout, the empowering climate or the actual chain.

The intensity technique that illuminates project configuration isn't simply an arrangement for assisting individual firms with turning out to be more beneficial, it is a guide for pushing an industry toward higher, supported paces of development. It gives a dream of intensity and a redesigning plan for the business that assists us with getting how should be updated the business, who the applicable partners are and what every one of them needs to do, and how the business will accomplish the vision. Many worth chain advancement programs in the past have zeroed in on reducing explicit requirements by presenting further developed creation innovation, giving monetary and business support benefits or further developing the approach climate. The point of the worth chain approach verbalized here is to work with activities that form limit interior to the worth chain to empower private-area partners to become and stay serious without proceeded with outer help. To accomplish this, esteem chain programs should draw on the vision of intensity to create: An industry pathway to direct intercessions on the side of this vision, an information the executives framework to empower deviations from the pathway to illuminate continuous and future mediations, and An arrangement for increasing effect and eliminating support preceding leaving.

For the development phase, the following methodology can be used:

1. **Agile methodology:**

   This methodology emphasizes iterative and incremental development. The development team works on small iterations, where each iteration is a mini-project with a specific goal to achieve. The team then tests and delivers the iteration, and then proceeds to the next iteration.

2. **Waterfall methodology:**

   This methodology is a linear sequential approach where the development process flows like a waterfall. The development team completes each phase before moving on to the next one. Once the requirements are finalized, the team designs, develops, tests, deploys, and maintains the system.

3. **Hybrid methodology:**

   This methodology combines the best aspects of both agile and waterfall methodologies. It can be customized according to the needs of the project.

The methodology chosen will depend on the specific requirements and constraints of the project.

CHAPTER 4. RESULTS ANALYSIS AND VALIDATION

4.1 Code:

1. Application:

```
from flask import Flask, render_template, request, jsonify
from flask_cors import CORS, cross_origin
import requests
from bs4 import BeautifulSoup as bs
import pickle
from urllib.request import urlopen as uReq

app = Flask(__name__)


@app.route('/')
def hello_world():
    return render_template("login.html")


database = {'Aakash': '1234', 'Dev': '4321', 'Harry': '@1234'}


@app.route('/form_login', methods=['POST', 'GET'])
def login():
    name1 = request.form['username']
    pwd = request.form['password']
    if name1 not in database:
        return render_template('login.html', info='Invalid User')
    else:
        if database[name1] != pwd:
            return render_template('login.html', info='Invalid Password')
        else:
            return render_template('index.html', name=name1)


@app.route('/review', methods=['GET'])  # route to display the home page
@cross_origin()
def homePage():
    return render_template("index.html")


# route to show the review comments in a web UI
@app.route('/review', methods=['POST', 'GET'])
@cross_origin()
def index():
```

```
if request.method == 'POST':
    try:
        searchString = request.form['content'].replace(" ", "")
        flipkart_url = "https://www.flipkart.com/search?q=" + searchString
        uClient = uReq(flipkart_url)
        flipkartPage = uClient.read()
        uClient.close()
        flipkart_html = bs(flipkartPage, "html.parser")
        bigboxes = flipkart_html.find_all(
            "div", {"class": "_1AtVbE col-12-12"})
        del bigboxes[0:3]
        box = bigboxes[0]
        productLink = "https://www.flipkart.com" + \
            box.div.div.div.a['href']
        prodRes = requests.get(productLink)
        prodRes.encoding = 'utf-8'
        prod_html = bs(prodRes.text, "html.parser")
        print(prod_html)
        commentboxes = prod_html.find_all('div', {'class': "_16PBlm"})

        # filename = searchString + ".csv"
        # fw = open(filename, "w")
        # headers = "Product, Customer Name, Rating, Heading, Comment \n"
        # fw.write(headers)
        reviews = []
        for commentbox in commentboxes:
            try:
                # name.encode(encoding='utf-8')
                name = commentbox.div.div.find_all(
                    'p', {'class': '_2sc7ZR _2V5EHH'})[0].text

            except:
                name = 'No Name'

            try:
                # rating.encode(encoding='utf-8')
                rating = commentbox.div.div.div.div.text

            except:
                rating = 'No Rating'

            try:
                # commentHead.encode(encoding='utf-8')
                commentHead = commentbox.div.div.div.p.text

            except:
                commentHead = 'No Comment Heading'
            try:
```

```
                    comtag = commentbox.div.div.find_all('div', {'class': ''})
                    # custComment.encode(encoding='utf-8')
                    custComment = comtag[0].div.text
                except Exception as e:
                    print("Exception while creating dictionary: ", e)

                mydict = {"Product": searchString, "Name": name, "Rating": rating,
"CommentHead": commentHead,
                          "Comment": custComment}
                reviews.append(mydict)
            return render_template('results.html', reviews=reviews[0:(len(reviews)-1)])
        except Exception as e:
            print('The Exception message is: ', e)
            return 'something is wrong'
    # return render_template('results.html')

    else:
        return render_template('index.html')


if __name__ == "__main__":
    #app.run(host='127.0.0.1', port=8001, debug=True)
    app.run(debug=True)
```

Login:

```
<
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Login Page</title>
</head>
<body bgcolor="orange">

<form action="/form_login" method="post">
  <h2></h2>Username:<br>
  <input type="text" name='username'><br>
  Password:<br>
  <input  name='password' ><br><br>
<input type="submit" value="Login">
</form>
<h1 >{{info}}</h1>
```

```
</body>
</html>
```

Result:

```
<!DOCTYPE html>
<html lang="en" >

<head>
  <meta charset="UTF-8">
  <title>Review Page</title>

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/normalize/5.0.0/normalize.min.css">


      <link rel="stylesheet" href="./style.css">
    <link rel="stylesheet" href="{{ url_for('static', filename='css/style.css') }}">


</head>

<body>

  <div class="table-users">
   <div class="header">Reviews</div>

   <table cellspacing="0">
      <tr>
         <th>Product</th>
         <th>Name</th>
         <th>Rating</th>
         <th>Comment Heading</th>
         <th width="230">Comments</th>
      </tr>
         {% for review in reviews %}
      <tr>
          <td>{{review['Product']}}</td>
         <td>{{review['Name']}}</td>
         <td>{{review['Rating']}}</td>
         <td>{{review['CommentHead']}}</td>
         <td>{{review['Comment']}} </td>
       {% endfor %}
   </table>
</div>
```

```
</body>

</html>
```

Home:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Home</title>
</head>
<body bgcolor="LightGray">
<br>
<h1 align="center">Welcome {{name}} !</h1>

</body>
</html>
```