

TERNA ENGINEERING COLLEGE
DEPARTMENT OF COMPUTER ENGINEERING

“VersusView: Price comparison Website”

Under the Guidance of

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Introduction:

We specialize in bringing you the most comprehensive comparisons of products based on price, ratings, and reviews. Whether you're hunting for the best deal on electronics, fashion, etc.

At VersusView, we believe in simplifying your shopping experience by providing unbiased comparisons that help you find exactly what you need at the best possible price.

We strive to present unbiased comparisons so that you can make well informed decisions with confidence.

Abstract:

Our project will be a dynamic platform to streamline online shopping by enabling users to compare prices across multiple online sites. Our website will aggregate product listings and pricing data, allowing users to quickly identify the best deals available. Additionally, it will include a review system where customers can share their experiences and insights, helping others make informed purchasing decisions. This project aims to enhance the shopping experience by saving users time and money, while ensuring they buy trusted products from reliable vendors.

Literature survey

S No.	Title	Author	Key Finding	Limitation
1.	Web Scrapping for ECommerce Websites	Atharva Bankar	The web application simplifies product comparison by automatically retrieving and displaying details from various ecommerce platforms in a userfriendly format. It eliminates manual comparison, improving efficiency and accuracy in market research and brand monitoring.	The paper lacks discussion on the scalability of the solution, especially in managing large data volumes from multiple ecommerce sites. It also does not address challenges related to website structure changes, data inconsistencies, or data quality issues in web scraping.
2.	Ecommerce Price Comparison Website Using Web Scrapping	Arman Shaikh; Raihan Khan; Komal Panokher; Mritunjay Ranjan; Vaibhav Sonaje.	<p>The research emphasized the importance of online presence for businesses, with a focus on ecommerce platforms and the use of mobile devices for shopping activities, such as seeking price information, getting discounts, and finding store locations.</p> <p>Despite the increasing competition and advertising spends in the online market, consumers continue to rely on price comparison sites for quotes, indicating a positive outlook for the future of such platforms.</p>	There is a gap in the paper regarding the user experience aspect of the price comparison website, such as usability testing, user feedback incorporation, and interface design considerations.

Literature survey

S No.	Title	Author	Key Finding	Limitation
3.	Web Scraping Application for ECommerce Website	Prashant Chavan; Dhiraj Holkar; Shivaji Vasekar	<p>The project introduces a versatile web scraping solution by integrating Superagent and Puppeteer, enabling efficient extraction of both static and dynamic content from modern websites.</p> <p>The combined capabilities of Superagent and Puppeteer offer researchers, analysts, and businesses a powerful tool to acquire structured data from diverse web sources, facilitating datadriven decisions and research across multiple domains.</p>	<p>The paper does not provide a detailed discussion on potential drawbacks or constraints associated with using Superagent and Puppeteer for web scraping tasks.</p> <p>.</p>
4.	Slickdeals Aggregator WebApplication Using Web Scraping	Aviraj Jagtap; Raunak Jaiswal; Vaibhav Kedari; Nikhil Khajure;	<p>The system utilizes web scraping tools like BeautifulSoup and Selenium to automate data extraction, enabling the collection of product information such as price, reviews, offers, descriptions, and availability from specific ecommerce sites.</p> <p>Overall, the findings underscore the significance of web scraping technologies in simplifying online shopping, enhancing user experience, and providing users with the necessary knowledge to make informed decisions when making purchases from various online retailers.</p>	<p>The paper does not extensively discuss the ethical dilemmas, legal implications, and strategies to mitigate risks associated with web scraping, which could have enhanced the paper's relevance and completeness.</p>

Problem statement and objective

Problem Statement:

- Consumers face difficulty in finding the best prices across multiple e-commerce platforms, leading to time consuming searches, overspending, and suboptimal purchase decisions.

Objectives:

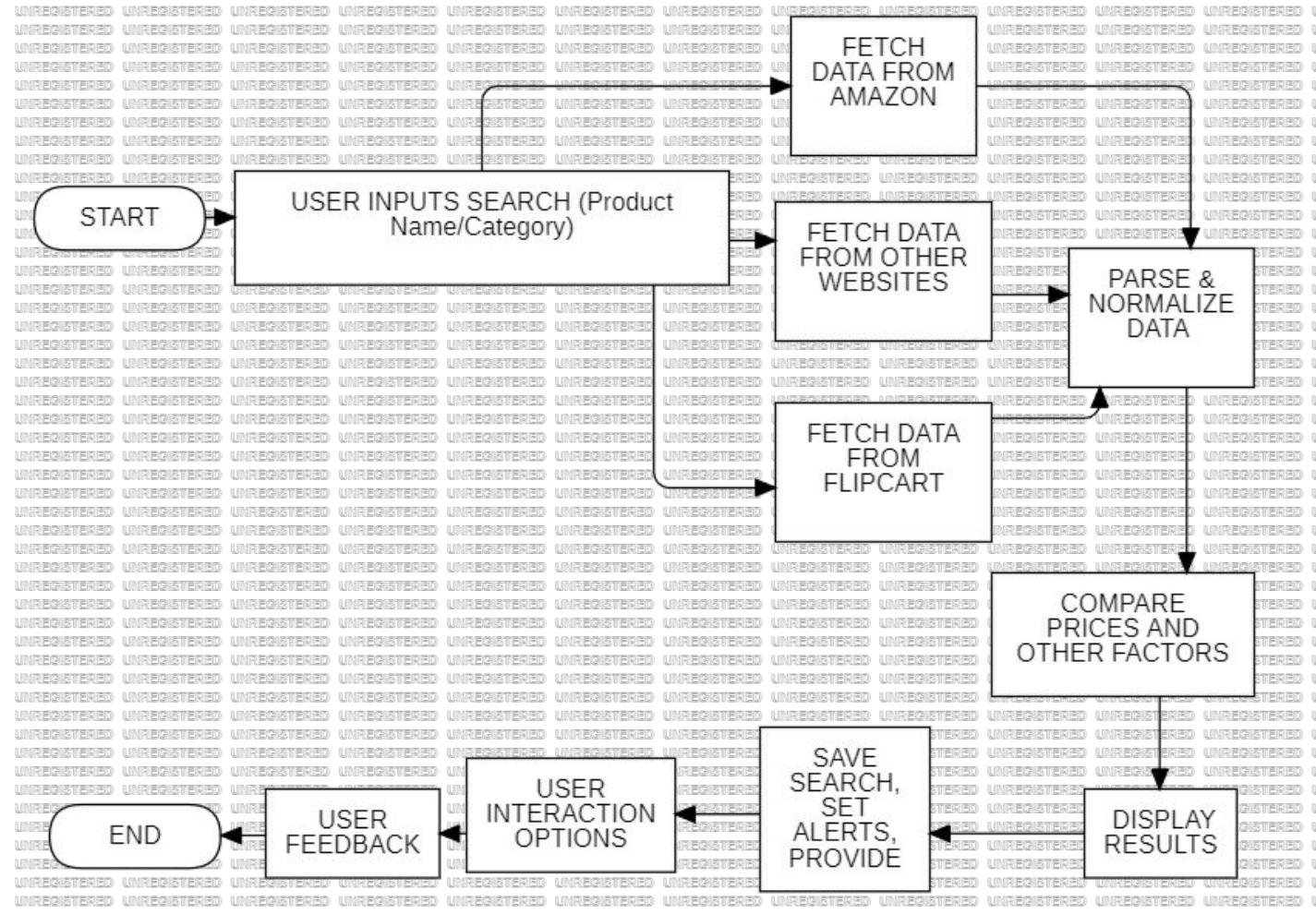
- Develop a centralized platform for comparing product prices across various online retailers.
- Provide real time price updates to ensure users have access to the latest deals.
- Incorporate a user review system to support informed decision making.
- Enhance the online shopping experience by helping users save money and make smarter purchasing decisions.

Scope of the Project

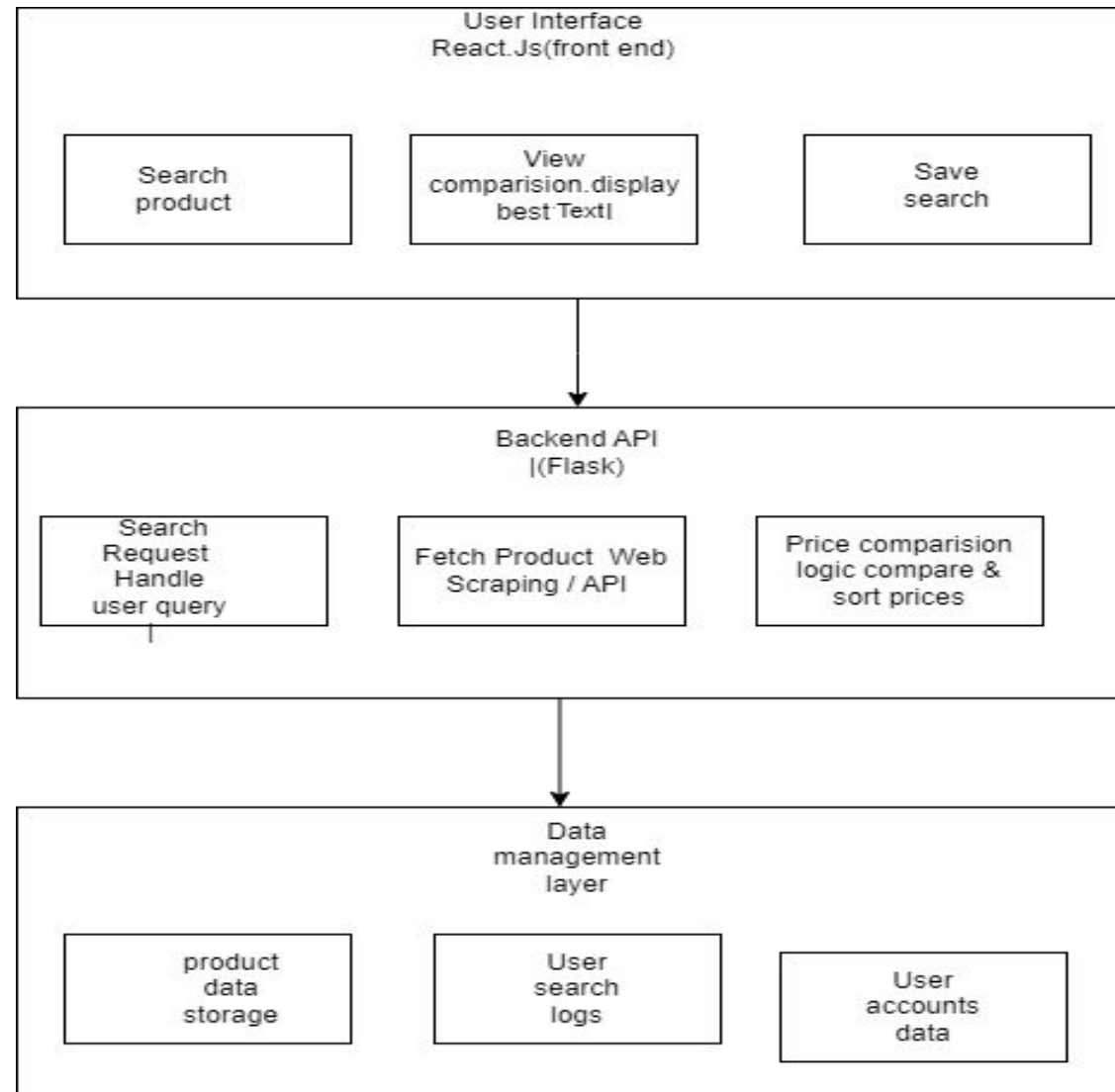
- **Create a user-friendly platform** that consolidates product prices from multiple online retailers.
- **Address the challenge** of time consuming and fragmented price searches for consumers.
- **Develop core features** such as:
 - Realtime price comparisons.
 - Product search filters.
 - User review system.
- **Cover a broad range of product categories** to ensure versatility and cater to diverse consumer needs.
- **Design the website for scalability**, allowing for future expansion to:
 - Include more retailers and product types.
 - Add advanced features like personalized recommendations.
- **Ultimate goal:** Help users save money and make informed purchasing decisions.

Proposed system:

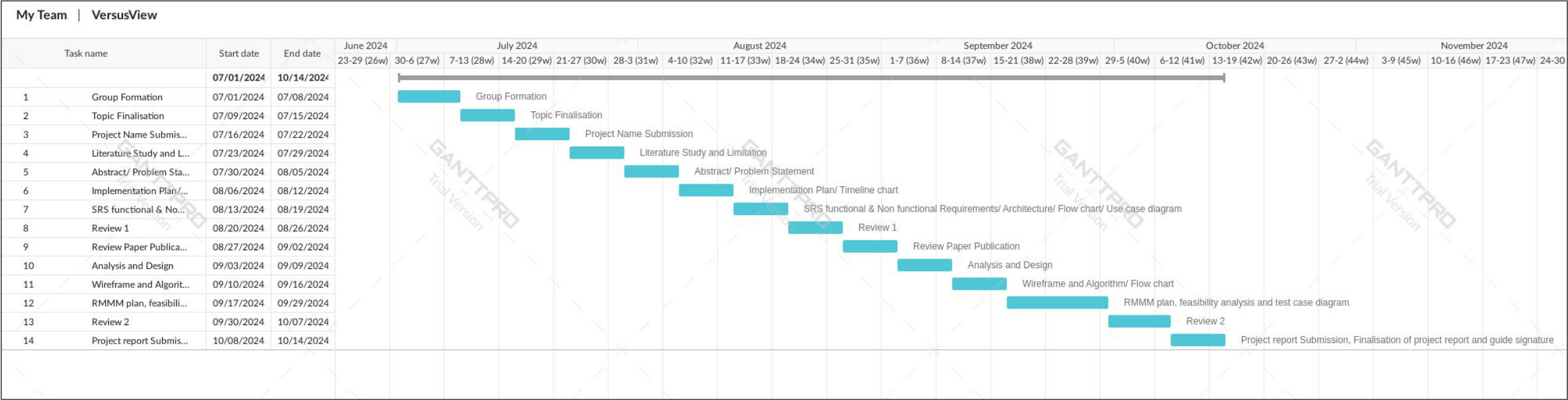
Flowchart



ARCHITECTURE DIAGRAM



Timeline Chart



SOFTWARE REQUIREMENT SPECIFICATION

Functional Requirements

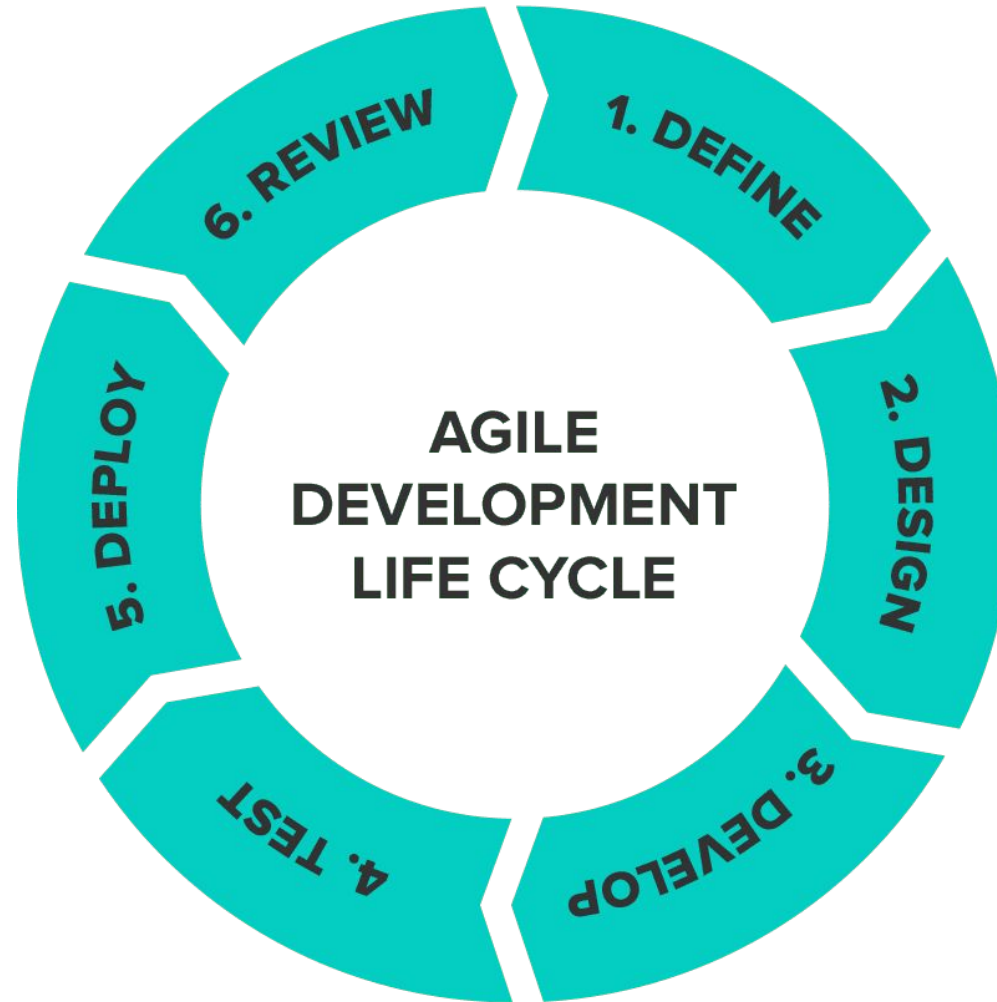
- Real-Time Data Fetching
- Automatic Update
- Price Comparison Results
- User Interface (UI)

SOFTWARE REQUIREMENT SPECIFICATION

NonFunctional Requirements

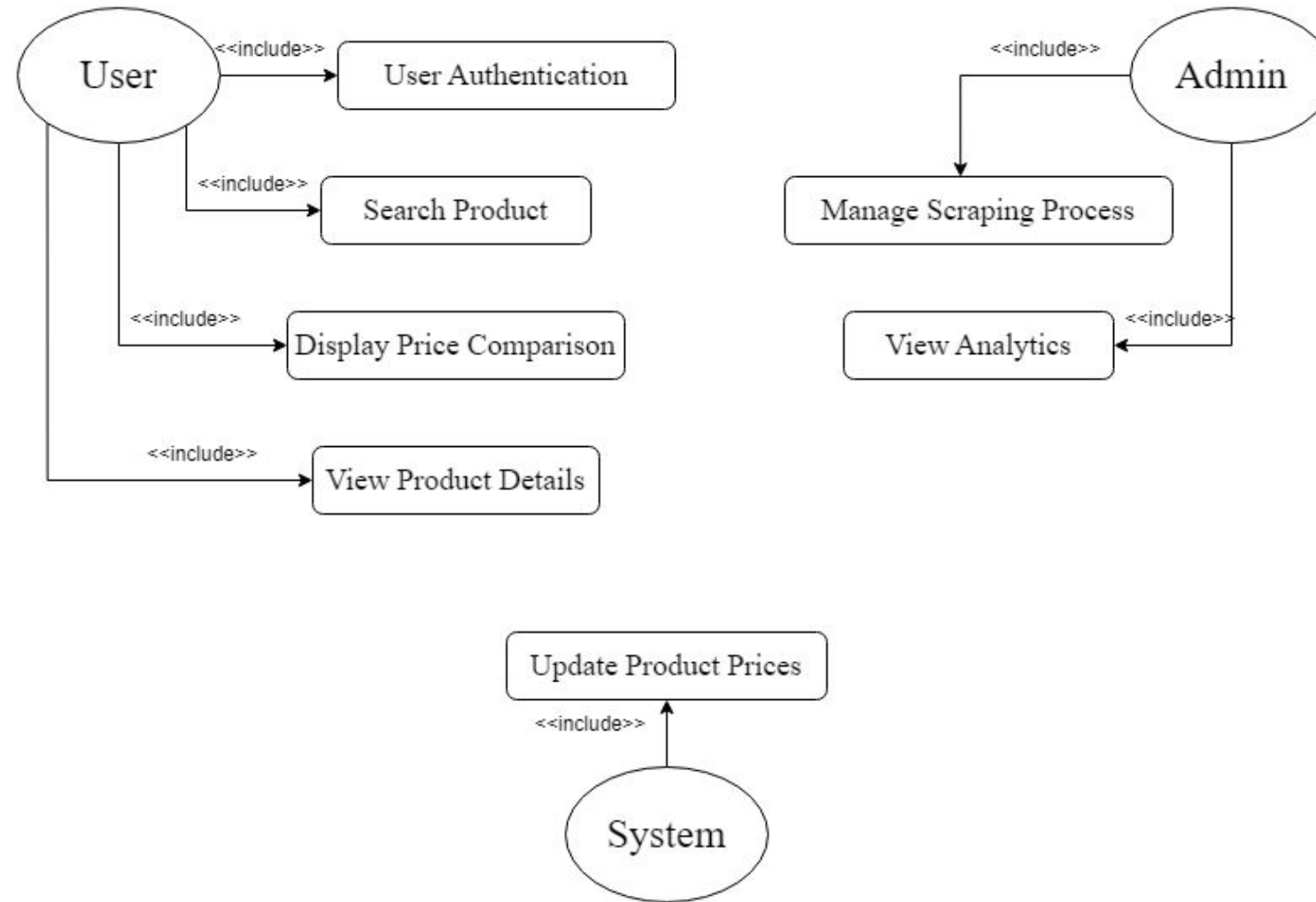
- Performance
- Compatibility
- Usability
- Scalability

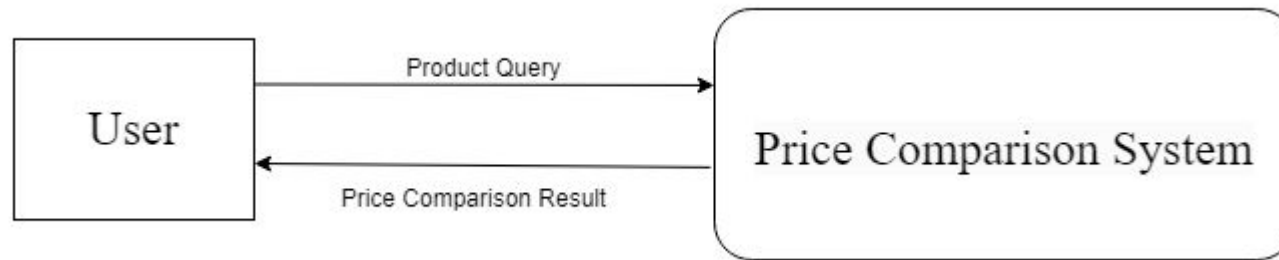
Development Model



Agile Model

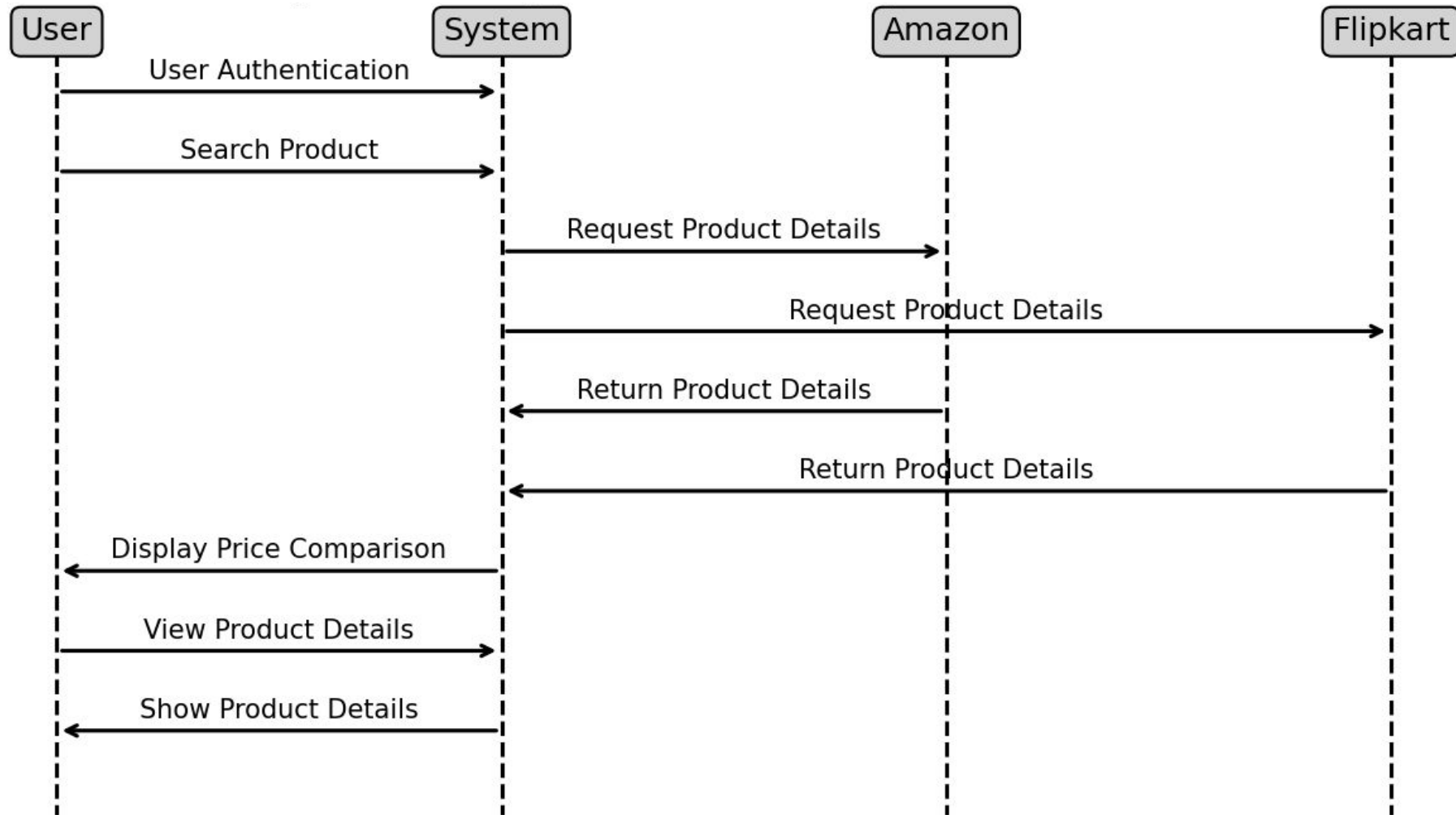
Use Case Diagram





DFD Level0

Sequence Diagram



Expected Outcomes

- **Purpose:**
Provides users with a platform to compare prices.
- **Key Features:**
Price comparison across multiple products and vendors.
User-friendly interface for easy navigation.
Realtime updates on price changes and deals.
- **Value Proposition:**
Helps users make informed purchasing decisions by finding the best prices available.
- **Impact:**
Enhances consumer savings and shopping efficiency.

References

- Bankar, A. (2024). Web scraping for E-Commerce websites. Indian Scientific Journal of Research in Engineering and Management, 08(04), 1–5. <https://doi.org/10.55041/ijsrem30243>
- Shaikh, A., Khan, R., Panokher, K., Ranjan, M. K., & Sonaje, V. (2023). E-commerce Price Comparison Website using Web Scraping. International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences, 11(3). <https://doi.org/10.37082/ijirms.v11.i3.230223>
- Chavan, P. (2024). Web scraping application for E-Commerce website. International Journal for Research in Applied Science and Engineering Technology, 12(5), 4011–4014. <https://doi.org/10.22214/ijraset.2024.60555>
- Jagtap, A. (2023). SlickDeals Aggregator Web-Application using web scraping. International Journal for Research in Applied Science and Engineering Technology, 11(11), 1756–1760. <https://doi.org/10.22214/ijraset.2023.56913>