Mahavir Education Trust's
SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE
Chembur, Mumbai - 400 088
UG Program in Artificial Intelligence and Data Science

Mini Project Report

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Mini Project Report on

"Price-Hikee"

Submitted in partial fulfilment of the requirements

of the degree of Bachelor in Engineering

by

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CERTIFICATE

This is to certify that the report of the Mini Project entitled

"Price-Hikee"

is a bonafide work of

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submitted to the

UNIVERSITY OF MUMBAI

during Semester III

in

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

(Prof. Madhav Shirole)
Guide

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(Dr. Rekha Ramesh)   (Dr. Bhavesh Patel)
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Mini Project Approval

This Mini Project entitled **"PriceHikee"** by **Yash Galande, Aryan Girir, Nikhil Harde, Rachit Pal** is approved for the degree of **Bachelor of Engineering** in **Artificial Intelligence and Data Science.**

Examiners

1.

2.

Date: ……………

Place: …………….

Declaration

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Place: …………….

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ABSTRACT -

Price comparison sites are designed to compare the price of goods and services from a range of providers, which will help consumers in making the decision to choose products that will save them money online. Considering the customers' busy lifestyle, especially those who are living in the city area, most of the consumers prefer to buy their needs through the internet because it saves their time. Besides, consumers always go for the cheaper price in purchasing products therefore by using a price comparison website, customers don't have to travel from shop to shop only to survey the price offered by different shops for the same product. They can just check it from the price comparison website itself and decide where they should buy the products they need. This project, named PRICE HIKE is a place where shoppers could find great deals on electronic products. The best deals will be clearly highlighted. Even though not all consumers are buying online, it is one of the ways to help consumers increase their price awareness. Consumers have the right to know whether the price they are seeing in the shops are good deals as it is claimed or not. Thus it is an advantage for the consumers who are always aware of the current price of a certain product so that they are not cheated by the big words advertised by the shops.

ACKNOWLEDGMENT -

We would like to express our gratitude to our project guide <u>Prof. Madhav Shirole</u> as well as our Principal <u>Dr. Bhavesh Patel</u> who gave us the privilege to work on this project entitled "PRICEHIKEE" due to which we acquired a lot of practical knowledge about our project related functions. We are really thankful.

CHAPTER 1. INTRODUCTION -

1.1 INTRODUCTION

Price comparison website allows consumers to see different lists of prices for the product chosen by the user and it helps consumers to make an informed decision about which to choose in order to save money. It also acts as a tool to help consumers increase their price consciousness so that they will not feel cheated by the advertisement from retailers that claimed they are offering the cheapest price but the reality happened to be otherwise. Unlike other comparison sites, **PRICE HIKE** (the name of this project) will focus on providing a list of prices of Electronics products such as mobile phones, laptops, earphones, and others. Due to the vast increase of people who are online, **PRICE HIKE** will be a great help for those who are stuck with loads of work in the office and don't have much time to check on the current price of the Electronics products, As what has been mention earlier, a price comparison website act as the medium between customers and retailers so customers can make a purchase online for certain retailers that provide such services. In other words, the price comparison website also has the role to promote the retailer/shop to the customers. a price comparison website like **PRICE HIKE** will absolutely become a great help towards consumers. Besides, users nowadays are very comfortable with the internet it has grown a wider variety of applications from networking and now provides various references for the users

1.2 MOTIVATION

In this fast-changing world and with ever-evolving technology, most electronic products have been developed. Price comparison sites have become much popular almost immediately after the E-Commerce revolution. This website is designed with the motive to provide customers with key information: like its price (obvious), a quick description, and product availability.

   For the convenience and ease of the customer, it becomes necessary to contribute to a project which will provide a platform, that enables easy access to electronic products. One of the main reasons for the selection of this project was to get better insight into the working of this kind of website. Due to this,we are keen at least partially learn the various back-end and front-end languages used while firebase.

1.3. ORGANISATION OF REPORT

Provides a brief introduction of the project and designates the motivation and Organisation of the project.

CHAPTER 01

The background of the study – It includes the purpose and the reason behind the conduct of the study a brief introduction of the project and an identification of the motivation and Organisation of the project. It follows the formulation and the title and should be faithful to it.

CHAPTER 02

List of the literature survey of existing systems used to compare another model that uses a mean algorithm supporting vector machines, etc.

CHAPTER 03

Mainly comprises data on architecture framework and details including hardware and software. Add to it we have an algorithm and design of the process with the experimental results. It specifies the kind of research used by another study.

CHAPTER 04

It contains the overall synopsis of the project. This also includes the recommended actions that should be done after the conduct of the study such as future works, concentration on other aspects, etc.

CHAPTER 2. LITERATURE REVIEW -

2.1 SURVEY OF EXISTING SYSTEM

Price comparison website allows consumers to see different lists of prices for the product chosen by user and it helps consumers to make an informed decision about which to choose in order to save money. It also act as a tool to help consumers increase their price consciousness so that they will not feel cheated by the advertisement from the retailers that claimed they are offering the cheapest price but the reality happened to be otherwise.

Nowadays people usually conduct first research on the internet regarding a particular product or service that they want which is very convenient as compared to what consumers had to do previously when there was no internet. Back then, consumers have to go through books, magazines, newspaper, encyclopaedia and other medium to find needed information meanwhile yellow pages, directories, advertisements and others are useful to locate business and their products. Everything has to be done manually and requires a lot of time, energy and resources to find information without the help of the internet. Comparison sites are known as the second type of search technologies as it helps users find products and services according to users' have chosen. It helps consumers to easily compare between the alternatives available in the market and reduce consumer search costs at the same time.Unlike other comparison sites, pricee.com (the name of this project) will focus on providing list of prices of home groceries products such as onion, chilies, garlic, potatoes, fish, chicken and others. Due to vast increase of people who are online, pricee.com will be a great help for those who are stuck with loads of work in the office and don't have

much time to check on the current price of the home groceries products. According to research of Social, Digital and Mobile in India made by We Are Social, the internet penetration for India is 59% and the average hours Indian netizens spend using the internet every week is 19.8 hours. Meanwhile 21% of Indian internet users access the web via mobile devices which means they have internet accessibility anywhere with their smartphones. Compared to other countries, in India there is only few price comparison website that is accessible until now. Most of them is comparing price for hotel's rate, holiday's package, mobile phone and others.

It is important for a web comparison website to return results with the low prices as what the customers want but accurate results also important so that customers can get what they really want. It also depends on how regular the database is being updated otherwise customers will be confused when they compared it from another site.

Most of the working people do not have time to do shopping for their home groceries. As consumers, they have the right to choose which shop is offering the best price for a certain products that they are interested in. However, to check on price offered by each shop is time consuming and due to limited time that they have, they are not able to compare the prices and end up buying certain product with higher price. Typical mindset of customers nowadays, they see Tesco as the providers for the cheapest product but the reality is, not every products in Tesco offered at the cheapest price. Sometimes, the smaller shop in the neighbourhoods offer a cheaper price.

2.2 PROBLEM STATEMENTS AND OBJECTIVES

PROBLEM STATEMENT–

- It is important for a web comparison website to return results with low prices as what the customers want but accurate results are also important so that customers can get what they really want.
- It also depends on how regular the database is being updated otherwise customers will be confused when they compare it to another site.
- Most working people do not have time to do the shopping, they have the right to choose which shop is offering the best price for certain products that they are interested in. However, checking on the price offered by each shop is time-consuming and due to the limited time that they have, they are not able to compare the prices and end up buying a certain product at a higher price.

OBJECTIVES–

The objective of this project is to develop a price comparison website that will have the following functions:
1. To provide customers with a list of price comparisons and highlight the cheapest price
    specifically for Electronics products.
2. To increase price consciousness among consumers.
3. To ensure that the price database is updated regularly so that customers will be able to get
    accurate results.
4. To provide a service for users to find the product's price.

2.3 SCOPE -

The scope of the study for this project will be all internet users and it is narrowed down to those who are using the internet for business-related purposes. The number of internet users increases every year as well as the number of internet buyers which means every single of them is a potential visitor of PriceHike.com. A price comparison website like PriceHike.com, only provides useful information to the users and it is up to the users to decide which e-commerce or shop they should go to. A price comparison website is accessible anytime and anywhere. The observation is made that people usually go online when they are on the way back from work, especially those who are using public transport. Therefore, visiting PriceHike.com can be one of their choices to fill up their free time. They also can share the link of the promotion through social websites such as Facebook and Twitter which 90% of Indian internet users according to research.
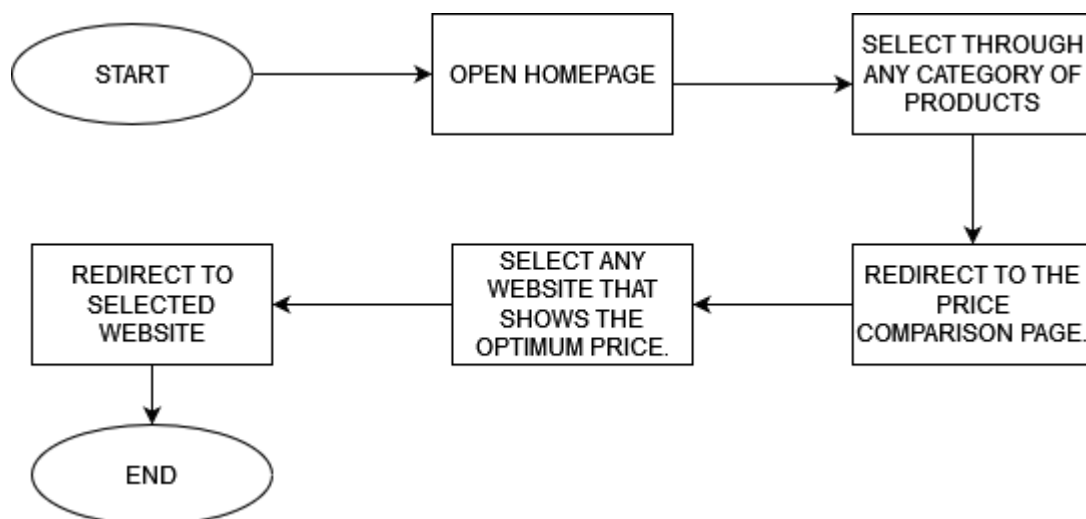
CHAPTER 3. PROPOSED SYSTEM -

3.1 FRAMEWORK-
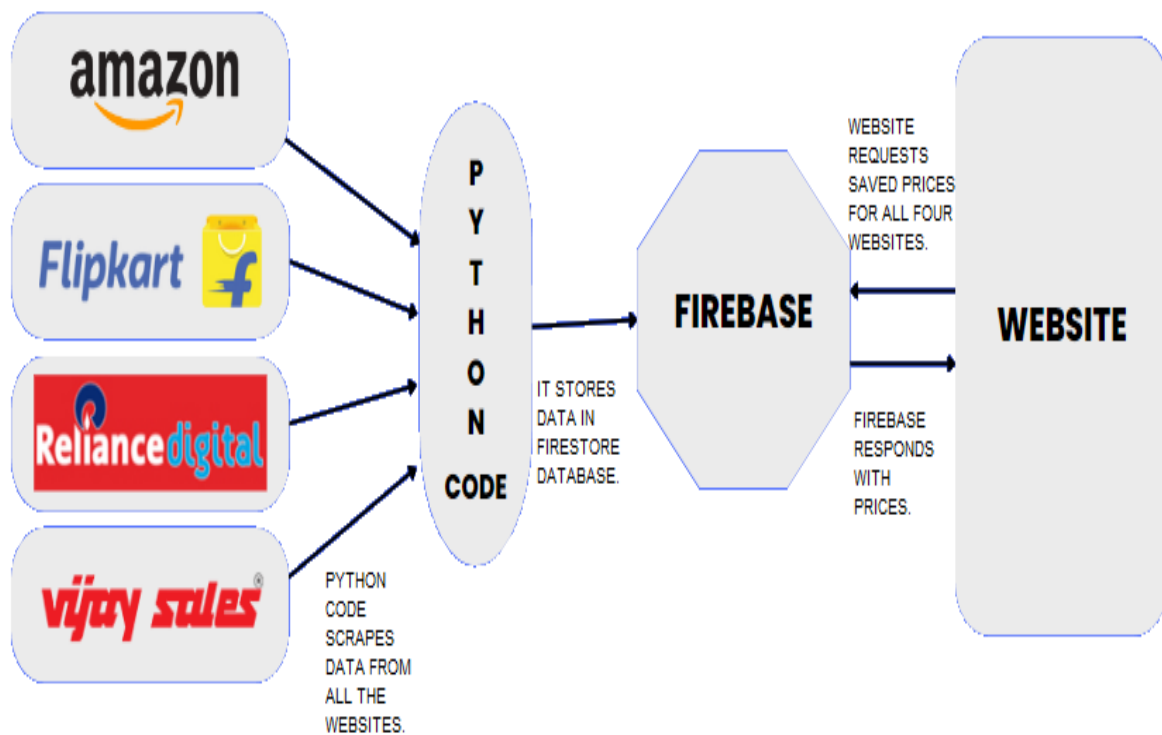
3.2 ALGORITHM AND DESIGN PROCESS

USER FLOW ALGORITHM-

1. START.

2. OPEN HOME PAGE.

3. SELECT ANY CATEGORY OF PRODUCTS.

4. REDIRECT TO THE PRICE COMPARISON PAGE.

5. SELECT ANY WEBSITE THAT SHOWS THE OPTIMUM
   PRICE.

6. REDIRECT TO THE SELECTED WEBSITE.

7. END.

3.3 DETAILS OF HARDWARE AND SOFTWARE

VS CODE -

Visual Studio Code, also commonly referred to as VS Code, is a source-code editor made by Microsoft with the Electron Framework, for Windows, Linux, and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

HTML -

It is used for documents designed to be displayed in a web browser. Html elements receive Html documents from a web server and render the documents into multimedia web pages.

CSS -

It is a stylesheet language used to describe the presentation of a document written in HTML.

JAVASCRIPT -

It is a **Programming Language for the Web**. JavaScript can update and change both HTML and CSS. JavaScript can calculate, manipulate and validate data.

FIREBASE -

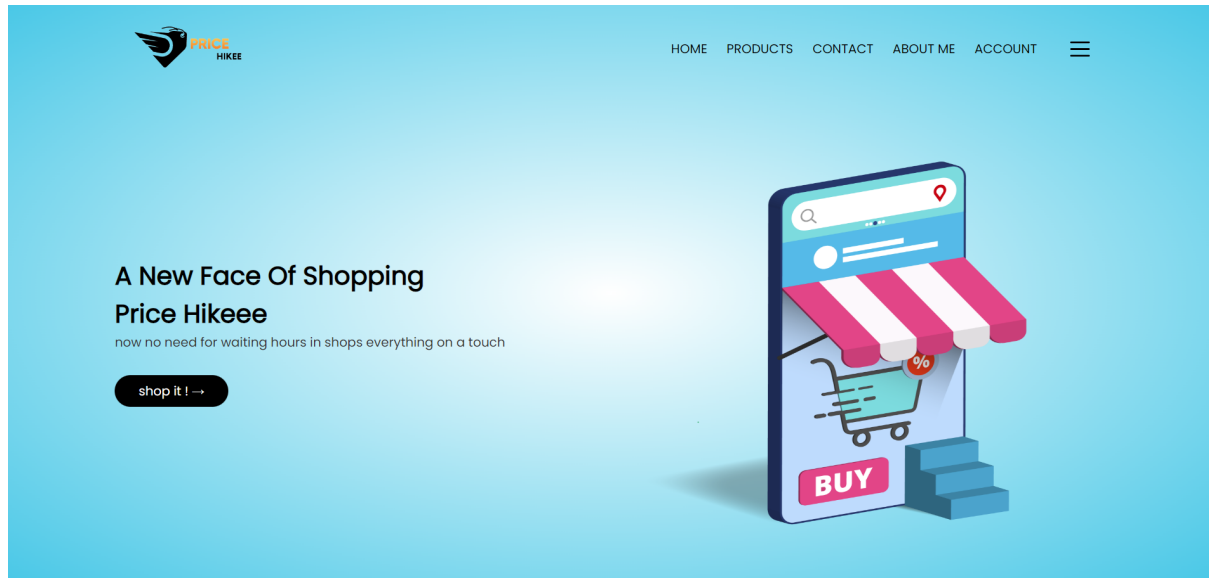Firebase is an app development platform which makes secure auth integration and NOSQL database management easy.

PYTHON -

Python is a high-level, general-purpose programming language and was used for saving product data in firebase.
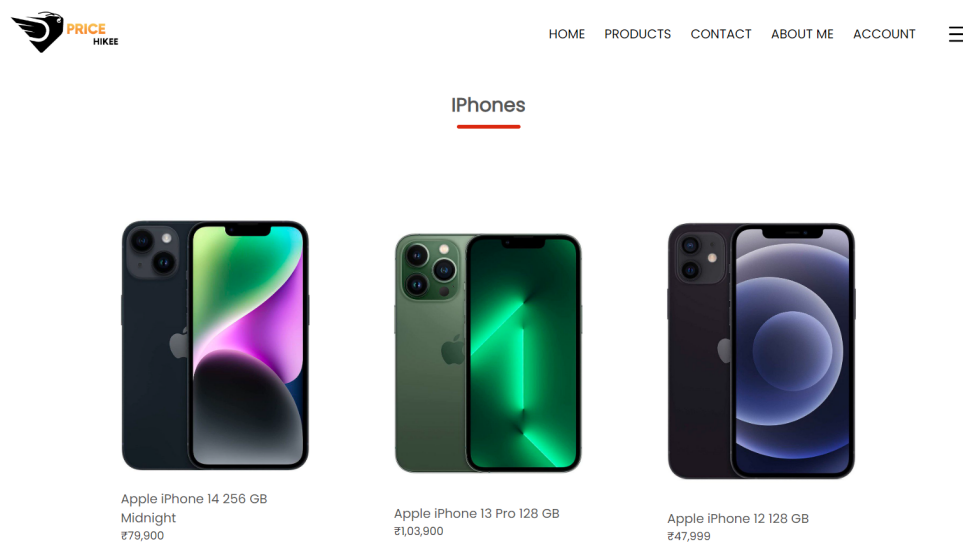
3.4 EXPERIMENTS AND RESULTS

3.4.1 Home Page -

Fig 3.4.1 Home Page

This is the home page of our project. This page has different options to select.

3.4.2 (a) Product page -

Fig 3.4.2 (a) Product Page

This is the product page of our project. This page has many options to select from.

3.4.2 (b) Product Page -

HP

HP Pavillion Gaming
₹79,900

HP Victus
₹1,03,900

HP Pavillion
₹47,999

MACBOOK

3.4.2 (c) Product Page -

Noise Pulse Go Buzz
₹ 499

boAt Xtend Smartwatch
₹599

boAt Flash Edition Smart
Watch
₹499

Home   Products   Contact   Services

3.4.3 Price comparison Page -

This is the Price comparison page for our project. This page shows the prices of the product at various websites.

Apple iPhone 13 Pro 128 GB

Lorem ipsum dolor sit amet consectetur adipisicing elit. Adipisci inventore dolorem repellendus exercitationem deserunt excepturi illo tempore, natus, earum eos eaque quisquam debitis! Vitae voluptates similique fugiat voluptatibus veniam rerum.

Amazon	₹	65999
flipkart	₹	65999
reliance	₹	66900
Vijay Sales	₹	67676

CHAPTER 4. CONCLUSION AND FUTURE WORK -

4.1 CONCLUSION

It is important to get a reference from the previous research paper that is related to the project. The literature review shows the research that has been done previously by other researchers. It is very important to get more knowledge on this topic in order to develop a successful and well-functional price comparison website. Research needs to be done in order to get the desired results because the different sites use their own formula to determine how, when and from where it gathers prices. Therefore, it is very important to get the correct way to retrieve the desired data according to what the user wants. In order to differentiate **PRICE HIKE** from other comparison sites in India, this website will focus on electronic products to help people make an informed decision before making a purchase. The website provides users with useful information that will help them make informed decisions. This price comparison website solves the problems of working people checking on the price before buying electronics products

4.2 FUTURE WORK

• A pop-up guide to the new users which will help them understand the website accurately.

• Further we will start a user login function.

• New eCommerce sites and some local stores will be added

• Also a recommendation system.

REFERENCES:-

[1] Future Comparisons: What's next for Price Comparison Websites? – Webcredible
(2009)

[2] Moraga-Gonzalez, J.L. , Wildenbeest, M.R. (2011) : Comparison Sites.
On the Horizon (2009), May

[3] Knight, E. (2009) : "The Use of Price Comparison Sites in the General Market.