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| Price Comparison Website – Lappie |
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# Introduction



**Situation:** In today’s digital age, laptops have become essential tools for work, education, entertainment and communication. With a myriad of brands, model and retailers, consumers often find themselves overwhelmed by the abundance of choices. This leads to the current situation where laptop shoppers face challenges in making well informed purchasing decisions, often struggling to find the best deals and the right specifications. In a world increasing reliant on technology, the need for a solution to simplify laptop shopping has never been more apparent.

**Problem:** The proliferation of laptops and the diversity of online retailers pose several challenges for consumers. There are issues like too much information to process and the time spent on research trying to find the best deal. It is a real time-suck.

**Opportunity:** The opportunity lies in addressing these challenges and simplifying the laptop purchasing journey. With the increasing reliance on laptops for Work, education and entertainment, there’s a growing demand for a platform that aggregates information and offers a transparent price comparison. Such a platform has the potential to become the go to resources for laptop shoppers, offering a streamlined and trustworthy way to find the best laptops at the best prices.

**Purpose:** The primary purpose of my project is to create a user-centric, data-driven and comprehensive laptop price comparison website that serves as a one-stop destination for laptop shoppers. To achieve my purpose and goals, I have set the following objectives for my laptop price comparison website:

**✔** Data Aggregation: Collect and update laptop information and prices from 5 different reputable online retailers.

**✔** User-Friendly Interface: Create an intuitive and user-friendly interface that allows easy product search and comparison

## Key Features

1. **Homepage:**

* A user-friendly homepage that highlights featured laptops and the latest deals.
* Search functionality allowing user to search for laptop products.

1. **Product Listings:**

* A list of the products user searched on.

1. **Price Comparison:**

* Real time price comparison across the 5 online retailers for the same laptop

# Data Sources



To populate the website with acurate and up to date information and prices, I propose data scrapping from reputable online retailers. This data sources include:

1. Amazon - https://www.amazon.co.uk/
2. Argos - https://www.argos.co.uk/
3. Ebuyer - <https://www.ebuyer.com/>
4. Currys - <https://www.currys.co.uk/>
5. AO - https://ao.com/

# Wireframe Sketches



A computer screen with a blue screen

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a search box

Description automatically generated

# Database Design



A screenshot of a computer code

Description automatically generated

-- Laptop Model Table

CREATE TABLE laptop (

id INT AUTO\_INCREMENT PRIMARY KEY,

brand VARCHAR(255),

model\_name VARCHAR(255),

release\_year INT,

operating\_system VARCHAR(255),

description VARCHAR(255),

image\_url VARCHAR(255)

);

-- Laptop Variations Table

CREATE TABLE laptop\_variations (

id INT AUTO\_INCREMENT PRIMARY KEY,

laptop\_id INT,

display VARCHAR(255),

processor VARCHAR(255),

battery VARCHAR(255),

storage VARCHAR(255),

memory VARCHAR(255),

color VARCHAR(255),

other\_specs VARCHAR(255),

FOREIGN KEY (laptop\_id) REFERENCES laptop(id)

);

-- Comparison table

CREATE TABLE comparison (

id INT AUTO\_INCREMENT PRIMARY KEY,

laptop\_variation\_id INT,

price\_url VARCHAR(255),

price DECIMAL(10, 2),

FOREIGN KEY (laptop\_variation\_id) REFERENCES laptop\_variations(ID)

);