

## CREATION OF A COMPETITIVE PRICING TOOL FOR MARKET INSIGHT



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# SUMMARY



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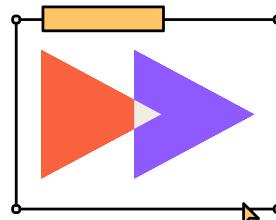
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Conclusion and thanks

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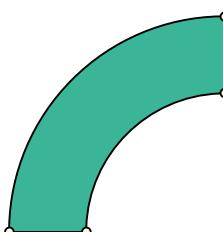
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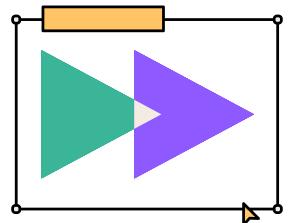


## 1. INTRODUCTION

Nowadays, data plays a crucial role when it comes to the success of a business of any sort.

It gives the possibility to analyse customers behaviours and it provides useful informations that contributes in making a data-driven decision in order to establish an efficient marketing strategy.





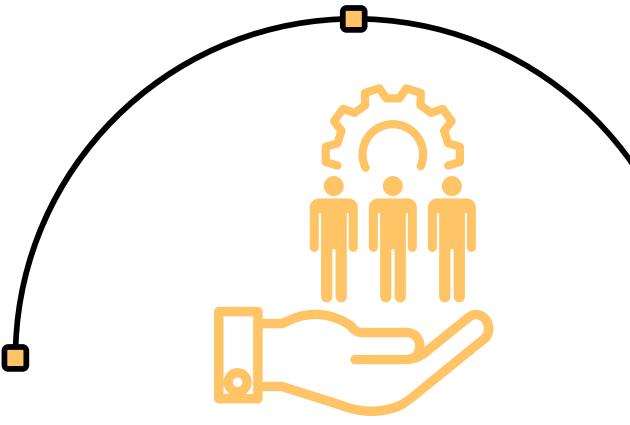
## 2. MARKETING VOCABULARY

Marketing is the process of promoting, selling, and distributing a product or service to consumers.

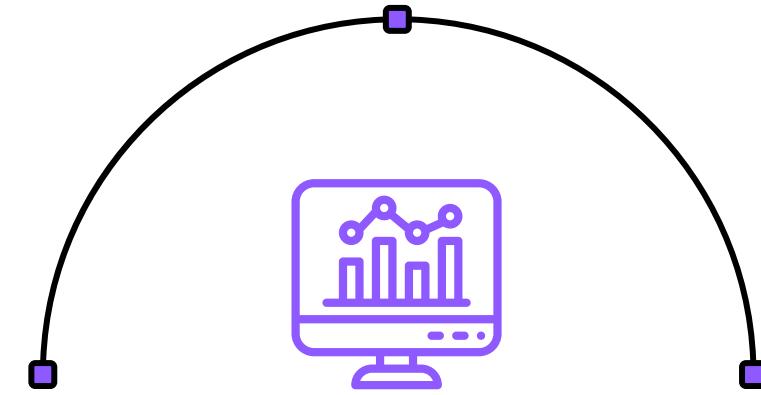
The purpose of marketing is to identify customer needs and drive sales by following certain steps:



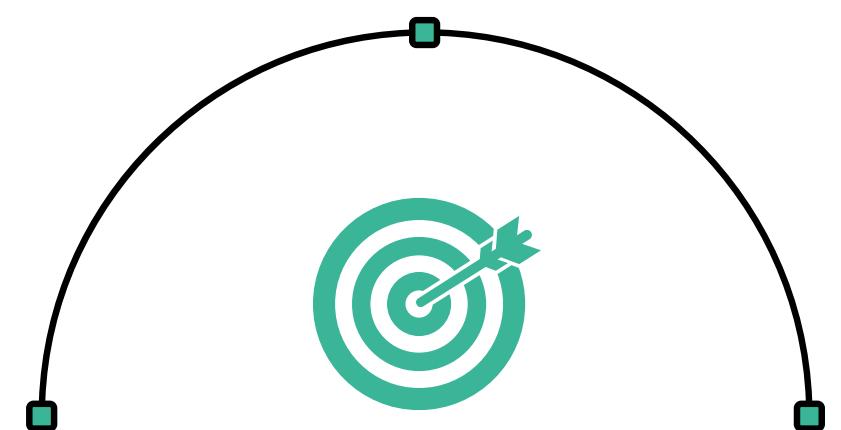
Evaluate the market



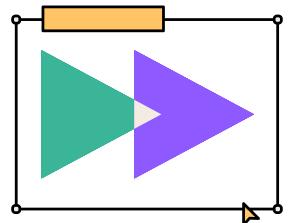
Target the clients



Competitive analysis



Define a marketing strategy



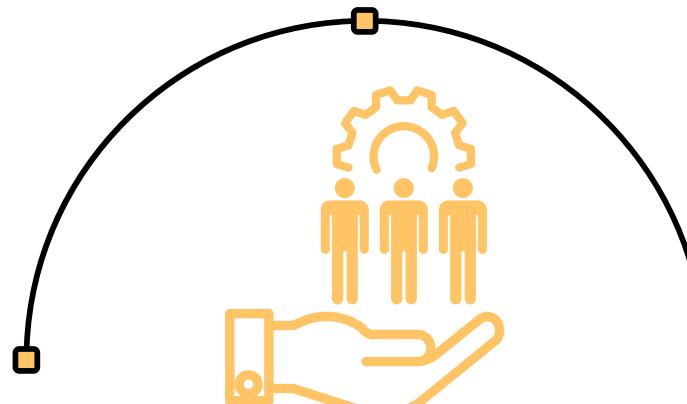
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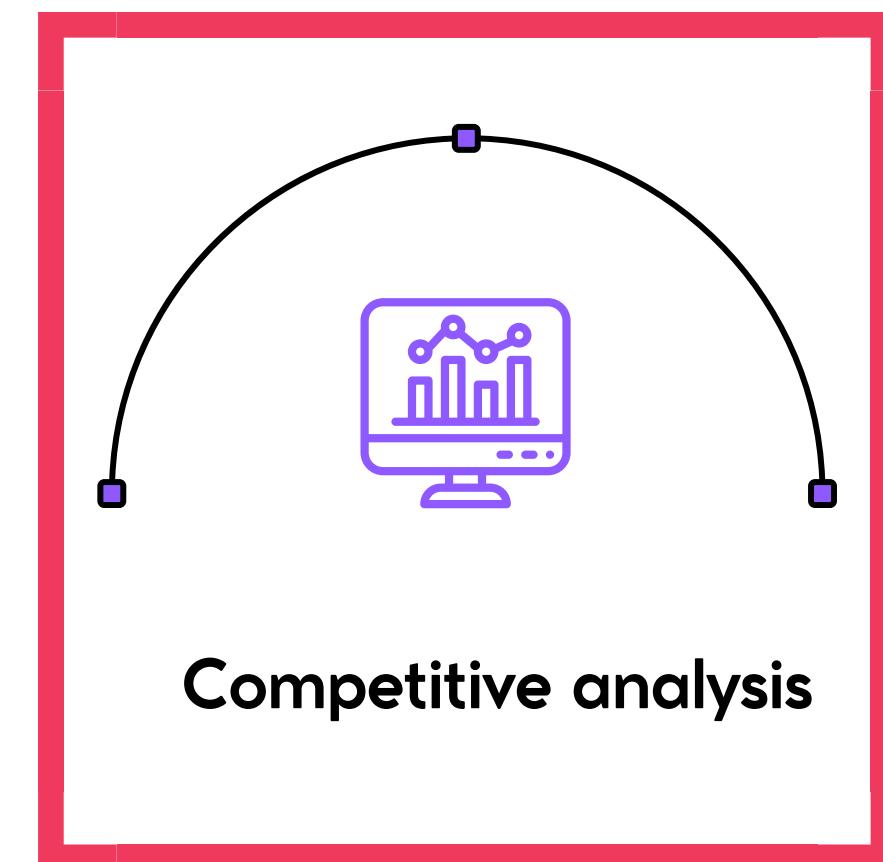
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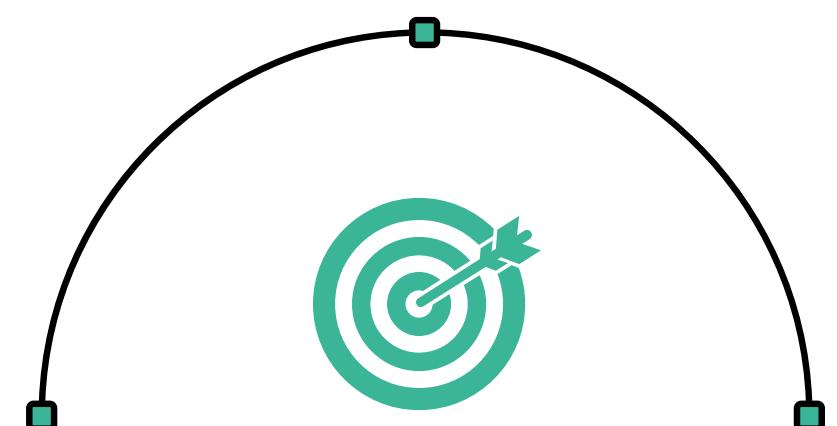
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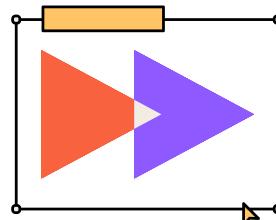
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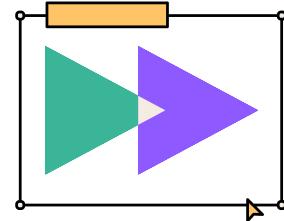
### 3. WEB SCRAPING



## WEB SCRAPING



Web scraping is the process of automatically extracting data from websites. It involves using software or scripts to collect information from web pages which can then be stored and analyzed. It can be done in many ways : using APIs (Application Programming Interfaces), using browser extensions or using **scripts**.

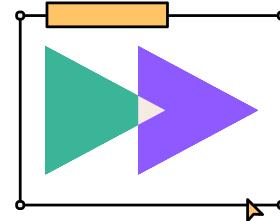


## 4. PYTHON AND WEB SCRAPING

Python is a high-level, interpreted programming language known for its simplicity and readability. It's a versatile programming language used for web development, data analysis, machine learning, scientific computing, web scraping..etc

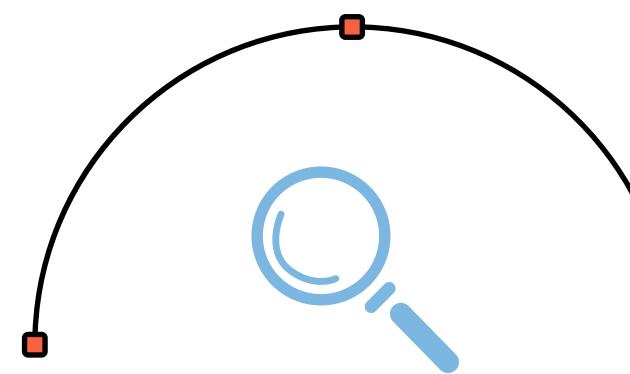
Python is commonly used for web scraping because of its simplicity, readability, and powerful libraries specifically designed for this purpose. Libraries like [BeautifulSoup](#) and [Scrapy](#) make it easy to parse and extract data from HTML pages, while [Selenium](#) allows for handling dynamic content and user interactions.



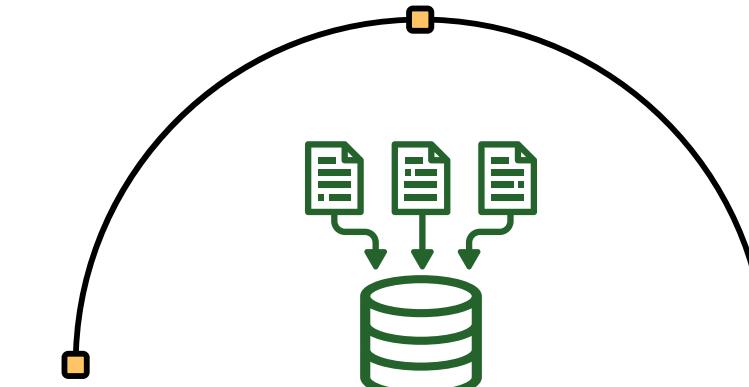


## 5. THE IDEA OF OUR PROJECT

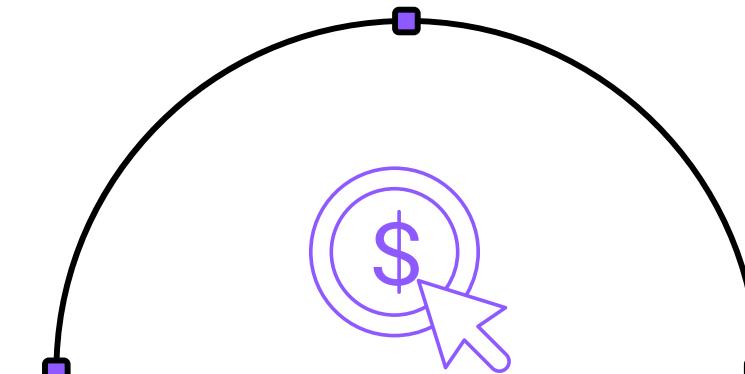
Our project consists of a tool that is going to extract the prices of a certain product in different websites in order to proceed to a comparison, get the mean of the values and therefore provide us with the average price of this product.



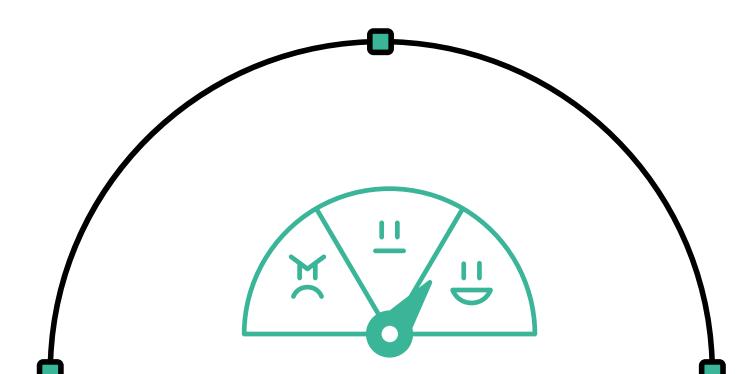
The user search for a specific product he plans to market  
ex: jam, chocolate



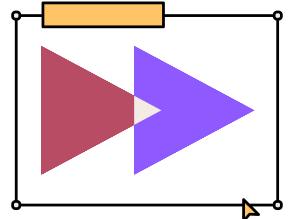
We do Web scraping on different websites to extract the prices of this product



We generate a table containing all the prices



We display the minimum price, the maximum and the average price of the product.



## 6. THE TOOLS USED



**open source web application used to  
create and share documents that  
contain code.**

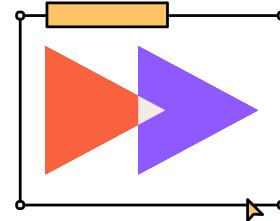
it offers several extensions and extra tools that serve different purposes

- Requests
- BeautifulSoup



- Pandas
- Math

- Tkinker



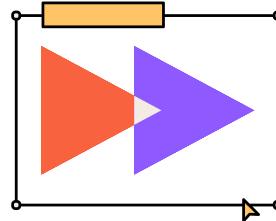
## 7. THE FINAL RESULT

Price Generator

The image shows two windows side-by-side. On the left is the 'BestPrice' application, which has a logo featuring a dollar sign inside a circle with three horizontal bars extending from it. Below the logo, the text 'BESTPRICE' is displayed in large, bold, purple letters, followed by 'THE IDEAL PRICE IN ONE CLICK' in smaller purple text. A search bar contains the placeholder 'Enter Product Name:' and two buttons at the bottom labeled 'Scrape with BeautifulSoup' and 'Scrape with Selenium'. On the right is a separate window titled 'Scraping Result' containing a table with the following data:

Product name	Product brand	Price	Weight (grams)	100g Price
Meru Herbs Pineapple Jam - 330g	Meru Herbs	3.65	330.0	1.11
True Origin Hibiscus Jam - 330g	True Origin	3.65	330.0	1.11
Meru Herbs Mango Jam - 330g	Meru Herbs	3.65	330.0	1.11
Meru Herbs Papaya & Lemon Jar	Meru Herbs	3.65	330.0	1.11
Organic Kitchen Blackcurrant Ext	Organic Kitchen	3.89	340.0	1.14
Organic Kitchen Raspberry Extra	Organic Kitchen	3.89	340.0	1.14
Organic Kitchen Strawberry Extra	Organic Kitchen	3.89	340.0	1.14

*Ideal Price for 100g: \$1.12*  
*Minimum Price for 100g: \$1.11*  
*Maximum Price for 100g: \$1.14*



## 8. CONCLUSION

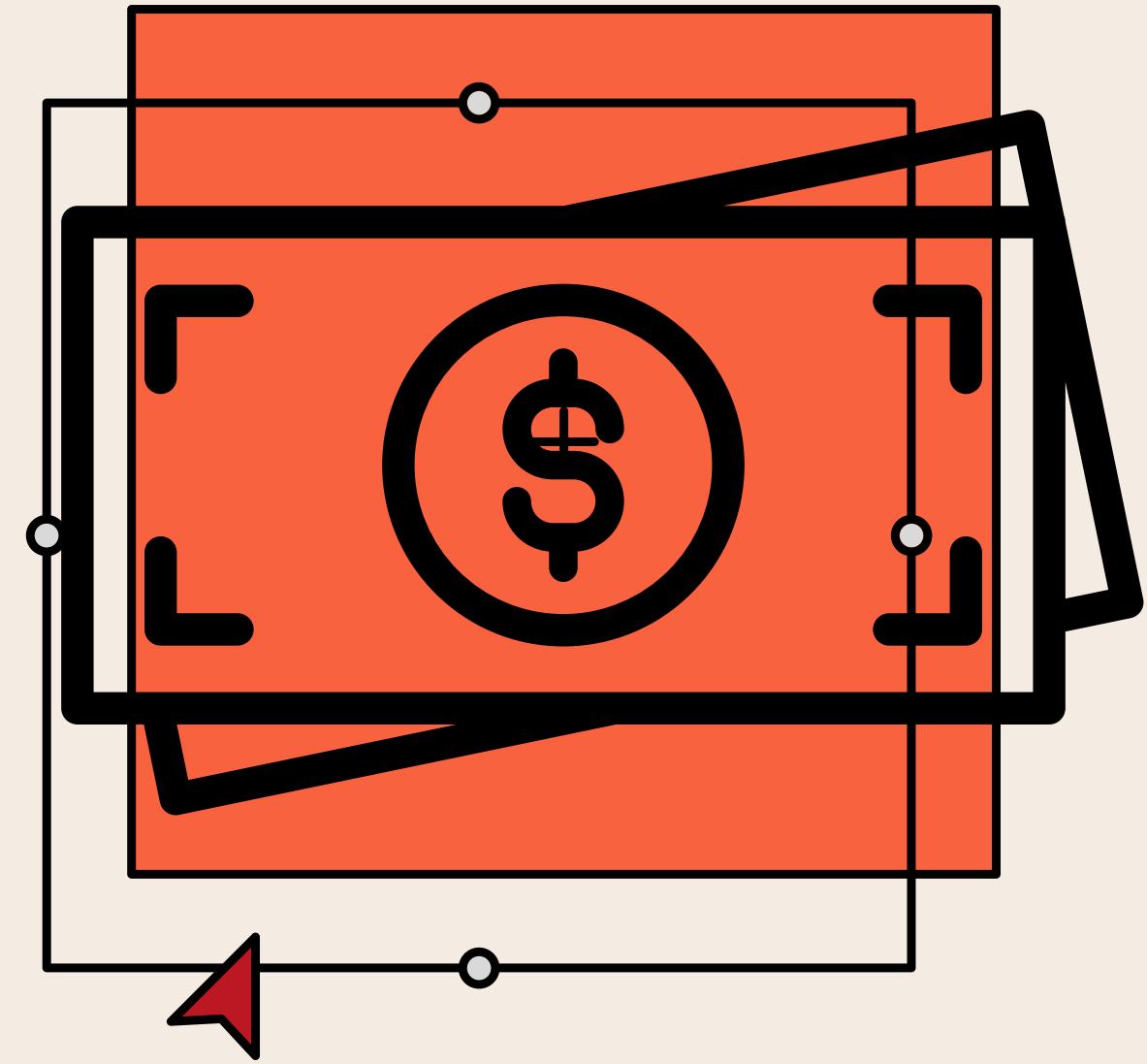
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Making this little project was a very interesting experience. It gave us the opportunity to put into practice the different programming concepts we had the occasion to learn throughout this Python Course.

Of course, we still have a long way ahead of us when it comes to gaining more knowledge and creating more complex projects.

But for now, we'd like to thank our instructor for his efforts and his effective teaching method.





*Thank You*  
**for your attention.**