

Price comparison system poster

How to Create Price Comparison Website

wpmet



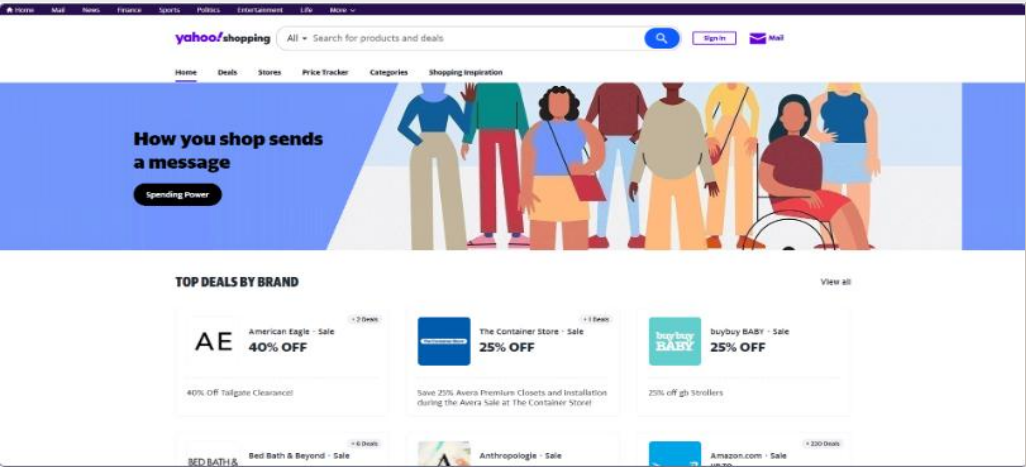
Authors

Darren (Zhu Xunran)

Chengdu University of Technology
School of Computer and Cyber Security
(Oxford Brookes Institute)
Computer Science and Technology

Introduction

With the gradual rise of Internet technology, people's lifestyles and shopping habits have changed and online shopping has become increasingly popular. People are keen to compare prices on products when shopping online. A price comparison system that can display matching products from multiple shopping platforms and display product information and price comparison results after users enter relevant search terms would provide great convenience to users. How to implement this price comparison system to improve the convenience of consumer shopping has become the focus of the moment.



Objective

- (1) Define project requirements
- (2) Background research
- (3) Establish project development steps
- (4) Database design
- (5) Crawler technology design
- (6) Front-end UI design
- (7) Back-end code design
- (8) Testing and Implementation

Methodology

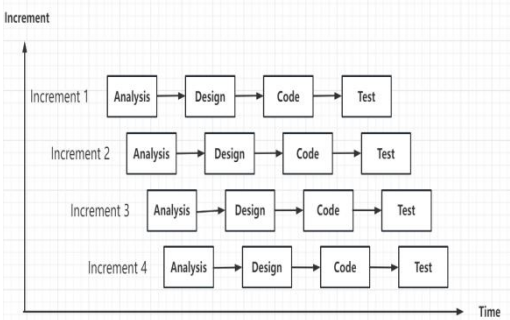
In this project, the development model is incremental, which is a step-by-step development model. Each phase of the project can be completed independently. The front-end technology uses html-based Bootstrap framework, the back-end code uses Python language, the database uses MySQL, and the crawler is designed using Beautiful Soup. finally integrated into a complete system to meet the final project development requirements.

Results

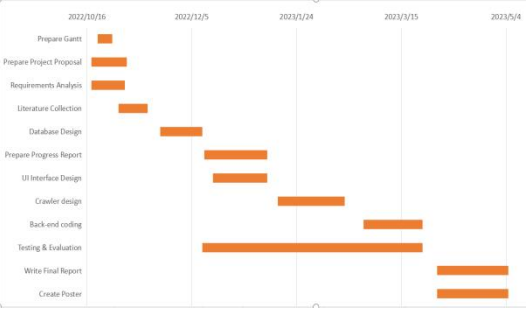
The project design was tested after completion. In the test results, users were able to sign in and out, display products on the home screen and paginate products, and filter and compare prices. In general, the system basically fulfilled its function and met the development requirements, and achieved the expected purpose.

Analysis

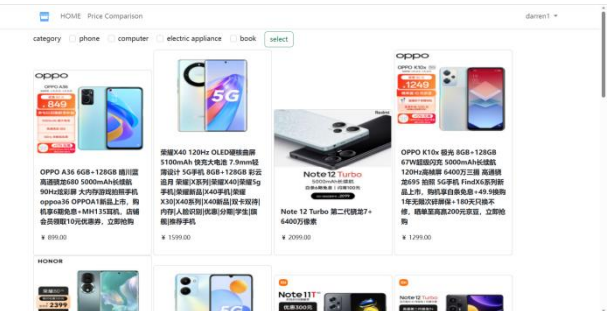
Shows the model of the project development, the time nodes allocated for the development project and the main front-end interface after the project development is completed.



Incremental model diagrams show the development steps



Use Gantt charts to refine development time



System main interface display

Conclusion

This project is a web-based price comparison system for online shopping platforms. In this project, Python is used as the development language, BeautifulSoup as the crawler framework, MySQL as the database, Flask as the back-end framework, and Bootstrap as the front-end framework. Each part is linked by back-end code on PyCharm compiler to finally form a complete price comparison system. The requirements of the development design were met and the intended purpose was achieved.

Related Literature

1. S. Sharma and P. Gupta, "The anatomy of web crawlers," in International Conference on Computing, Communication and Automation, ICCCA 2015, Institute of Electrical and Electronics Engineers Inc., Jul. 2015, pp. 849–853. doi: 10.1109/CCAA.2015.7148493.
2. L. Yang, S. Lan, and X. Tong, "Application of HTML5 multimedia," in Proceedings - 2012 International Conference on Computer Science and Information Processing, CSIP 2012, 2012, pp. 871–874. doi: 10.1109/CSIP.2012.6308992.