HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

GRADUATION THESIS

Application of matrix decomposition technique in launching e-book recommendation system

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ABSTRACT

E-commerce is currently developing and offering a ton of convenience to clients. Because of the variety of models available, it might be challenging for people to make a decision online. Furthermore, the phenomenon of the long tail is very common in commerce; the best-selling products make up a very small portion of the total products, while the long list behind them only contributes very little. The product might not be personalized for the user.

Therefore, the recommender system is required when the user has too many options or when he is unable to define his requirements at the beginning of the shopping session in a clear and comprehensive manner. Online stores are gradually implementing the recommendation system, particularly significant e-commerce platforms like Shopee, Amazon, Netflix, etc. have excellent systems.

In this thesis, we propose the steps to build a website that sells books having a built-in recommendation system. The system's front-end and back-end are built using the Ionic framework and Asp.net. Specially, we construct two recommender algorithms specifically for the system and evaluate their effectiveness.

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LIST OF ABBREVIATIONS

Abbreviation	Definition
API	Application Programming Interface
EUD	End-User Development
GWT	Google Web Toolkit
HTML	HyperText Markup Language
IaaS	Dịch vụ hạ tầng