

MERN Stack Ecommerce Web Application

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Abstract: Over the last decade, web development has gone through significant changes in every aspect. The rapid development of web technologies in general as well as front-end library and framework have taken web development to a new level which facilitate developer job considerably. One of the most widely used and modern full-stacks is the MERN stack, which plays a leading role in web development nowadays. The four components included in MERN stack are MongoDB database, Express as back-end web framework, React.js serves as front-end library and Node.js as JavaScript environment. The purpose of this thesis was to study the usability and functionality of each technology in the MERN stack and as a consequence, to develop a fully functional E-commerce web application by utilizing MERN as well as some other additional modules. The thesis presented the development process of the application, with all the essential parts noted and explained. The outcome of this project is an e-commerce web application with all the necessary and fundamental features of an online bookstore. The product aimed to be an essential part in the business strategy of the author's parent's startup. The application is a beta version and focused mainly in development process, therefore deployment process is not carried out in this thesis but will be concerned further in the future..

Keywords: MERN Stack, E-commerce, React, JavaScript, Node, Ex-press, MongoDB, Web Development.

REFERENCES

- [1]. Brown , jeff ", E-commerce strategies and practices "Editor jill mckenna. Ciwf (2001)158 References 158
- [2]. Bhimani, A,"Securing the Commercial Internet" Communications of the ACM,VOL 39,NO 6 G.
- [3]. European Communities, 2005, Swiss e-government still below expectations, survey reveals, E-Government News, March 2005 (<http://europa.eu.int/idabc/en/document/4025/5791>, accessed June 7th 2006).
- [4]. J.L. Pressman & A.B. Wildawsky, 1973, Implementation, University of California Press, Berkeley, CA.
- [5]. C.A. Bellamy & J.A. Taylor, 1998, Governing in the Information Age, Open University Press, Milton Keynes.
- [6]. I.Th.M. Snellen & W.H.B.J. van de Donk, 1998, Towards A Theory Of Public Administration In An Information Age. In: Public Administration in an Information Age. A Handbook, I.Th.M. Snellen & W.H.B.J. van de Donk(eds.), Informatization Developments and the Public Sector 6, IOS Press, Amsterdam, pp. 3 – 19.
- [7]. J.E. Fountain, 2001, Building the Virtual State. Information technology and institutional change, Brookings Institution, Washington, DC.
- [8]. D. Janssen & S. Rotthier, 2003, How are they doing elsewhere? Trends and consolidations in e-government implementation. Paper presented at the annual EGPA Conference, Oeiras. In their research they have compared the following countries: Belgium, Canada, Finland, France, Germany, Ireland, the Netherlands and the United Kingdom

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