Start-Up Web Application

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Abstract:

In the present scenario of e-globalization and economic liberalization, small-scale startups/industries occupies a place of strategic role in employment of manpower and productivity, distribution of income across the regions through increased investments and profits. However, such industries find themselves in an intensely competitive environment because of giant enterprise occupying most of the market segments. This paper identifies problems of small scale startups and after completely analysis, provides answers for upgrading and modernizing their technologies and suggest measures for facilitating procedures for accessibility of finance, requirements of improvements in skills, education and training. Through our paper, we have proposed a stage to remove a wide range of barriers for reception of improved technologies, which is essential for growth of small scale startups. We have likewise provided strong and feasible techniques for business analysis and growth in the provided stage. The use of our foundation encourages technological upgrade and in-house technological innovations and advancement of inter-firm linkages. In our paper we are likewise exploring other aspects of strategy development like human resource, vendor development, association culture, etc.

Keywords: E-globalization, Small-scale industries, Technological improvement, Investment

Introduction:

As accessibility to e-commerce and technology has become a need for industries, large-scale industries are moving towards these markets. However small-scale industries are not able to compete with these industries as they do not have the capital or the technological no-how of how to start and run a successful e-commerce. Here, we are creating a platform where small-scale industries can market their products to the public. They can also access various information, training material and practical

seminars for better understanding and improvement of their business. This platform also acts as a platform to showcase and improve their business. This allows investors to broaden their vision to small-scale industries and find small effective investments. Even the consumers will be able to get better products at cheaper rate as the small-scale industries generally have products which are locally sourced and cost less.

Objective:

- Provide analytical tools
- Provide inventory management tools
- Provide learning materials for startups
- Provide a platform for investors to invest in startups
- Digitize the market for small business

Problem Statement:

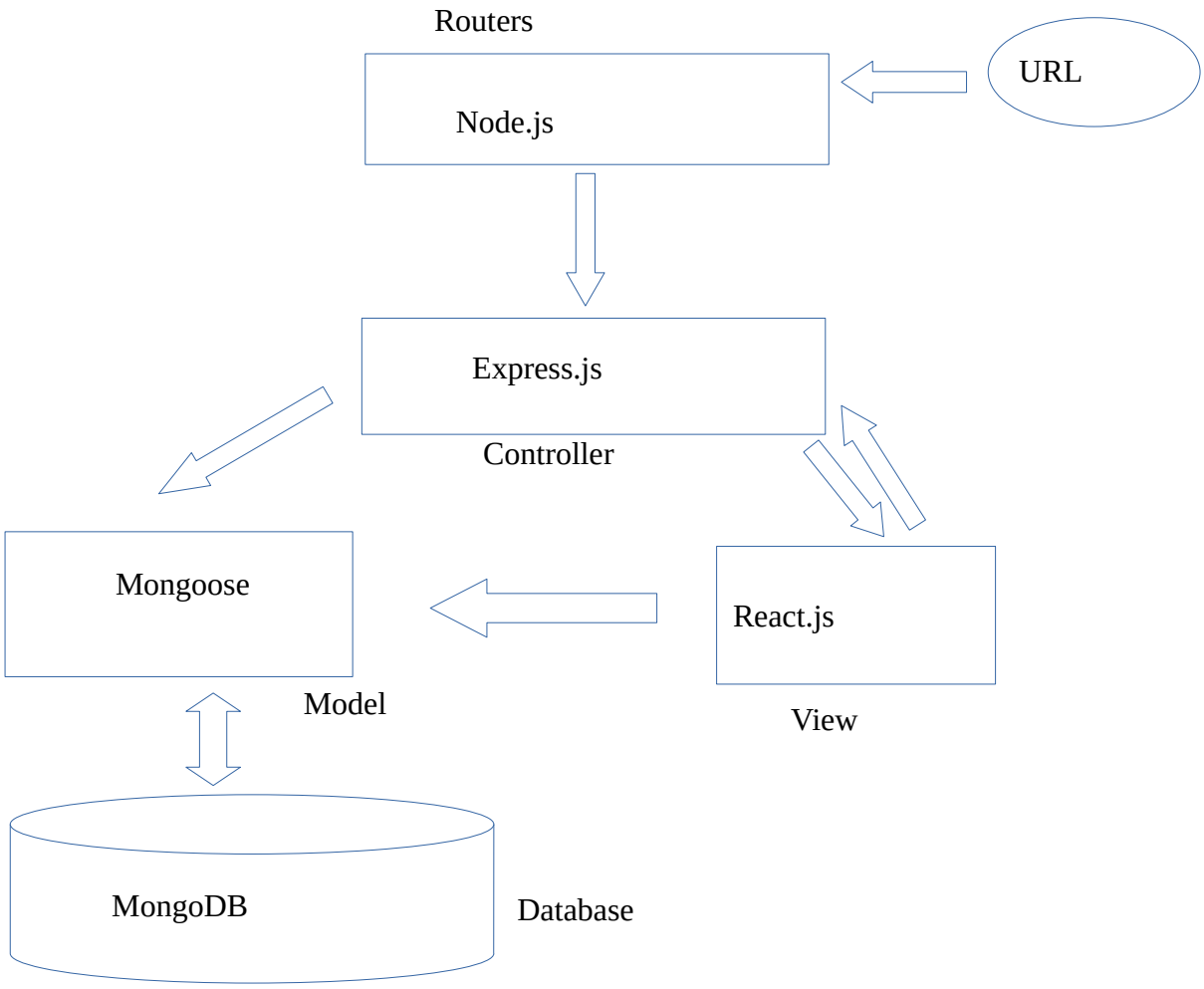
We have seen many small business sufferings as the pandemic raged, most were finding it hard to find customers, leading to business shutting down. Market all over the world had faced severe damage. Especially in India, where 45%-50% of exports are handled by small scale business, the damage dealt with the economy was immense. During this pandemic raged period, one of the many reasons why small-scale vendors were not able to continue and face a total shutdown was business not being conducted digitally.

Literature Review:

In India 50% of GDP is contributed by Small-scale industries. These do not have access to modern technological advancements. Many suffered huge losses especially due to pandemic. This showed us the need for introducing new technologies to this sector of industry.[1] Currently these small scale industries are not able to compete with large scale industries, basically due to the lack of capital. They lack the new technologies like e-commerce to market their product to the current market. They are facing constraints in competitive priorities, investment and performance optimization.[2] Despite the government level knowledge that small scale industries are not able to cope with e-commerce system of large industries, there have been no involvement to uplift small scale industries. Slow pace of e-commerce diffusion in small-scale industries have been studied and found that investment and marketing have been the most important in the slow integration with e-commerce.[4] Currently large E-

commerce giants(large-scale industries) have utilized and structured their marketing around social-media. However the small-scale industries do not have nor the capital nor the technological know-how for this level of marketing.[3] Many studies have shown that e-commerce is especially good for developing countries. As it expands the market and availability to boarder market. [5]

We are using MERN (MongoDB, Express JS, React JS and Node JS) as our stack. This uses React.js in the front end, Express.js and Node.js as server-side framework and MongoDB as the database. It is a full-stack solution fol owing the 3-tier architecture. MongoDB is designed to store JSON data natively making it scalable. It is built on JSON and JavaScript. It works extremely well with Node.js. It also provides MongoDB Atlas for cloud native applications like e-commerce sites. Express.js handles server-side applications like HTTP requests and responses, also makes it easy to map URLs to server-side functions. React.js allows building interactive user interfaces and communication with remote server making it an easy to use and deploy.[1(web-links)]



Conclusion:

We aim to develop an application to improvise small scale business digitally. These businesses will be able to gain a bigger audience. The application will provide a platform over the internet space to run the business, along with analytical tools. The application developed, will use machine intelligence to boost small scale business, provide various services and a small platform for globalization and marketing.

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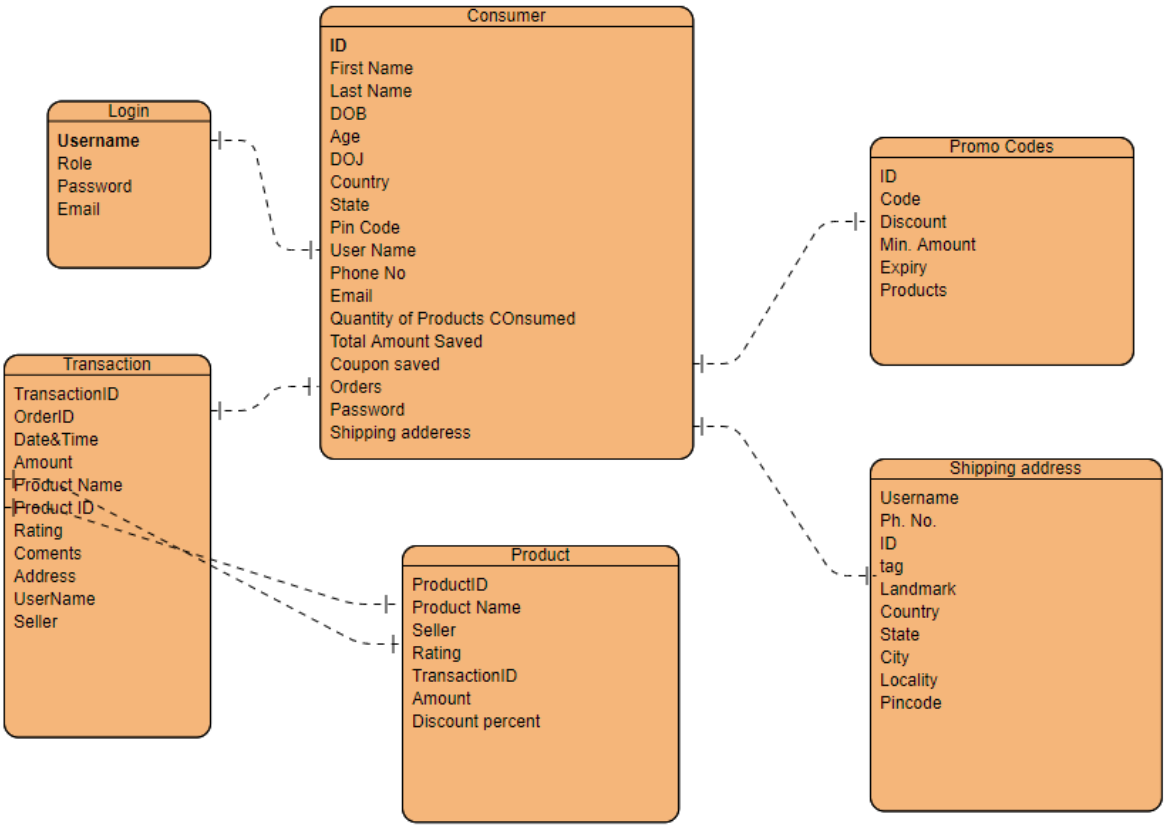
Book:

1. Pro MERN Stack: Full Stack Web App Development with Mongo, Express, React, and Node

Weblinks:

1. https://www.mongodb.com/mern-stack
2. https://medium.com/swlh/how-to-create-your-first-mern-mongodb-express-js-react-js-and-node-js-stack-7e8b20463e66

ER Diagram: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