LOST & FOUND

MINI PROJECT– II

SYNOPSIS

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ABSTRACT

A lost and found website for colleges and universities provides an efficient and convenient way for students, faculty, and staff members to report lost items and potentially recover them. By submitting details about lost or found items, users can help facilitate the process of reuniting lost items with their owners.

In addition, a lost and found website can serve as a central location for campus security and management teams to monitor and respond to lost item reports. This can help improve campus safety and enhance the overall experience of campus life for members of the community.

CONTENTS

INTRODUCTION

A “lost and found” website for colleges and universities is an online platform designed to assist the process of reporting lost items and reuniting them with their rightful owners within the campus community. This website provides a central location for students, faculty, and staff members to report items they have lost or found on campus.

Misplacing personal belongings is common on college and university campuses, and a lost and found website can streamline the process of recovering lost items. The website allows users to provide a detailed description of the item, the location where it was lost or found, and the date and time. This information is then stored in a database, which can be searched by other users who are looking for lost items.

A lost and found website for colleges and universities can promote a sense of community responsibility and help reduce the stress and inconvenience associated with lost possessions. It can also be a valuable resource for campus security and management teams in identifying and returning lost items to their rightful owners.

Technologies Used

MERN :

MERN is one of several variations of the MEAN stack (MongoDB Express Angular Node), where the traditional Angular.js front-end framework is replaced with React.js. Other variants include MEVN (MongoDB, Express, Vue, Node), and really any front-end JavaScript framework can work.

MERN stands for MongoDB, Express, React, Node, after the four key technologies that make up the stack.

- MongoDB — document database
- Express(.js) — Node.js web framework
- React(.js) — a client-side JavaScript framework
- Node(.js) — the premier JavaScript web server

Express and Node make up the middle (application) tier. Express.js is a server-side web framework, and Node.js is the popular and powerful JavaScript server platform. Regardless of which variant you choose, ME(RVA)N is the ideal approach to working with JavaScript and JSON, all the way through.

REQUIREMENTS

SOFTWARE REQUIREMENTS

- Languages/Technologies Used: MERN
- Technology implemented : MongoDB, Express, React, Node
- IDE Used : VS Code
- Web Browser : Google Chrome
- GitHub

HARDWARE REQUIREMENTS

- Processor Used : Intel i3
- Operating System: Windows 10
- RAM : 4GB
- Hardware Devices: Computer System
- Hard Disk : 256GB

PROJECT DESCRIPTION

MongoDB :

MongoDB, the most popular NoSQL database, is an open-source document-oriented database. The term 'NoSQL' means 'non-relational'. It means that MongoDB isn't based on the table-like relational database structure but provides an altogether different mechanism for storage and retrieval of data. This format of storage is called BSON (similar to JSON format).

SQL databases store data in tabular format. This data is stored in a predefined data model which is not very much flexible for today's real-world highly growing applications. **Modern applications are more networked, social and interactive than ever**. Applications are storing more and more data and are accessing it at higher rates.

Relational Database Management System(RDBMS) i**s not the correct choice when it comes to handling big data by the virtue of their design since they are not horizontally scalable**. If the database runs on a single server, then it will reach a scaling limit. NoSQL databases are more scalable and provide superior performance. MongoDB is such a NoSQL database that scales by adding more and more servers and increases productivity with its flexible document model.

Express(.js):

Express.js is a small framework that works on top of Node.js web server functionality to simplify its APIs and add helpful new features. It makes it easier to organize your application's functionality with middleware and routing. It adds helpful utilities to Node.js HTTP objects and facilitates the rendering of dynamic HTTP objects.

React(.js):

React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It is an open-source, component-based front-end library that is responsible only for the view layer of the application. ReactJS is not a framework, it is just a library developed by Facebook to solve some problems that we were facing earlier.

React is a declarative, efficient, and flexible JavaScript library for building user interfaces. It is a Model-View-Controller (MVC) architecture-based library that plays the role of “V” which means view. It designs simple views for each state in your application, and React will efficiently update and render just the right component when your data changes. The declarative view makes your code more predictable and easier to debug.

Node(.js):

NodeJS is an open-source and cross-platform runtime environment built on Chrome's V8 JavaScript engine for executing JavaScript code outside of a browser. You need to recollect that NodeJS isn't a framework, and it's not a programing language. It provides an event-driven, non-blocking (asynchronous) I/O and cross-platform runtime environment for building highly scalable server-side applications using JavaScript.

Most people are confused and understand it's a framework or a programing language. We often use Node.js for building back-end services like APIs, Web App, or Mobile App. It's utilized in production by large companies like Paypal, Uber, Netflix, Walmart, etc.

Learning JavaScript is necessary these days in the development field. Anyhow you have to use JavaScript on the front end. So it is better to learn NodeJS rather than learn other backend technologies like PHP, JAVA, Ruby, etc. NodeJS is the hottest technology across the world, especially in Silicon Valley.

References

https://www.geeksforgeeks.org/
https://youtube.com/
www.intellipaat.com/
www.wikipedia.com/

GitHub Repository Link:

https://github.com/Rahulbishnoi0014/LostAndFound

Faculty Guidelines:

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