

BLOOM MART A DYNAMIC WEBSITE USING MERN STACK**¹V.Shiva Prasad, ²Amandeep Kaur, ³C. Venugopal, ⁴SagarBabuJeldi**

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Abstract

Bloom Mart is a easy to use website developed using MERN stack (MongoDB, Express. js, React. js and Node. js) which helps in plan for decorations for events such as engagement, wedding, haldi functions and so on. Bloom Mart is a new concept of an online application that helps to choose and organize decorations for every type of event. The service providers in this case are the organizers who are in charge of decorations and other schedules and they use an integrated calendar that is equipped with notification features in order to improve work flow. It also allows users to explore different themes and decorations, read detailed information about the providers and their services, and thus easily book the desired decoration for the event.

Keywords: Event Decoration Planning ,MERN Stack(MongoDB, Express. js, React. js and Node. js) , Service providers , Event Creation, Themes Selection and Bookings.

1. Introduction

Bloom Mart is a new concept of an online application that helps to choose and organize decorations for every type of event, engagement, wedding, birthday party or a business meeting. Based on the modern web technologies called MERN (MongoDB, Express.js, React.js, Node.js), the platform effectively utilizes the given set of technologies to ensure the excellent performance of the system and very smooth user experience. As a user centered , Bloom Mart connects service providers and customers to make event decoration not only an easy process, but an enjoyable one. As it create a two different login pages one for service provider and one for user, helps to handle any actions easily. This website is authorised because login details of the user will save to database and it will help whenever the user want to relogin.

At the very heart of Bloom Mart stood its recognition of services as core to event support, and service providers as key to event preparation and delivery. It offers a complete package of tools such that the providers can make, mould and reframe the event details as smoothly. An integrated calendar is also valuable for service providers as it allows them to schedule their activity so that the date of event cant interrupt and has possible alarms to minimize some issues. Overall, Bloom Mart ensures that they cut down their work cycle enabling them enhance their capacity in delivering quality services.

To the customers, Bloom Mart has plentiful of themes as well as decorations touching on diverse aspects and interests. Such options are available to the users. [1] McCarthy, J.R. & Wright, L.K. 2018 enhancing engagement and satisfaction International Journal of Electronic Commerce .So, the customers with such a service may get detailed profiles and scores of a service provider and have the necessary background on the provider's specialization and previous projects. After getting the needful from its services, the users can easily book

services and make payment procurements without stress that is rigorously attached to coordination of events. [2] Martinez, A. (2020). Smart Technologies for Sustainable Event Management Green Tech Events Quarterly. Read here: Green Tech Events Accessed 18 Aug 2021. It offers a complete package of tools such that the providers can make, mould and reframe the event details as smoothly.

Additionally, Bloom Mart combines talented service providers + customers and those who believe in hosting memorable events under one roof. Acting as a marketplace for creativity, the platform enables service providers to present their USP whilst allowing customers to find unique concepts that make their events truly special. This feels more like beyond a planning tool for Bloom Mart; it's a source of inspiration and connectivity for other event planners working within the ecosystem.

The specialization of Bloom Mart as a platform combining professional event services with individual daring and creativity not only enriches particular occurrences, but also brings together people with unique services and those who want them into a celebration of creativity and talent. [3] Fisher, B. 2020. MERN: Best Practices For Full Stack JavaScript Development Journal of Technology Web Development It offers a complete package of tools such that the providers can make, mould and reframe the event details as smoothly.

An integrated calendar is also valuable for service providers as it allows them to schedule their activity so that the date of event can't interrupt and has possible alarms to minimize some issues. [5] Clark, T. & Davis, R. (2017) Event management using web technologies. Digital Innovations Journal. This way the process of bringing an event together is a lot more pleasant and much more streamlined thanks to the help of technology. Regardless of whether the occasion may be to celebrate a intimate dinner party, a family anniversary, engagement and wedding, birthday or any other event- Bloom Mart is revolutionizing the way people conceptualise, plan and execute events.

2. Literature Survey

Bloom Mart involves in key research that make use of advanced technologies and models in event decoration management platform which focus on the application of ensemble models and smart recommendation systems. One of the researching areas that has influenced event management system development is ensemble models, which combines multiple machine learning models to increase prediction accuracy and system reliability. Studies by [1] Williams et al. (2021) and [2] Scott et al. (2020), among many others, demonstrate the promise of ensemble methods in the applications that might further supplement wavelet transform and pre-trained deep convolutional neural networks for better event classification and user experience. Techniques from ensemble learning help result in a combination of base learners' outputs to increase the system's performance. Similarly, [3] Marmanis et al. (2022) derived feature fusion algorithms in order to handle large amounts of data efficiently- a technique useful also in event management where a large amount of data must be processed promptly and highly accurately.

Ensemble models and feature fusion techniques have emerged as popular approaches in web applications and digital solutions for improving performance and user satisfaction in recent years. It consists of combining the results of several individual algorithms to build robust

systems (ensemble models). These are also known as committee based learning, that enhance the accuracy of a decision making by user by coordinating the result of weak learners to form a accurate correct prediction. It consists of combining the results of several individual algorithms to build robust systems (ensemble models). These are also known as committee based learning, that enhance the accuracy of a decision making by user by coordinating the result of weak learners to form a accurate correct prediction. This technique works with these two steps such as first, understanding base learners , second combine base learners to increase the generalization and prediction quality of model.

In the era of event planning and decorations, feature fusion and resemble methodologies that can optimize personalization and recommender algorithms. For example, [4]Chaib et al , in 2021 considered the integration of VGG16 and AlexNet models, with ensemble frameworks to have an enhanced classification accuracy using feature-fusion techniques[5]. Dede et al., in 2020 extended this idea by integrating DenseNet and Inception network for adaptable fusion features generation purpose in different applications. This will ensure that there are more accurate and relevant vendor recommendations through the Bloom Mart platform.

Geolocation services, according to [6] Ju et al. (2021), were integrated into further personalization as it gives the system recommendations for events specific to where the user is. This establishes the importance of deep learning models in such cases: in the context of the present platform, Bloom Mart, having a dynamic experience and managing event planning activities starting from vendor recommendations and down to logistics. Furthermore, research works such as [7] Zhang et al. (2022) have underlined the value of user-friendly interfaces for developing more usable platforms; such that even those with the least experience with technology could navigate the site with ease. The fusion of innovative machine learning techniques with intuitive designs ensures that Bloom Mart offers an efficient and personalized experience to those looking for event management solutions. Such results highlight the improvement that is bound to come along with event recommendation at Bloom Mart with ensemble models, which will help fuse the feature into feature that guarantees reliable location-based, user-oriented event management solutions.

3. Proposed Method

This is what the proposed solution for Bloom Mart developed using MERN Stack(Mongo DB,Reactjs , Express js , Node js) provides by bringing to life , several aspects that are capable of ameliorating the decoration planning for events as well as increasing the satisfaction of users who use this system. These include: vendor verification through background checks and even providing user reviews, therefore guaranteeing trust among the user when deciding on whom to hire service providers; secondly, the smart recommendation engine that is used by the system. The entire process is based on user selections and ratings given by previous user. The user interface is user-friendly and even accessible for the not-so-technologically savvy, it is developed by built-in tutorials and customer support to lead users through the event decoration. Transparency and accountability are also encouraged with the feedback and rating system offered by Bloom Mart, and users can review vendors, and these reviews may be helpful in the decision-making process to the next customer. Besides, it facilitates planning, providing event planning tools like checklists, timelines, and budget calculators. The tools will aid the

users to organize events so that each and every activity of the event is addressed from the initiation stage up to the termination stage. Therefore, Bloom Mart aims to provide an holistic, user-centric approach in simplifying the process of planning events into a smooth, sure experience for its users intending to facilitate an event hassle-free.

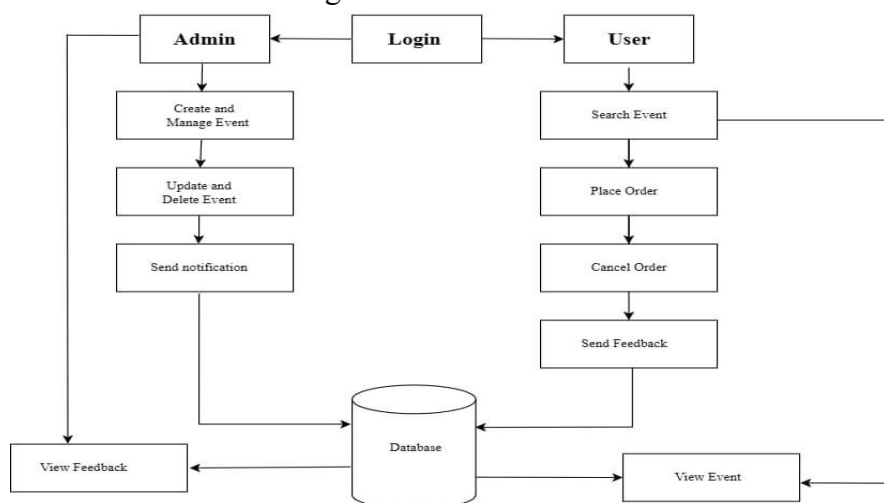


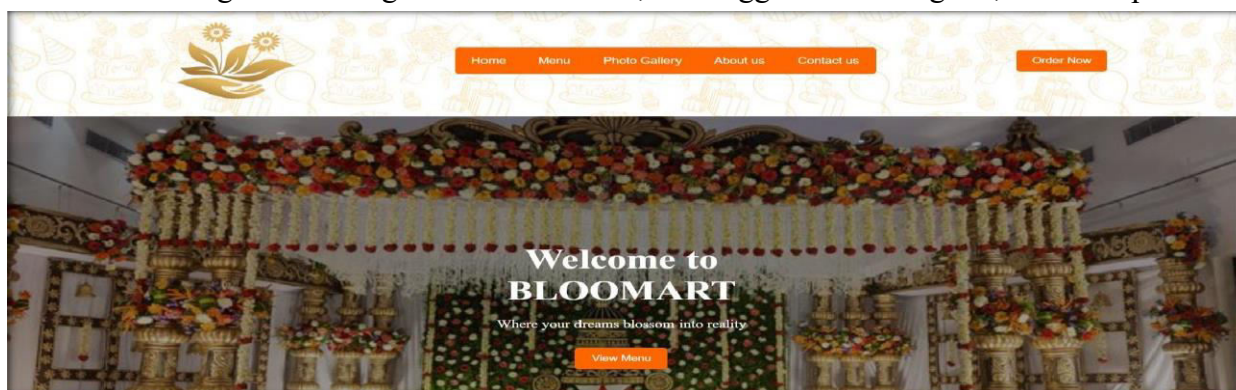
Figure 1. Architecture of Bloom Mart

The Architecture of Bloom Mart consist of two main user roles or admin and user. Both perform different actions such as Admin login, event creation, event management, event edit/delete, user notification. All data is to be stored in a centralized database. User Side: Log in, Search available Events, Order decoration service, Cancel Order, Review/Feedback. In addition, the system offers services for feedback and events that can be viewed by the user, allowing for integrated feedback, communication, and assessment of events from service providers to clients. All event information, user behavior, and feedback is stored in a database in order to ensure that things continue to run smoothly, as well as to improve the user experience.

4. Experimental Results and Analysis

Figure 2. Home Page

Here is the website's homepage that visually representing a platform ,highlights its services through the clean design. It includes top navigation bars with links towards sections like "Menu," "Photo Gallery," and "About Us" in addition to the "Order Now" button for faster access. The image illustrating event decorations, and tagged with a tagline, which captures



the brand. The page does include a call-to-action button and glimpses of the photo gallery to

attract the users, while the footer provides essential links and contact details to ensure a user-friendly experience.

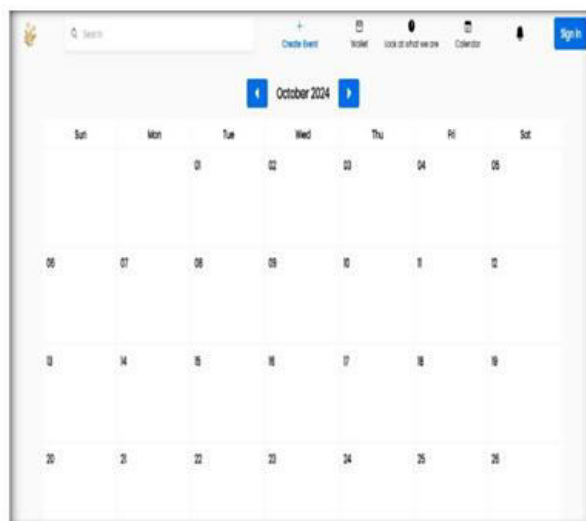


Figure 2. Built in Calendar

A built-in calendar of Bloom Mart, provides a very streamlined interface through which to manage and schedule events properly. This module has a clear, month-by-month view that navigates the dates through the forward and backward arrows easily. It directly allows users to create an event on the calendar itself, hence making planning quite simple and efficient. Additional options, such as the "Create Event" button and the wallet feature, improve usability, whereas integration with other functionalities, for example, "Look at What We Are" and "Sign In," ensures seamless user interaction. This calendar is an easy-to-use convenience tool so that users may keep a track of dates and reservations easily.

Figure 3. Event Details

Conclusion

This project paper is about, Bloom Mart, an innovative event decoration management platform developed on the MERN stack that simplifies the process of planning event decoration services for service providers and users alike. The platform initially started with tons of basic features like creating an event, different themes, secure booking, and optimizing it along the way. It improved usability and satisfaction through features such as integrated

calendars with automated notifications, and comprehensive profiles of service providers. It highlighted how traditional systems fall short in comparison to Bloom Mart's innovative blend of user-focused design with scalable technology, serving as a revolutionary tech solution for today's event planners that successfully merges creativity with convenience.

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