JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Task Buddy

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Abstract: **— The presented paper intends to showcase the development of a mobile application utilizing the Flutter framework that permits users to establish reminders or alarms with the possibility of collaborative work. The application empowers users to generate a task comprising a title, description, and alarm time. Once the scheduled time arrives, a notification is triggered to prompt users about their task. Moreover, the application provides a collaborative work attribute that allows users to dispatch reminders to their acquaintances or colleagues concerning a particular task. Additionally, an email reminder choice is obtainable to transmit a reminder via email to the designated individual. The paper also entails a comprehensive explanation of the application's architecture, design, and implementation. The proposed solution adopts the Flutter framework for the application's development, and Hive powers the application's backend. The application's user interface is designed to be straightforward and user-friendly, simplifying the process of establishing reminders and collaborating with others. All in all, the proposed solution provides a convenient and pragmatic approach to set reminders and encourage collaborative work among individuals. The application's features and functions render it a valuable tool for managing tasks and improving productivity.**

Keywords: - Flutter; Task Buddy; Smart Task managing;

1. INTRODUCTION

In today's fast-paced world, task management and organization can be daunting. With the emergence of mobile technology, developers are creating applications that simplify managing tasks and keeping up with daily schedules. This paper discusses the development of a mobile application that utilizes the Flutter framework, enabling users to set reminders or alarms, collaborate with others, and receive email reminders.

The application offers numerous features that enhance task management. Its collaborative work attribute enables users to send reminders to their colleagues or friends about a specific task, boosting teamwork and productivity. Additionally, the email reminder option sends reminders via email to the designated individual.

The paper provides an in-depth description of the app's architecture, design, and implementation. The app's development employs the Flutter framework, and Hive powers its backend. The application's user interface is designed to be user-friendly and intuitive, allowing users to set reminders, collaborate with others, and receive email reminders with ease. The purpose of this paper is to demonstrate the efficacy of the Flutter mobile application in promoting productivity and task management. The app's functionalities make it a valuable tool for individuals who struggle with managing their tasks and schedules. This paper aims to provide developers with a comprehensive understanding of the application's features, functionalities, and implementation details to help them create similar applications in the future.

2. LITERATURE SURVEY

1) Task do is an application that provides personalized recommendations to its users based on their task performance history. These recommendations are tailored to specific days and times and are generated through a complex system that includes both dependent and independent modules. To develop this task recommender system, users enter their tasks and relevant variables, providing task preferences and feedback over time. As the system gathers more data on the user's task performance, it begins to offer recommendations. for instance, if the user consistently completes household chores successfully on Monday mornings but struggles with other types of tasks during the same time, task do will suggest prioritizing household chores on Monday mornings.

2) The article discusses the topic of task allocation among employees by project managers. Nowadays, software development companies frequently use task management software to keep track of their ongoing projects and tasks. Despite the customization options available in these software programs for project workflow, they do not effectively monitor employee workload. As a result, this can lead to inadequate task allocation, employee fatigue, and missed deadlines. The research provides an overview of different task management software and investigates ways to supplement their limited employee workload tracking capabilities.

3) Effective time management is a crucial aspect for students, which involves scheduling tasks and submitting assignments on time. Although there are numerous task scheduling and reminder applications available to assist students, excessive use of smartphones can often lead to distractions and render reminders useless. To address this issue, the Snoop Me app has been developed to alert students about their scheduled tasks while monitoring their mobile usage. Snoop Me is a smart scheduler that enables students to complete their scheduled tasks efficiently. Once logged in, students can schedule their tasks by entering the due date for submission and expected completion time. Regular notifications about the remaining time for task completion are provided by Snoop Me. Additionally, Snoop Me tracks all mobile activities and provides recommendations to limit mobile usage based on the tracked information. Snoop Me also offers a graphical representation of the time spent on various apps. To evaluate the effectiveness of Snoop Me in completing scheduled tasks, an experimental study was conducted on 30 undergraduate students of Information Technology. The students installed the Snoop Me APK on their smartphones for a week to schedule their activities and submission work. The feedback received from the students was positive, indicating that they found the app helpful in managing their time efficiently.

3. DISCUSSION

The need for the task management project developed using Flutter is essential because it helps users to manage their tasks efficiently and effectively, thereby reducing stress and increasing productivity.

Flutter, being a mobile app development framework, provides numerous advantages to developers and users alike. One of the significant advantages of Flutter is its ability to create fast and responsive applications. The task management project developed using Flutter takes full advantage of this feature, allowing users to manage their tasks efficiently and without delay. Another advantage of Flutter is its cross-platform compatibility, allowing users to access the task management application on multiple devices, including smartphones, tablets, and laptops. The task management project developed using Flutter ensures that users can access their tasks from anywhere, at any time, using any device. The task management project developed using Flutter also provides users with a visually appealing and easy-to-use interface, allowing them to manage their tasks efficiently and without difficulty. The project utilizes Flutter's widgets and components, providing users with an intuitive and user-friendly experience.

4. PROPOSED SYSTEM

4.1 Major Components of proposed system: -

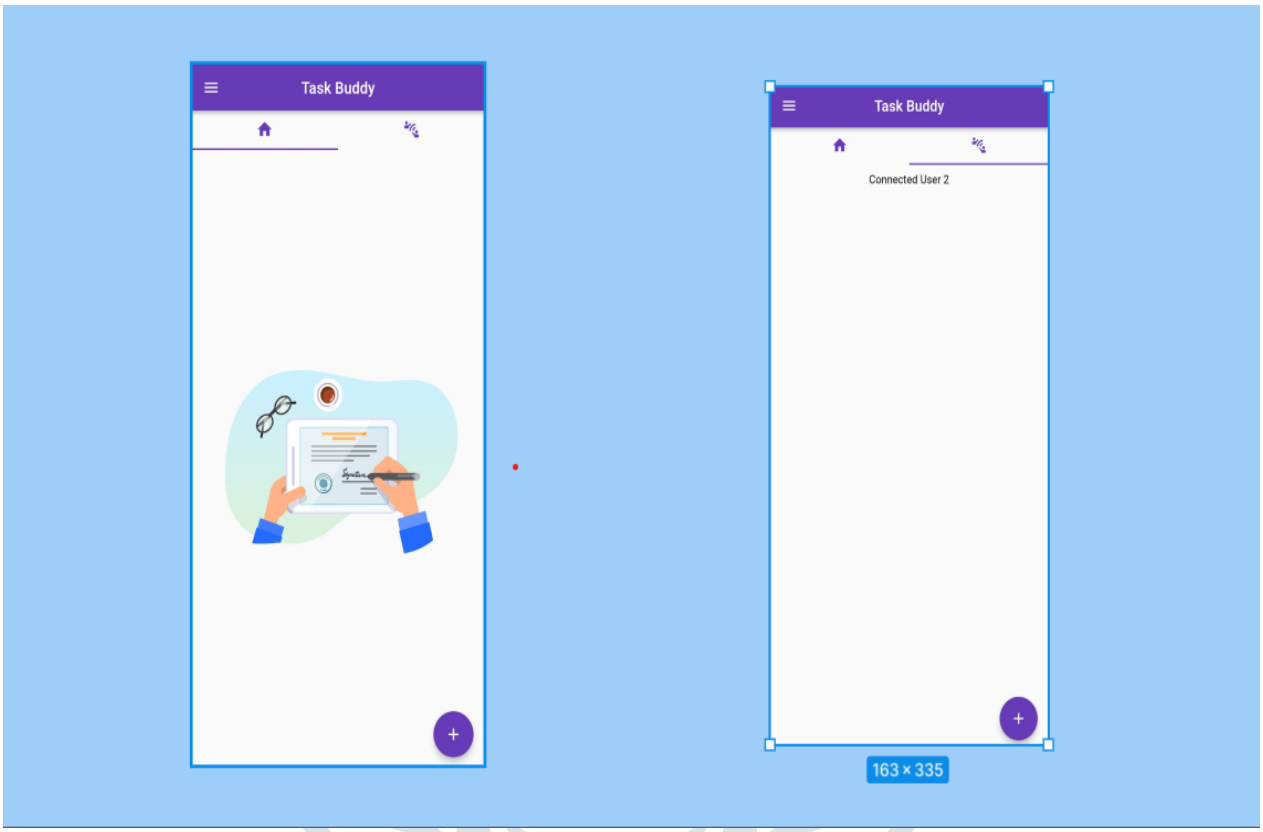
Frontend Technology - The frontend of a to-do list app is crucial for providing a seamless user experience. With Flutter, designing an intuitive UI involves creating visually appealing widgets for inputting tasks, displaying task lists, and marking completed tasks. Using animations and gestures can further enhance the user experience. A well-designed frontend is essential for a successful to-do list app, ensuring users can easily manage their tasks and increase productivity.

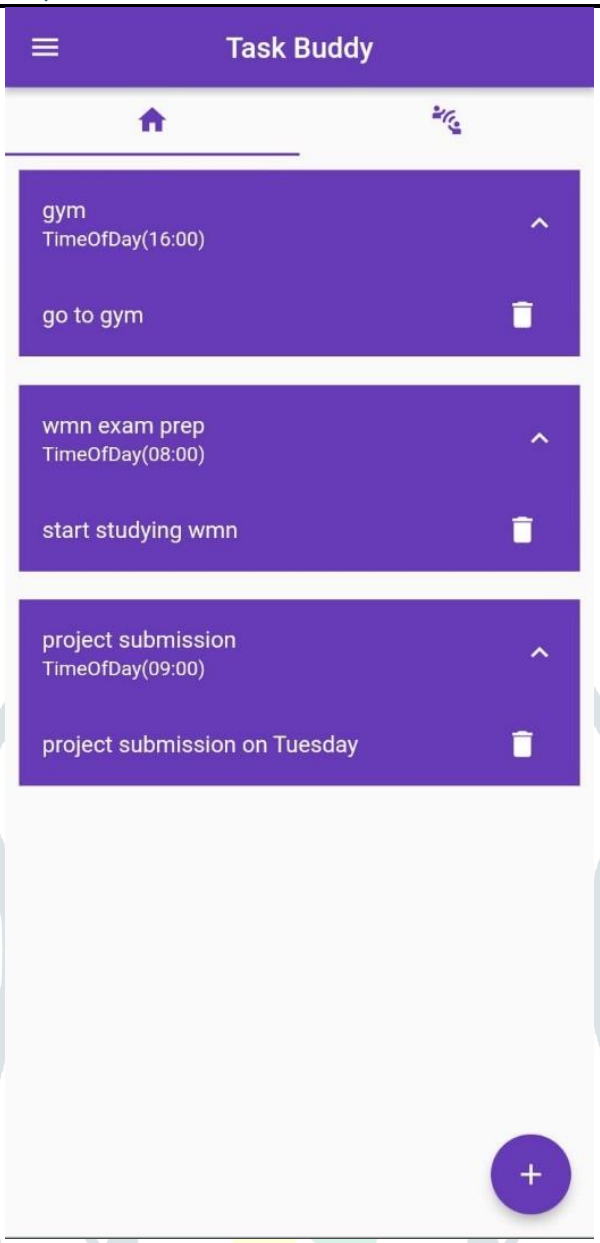
Backend Technology – This refers to defining the operations carried out by a remote computer situated in a cloud-based infrastructure using the widely-used runtime Nodejs. The frontend or user interface component of the applications communicates with the backend, sending certain requests which are then executed by the backend.

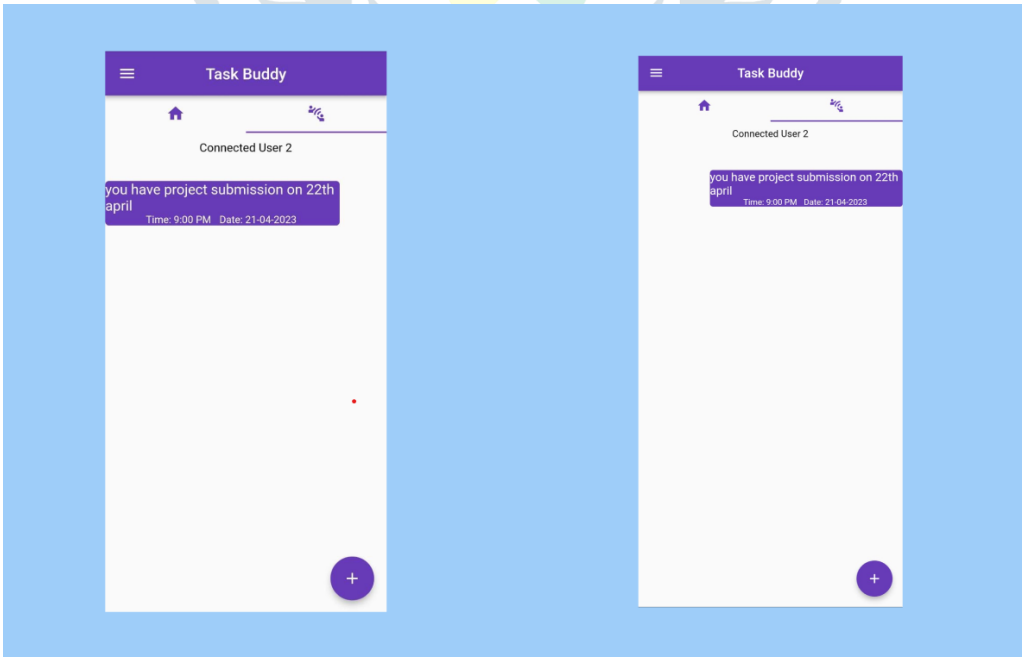
Database – Hive, a NoSQL and document-oriented database, was an ideal choice for storing notes and user information. The backend component reads and writes to the database and sends the requested data to the frontend. The data is stored in Json format, which is identical and interchangeable with the Json formation. Due to its ease of use with Dart, the Json format is highly convenient.

4.2 Working of Task Buddy

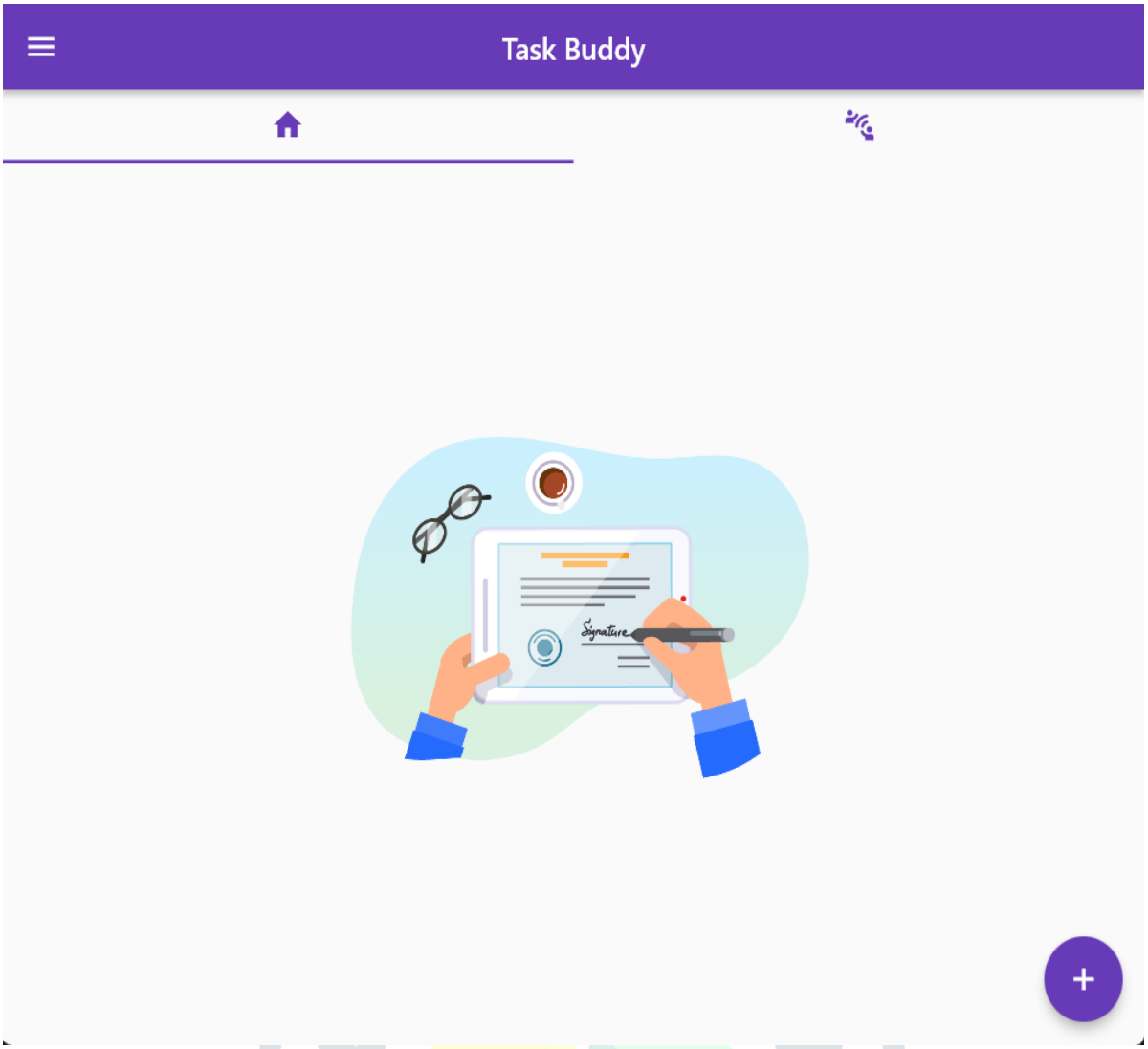
Mobile View:




Task Buddy
gym
TimeOfDay(16:00)
go to gym
wmn exam prep
TimeOfDay(08:00)
start studying wmn
project submission
TimeOfDay(09:00)
project submission on Tuesday


Task Buddy
Connected User 2
you have project submission on 22th april
Time: 9:00 PM Date: 21-04-2023
Task Buddy
Connected User 2
you have project submission on 22th april
Time: 9:00 PM Date: 21-04-2023

Desktop View:



5. Conclusion

The paper's developed Flutter mobile application provides an easy-to-use and convenient solution for task management and collaboration. By customizing reminder and alarm titles and descriptions, users can track their daily tasks and deadlines with ease. With its collaborative work feature, sharing tasks with friends or colleagues becomes effortless, allowing for delegation and teamwork. The paper's suggested future enhancements aim to further enhance the app's functionality and usability, providing users with additional tools for efficient task management.

Overall, the Flutter mobile application developed in this paper has the potential to be an accessible and comprehensive platform for task management, organization, and collaboration, effectively resolving users' task management issues.

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