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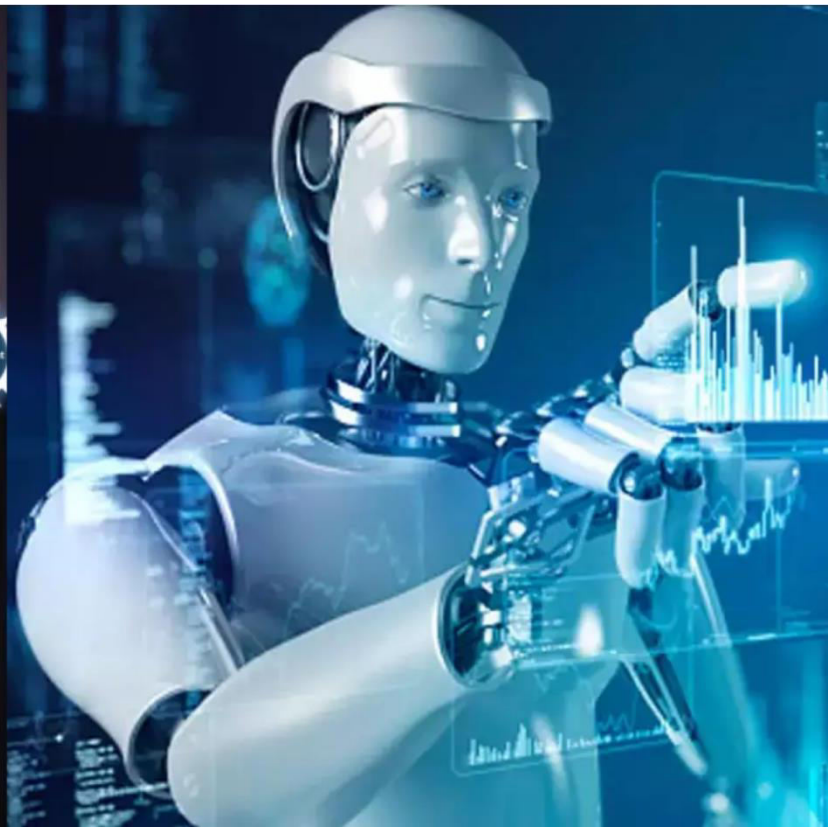
ISSN(O): 2319-8753
ISSN(P): 2347-6710



International Journal of Innovative Research in Science Engineering and Technology (IJIRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)





Impact Factor: 9.935

Volume 15, Issue 10, October 2026

International Journal of Innovative Research of Science, Engineering and Technology (IJIRSET)

Impact Factor 9.935

|www.ijirset.com |A Monthly, Peer Reviewed & Refereed Journal| e-ISSN: 2319-8753| p-ISSN: 2347-6710|

Volume 15, Issue 10, October 2026

|DOI: 10.15680/IJIRSET.2026.1510091|

Asha Sarthi - AI Powered Healthcare Management System for ASHA Worker

Prof. Bhosale A. U., Kadam P.R, Madas S.G, Shivagunde S.B, Birajdar K.S

Department of Computer Science and Engineering, MAEER'S MIT CORER, Barshi. Dt., Solapur, India

ABSTRACT: Asha Sarthi is a digital healthcare application designed to help ASHA workers manage beneficiary records, healthcare activities, notifications, and communication efficiently. It provides a centralized cloud database to access updated information from different devices. Developed using Flutter, FastAPI, and MySQL, the system aims to reduce paperwork, minimize errors, and improve coordination between ASHA workers, supervisors, and beneficiaries.

KEYWORDS: Asha Sarthi, Digital Healthcare, ASHA Workers, Flutter, FastAPI, MySQL, Cloud Database, Beneficiary Management, Healthcare Services, Data Management, Mobile Application.

I. INTRODUCTION

Asha Sarthi is a digital healthcare application designed to support ASHA (Accredited Social Health Activist) workers in managing their daily healthcare activities efficiently. ASHA workers play an important role in connecting communities with healthcare services. However, maintaining paper-based records and managing beneficiary information manually can be time-consuming and challenging.The Asha Sarthi application provides features such as beneficiary management, digital record maintenance, notifications, messaging, and multilingual support. It is developed using Flutter for the frontend, FastAPI for the backend, and MySQL for centralized data storage. The application enables authorized users to access updated information from different devices, including mobile phones and computers.The main objective of Asha Sarthi is to reduce paperwork, minimize manual errors, and improve communication between ASHA workers, supervisors, and beneficiaries. By providing a centralized and user-friendly digital platform, the system aims to improve healthcare data management, increase work efficiency, and support better coordination in community healthcare services.

II. LITERATURE SURVEY

A literature survey is an important part of project development that reviews existing research, technologies, and systems related to the project. It helps identify the limitations of existing healthcare applications and understand how digital technologies can improve healthcare management. The study of existing systems provides a foundation for developing Asha Sarthi, a digital platform designed to support ASHA workers in managing healthcare activities and beneficiary information efficiently.

1. Smart Healthcare Management Systems: Existing smart healthcare systems provide digital platforms for maintaining patient records, managing health information, and improving communication between healthcare providers and patients. These systems demonstrate how technology can simplify healthcare services and reduce manual work.
2. Mobile-Based Healthcare Applications: Research on mobile healthcare applications highlights the importance of providing healthcare information and services through smartphones. Such applications help healthcare workers manage beneficiary details, receive notifications, and communicate with supervisors efficiently.
3. Cloud-Based Healthcare Data Management: Cloud computing enables centralized storage of healthcare records and allows authorized users to access updated information from different devices. This approach improves data availability, information sharing, and coordination among healthcare workers.
4. Digital Record Management Systems: Traditional paper-based record management can lead to data duplication, information loss, and errors. Digital record management systems help maintain organized beneficiary information, simplify record updates, and improve the accuracy of healthcare data.
5. Communication and Notification Systems: Communication systems play an important role in healthcare coordination. Messaging and notification features help healthcare workers and supervisors exchange information, share updates, and manage healthcare activities more effectively.

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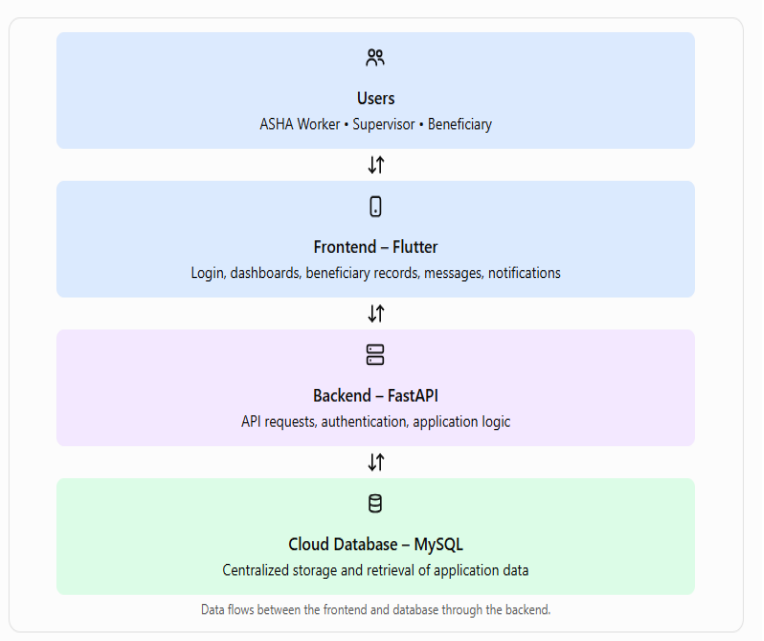
Volume 15, Issue 10, October 2026

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6. Multilingual Healthcare Applications: Language accessibility is important for community healthcare services. Multilingual applications allow users to interact with the system in their preferred language, making digital healthcare tools easier to understand and use
7. Proposed Asha Sarthi System: Based on the study of existing healthcare technologies, Asha Sarthi integrates beneficiary management, digital records, messaging, notifications, and multilingual support into a single application. It uses Flutter for the frontend, FastAPI for backend services, and MySQL for centralized data storage. The system aims to reduce paperwork, improve data accessibility, and support efficient coordination between ASHA workers, supervisors, and beneficiaries.

III. METHODOLOGY

The system flowchart of Asha Sarthi represents the complete workflow of the application, starting from user login to accessing healthcare services. First, the user opens the application and registers or logs in using their credentials. The system validates the credentials and displays an error message if they are incorrect; otherwise, the user is directed to the dashboard. From the dashboard, users can access features such as beneficiary management, messaging, notifications, and language settings. The FastAPI backend processes user requests and communicates with the MySQL database to store or retrieve information. Finally, the application displays the requested or updated data to authorized users. This workflow helps ensure organized data management, improved accessibility, and efficient coordination among ASHA workers, supervisors, and beneficiaries.



The Asha Sarthi application works through the following steps:

1. User Authentication: Users register or log in using their credentials to access the application.
2. Dashboard: After successful login, users access the dashboard and the features available to their roles.
3. Beneficiary Management: ASHA workers can add, view, and update beneficiary information.
4. Communication: Messaging and notification features help users exchange information and receive updates.
5. Backend Processing: The Flutter application sends requests to the FastAPI backend, which processes them and interacts with the MySQL database.
6. Cloud Data Access: Data is stored centrally so authorized users can access updated information from different devices when connected to the internet.
7. Display Results: The application displays the requested or updated information to the user.

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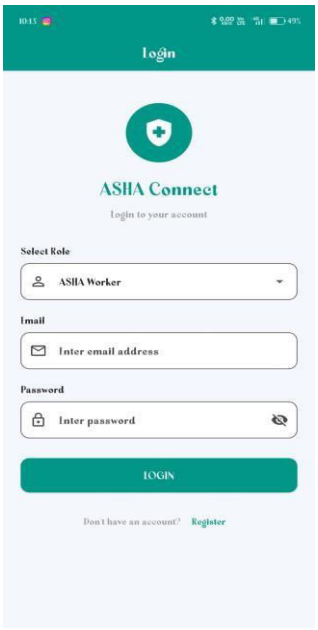
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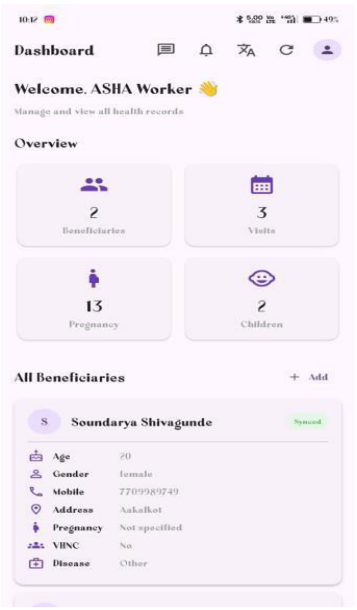
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IV. HARDWARE AND SOFTWARE REQURIMENT

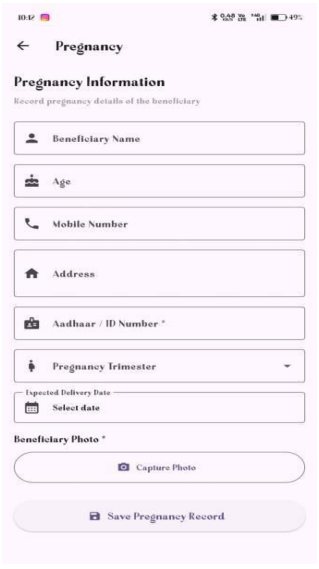
1. Operating System : Windows 10/11
2. Frontend : Flutter, Dart
3. Backend Language : Python
4. Framework : FastAPI
5. Database : MySQL,SQLite
6. Code Editor : Visual Studio Code Cloud
7. Version Control : Git, GitHub
8. Web Browser : Google Chrome ,Microsoft edge
9. Mobile Platform : Android
10. Internet : Stable Internet Connection

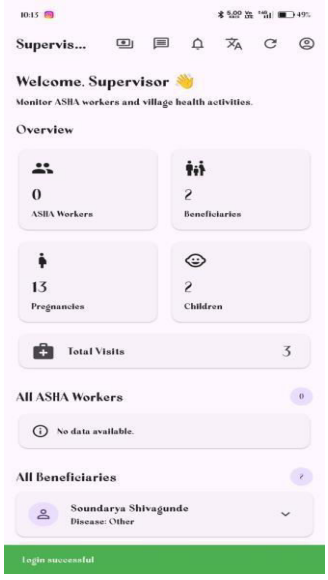
V. EXPERIMENTAL RESULTS

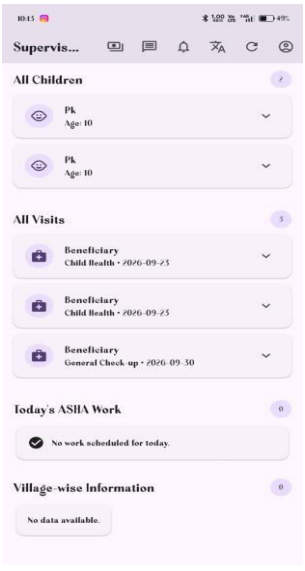












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VI. CONCLUSION

Asha Sarthi is a digital healthcare application developed to simplify the daily activities of ASHA workers and improve healthcare management. It provides features such as beneficiary management, digital record maintenance, messaging, notifications, and multilingual support. The application uses Flutter, FastAPI, and MySQL to provide an organized and centralized platform for managing healthcare information.

The system aims to reduce paperwork, minimize manual errors, and improve communication between ASHA workers, supervisors, and beneficiaries. Its cloud-based data management enables authorized users to access updated information from different devices through the internet. Overall, Asha Sarthi aims to improve the efficiency, accessibility, and coordination of community healthcare services through digital technology.

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