

Extending Care to the Home - Enabling Health Workers

CS 837: Healthcare Application Development Milestone -1

Guided By

Prof. T K Srikanth
International Institute of Information Technology, Bangalore

Jayaa Shree Laxmi Kishoore
Teaching Assistant



**International Institute of Information Technology,
Bangalore**

Created by:

Team - 12

Tanvi Motwani
MT2023149
Tanvi.Motwani@iiitb.ac.in

Arjun Gangani
MT2023153
Arjun.Gangani@iiitb.ac.in

Harsh Ranpariya
MT2023164
Harsh.Ranpariya@iiitb.ac.in

Vraj Jatin Naik
MT2023050
Vraj.Naik@iiitb.ac.in

Nikita Gupta
MT2023132
Nikita.Gupta@iiitb.ac.in

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1. Problem Statement:

Project No. – 6:

- Field Health Workers [FHW] visit houses and screens all members of a family using standardized questionnaire.
- Those identified with mental health conditions are referred to doctor for local area.
- Doctor evaluates and prescribes treatment, and any follow ups needed. Records diagnosis with ICD10 codes (entry should be simple).
- Health Worker should track and complete follow ups. App helps them with schedule, alerts etc.
- Tablet-Based app for health worker, should support offline capability.
- Doctor can view data of patients they have treated, as well as summary data of patients in their local area (e.g. district or taluka)
- Provides API for state level dashboard that shows data across such programs.
- Multi-lingual (for field worker).

2. Actors and their roles:

1. Admin
2. Supervisor
3. Doctor
4. Field Health Worker

Roles:

1. Admin:

- Admin will login.
- On landing screen admin can view the number of registered doctors, supervisors and health workers.
- By clicking on one of the cards, admin can view the list of registered doctors, supervisors and health workers respectively.
- Admin can add new health worker/doctor/supervisor.

2. Supervisor:

- Supervisor will login.
- The person can view the assigned areas.
- By clicking on the card of specific area, he can view the list of health workers corresponding to that area.
- The list of health workers will also contain information related to whether or not the follow up has been completed.

- If there are no health workers corresponding to the given area, then popup will be shown.
- Can handle missed follow ups if any by contacting health worker.

3. Doctor:

- Doctor will login.
- On landing the screen the doctor can view the list of patients that have been referred to him.
- Doctor can also view bucket cards which are as follows:
 - New Appointments: This bucket shows the list of patients that have been newly appointed to doctor
 - Ongoing: This bucket shows the list of patients that still have ongoing follow ups
 - Completed: This bucket shows the list patient whose treatment has been completed.
- So, by clicking on the completed bucket the doctor can see the list of all the previous patients that he has treated.
- By clicking on one of the patients from list, the demographics of patient will open on right half, where doctor can view the information related to the patient
- By clicking on the View Patient Details button, doctor can view patient's medical history.
- Doctor can view patient's medical history.

- By clicking on add/edit prescription, doctor can add details related to checkup and can upload prescription.
- Doctor can schedule follow up if required.
- Doctor can view dashboard which contains graphical representation of the total patients treated and corresponding to which disease.
- In dashboard doctor can also view the district level statistics.
- Doctor can also view/edit his profile.

4. Field Health Worker:

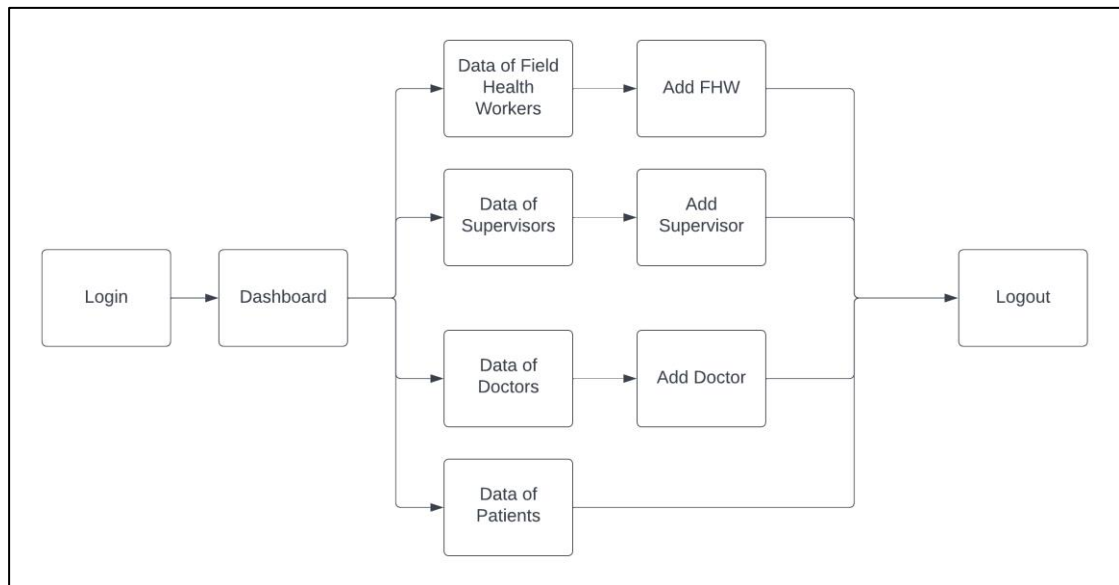
- Healthcare worker can login by username and password.
- On forgot password, OTP verification with mobile number is provided.
- On home page he can view two options:
 - Registers people
 - Follow ups
- On clicking register people he can register patient with all the demographics details.
- After submitting registration form, he can carry out standard questionnaire.
- After completing questionnaires, he can view results and based on that patient will be referred to doctor of local area.
- On home page by clicking on Follow up, he can view the list of follow ups and can mark done for the follow ups he has completed.

- By clicking on patient with follow up, he can view the prescription and the instruction added by doctor.
- And following that he will carry out follow up questionnaire with patient.
- Offline capabilities: Access to patient schedules for follow-ups. Questionnaire administration offline, with data synchronization upon network availability.
- Ability to view and update patient records offline.
- Notification System: reminders for upcoming follow-ups.
- Multilingual Support with local languages.

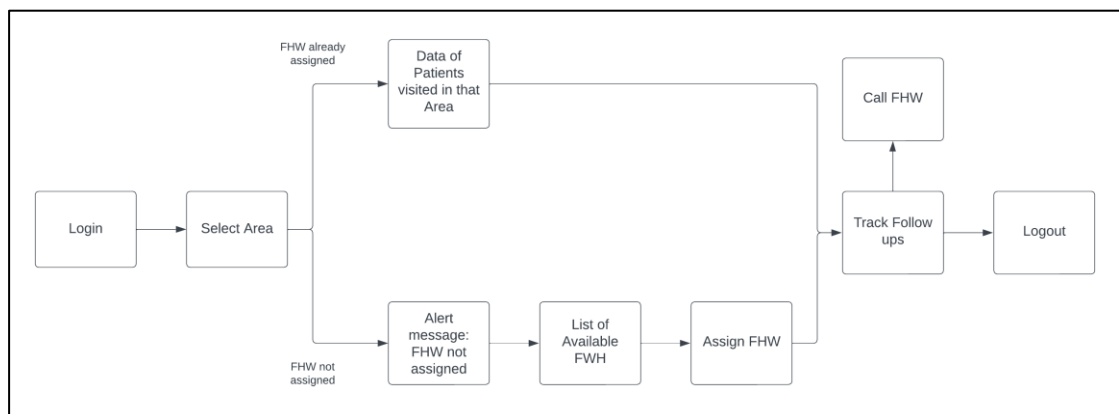
3. Diagrams

3.1 Work Flow Diagram:

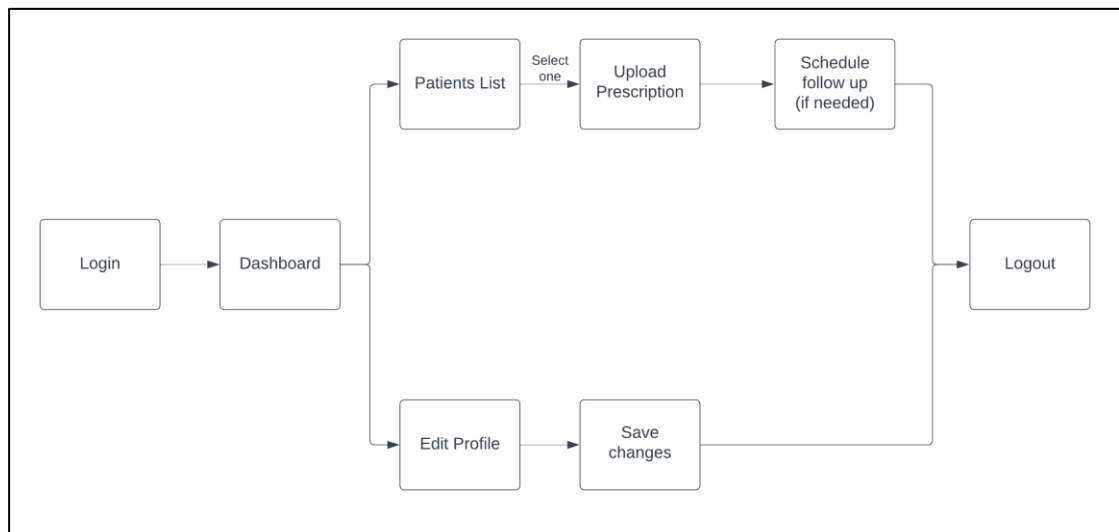
3.1.1 Admin:



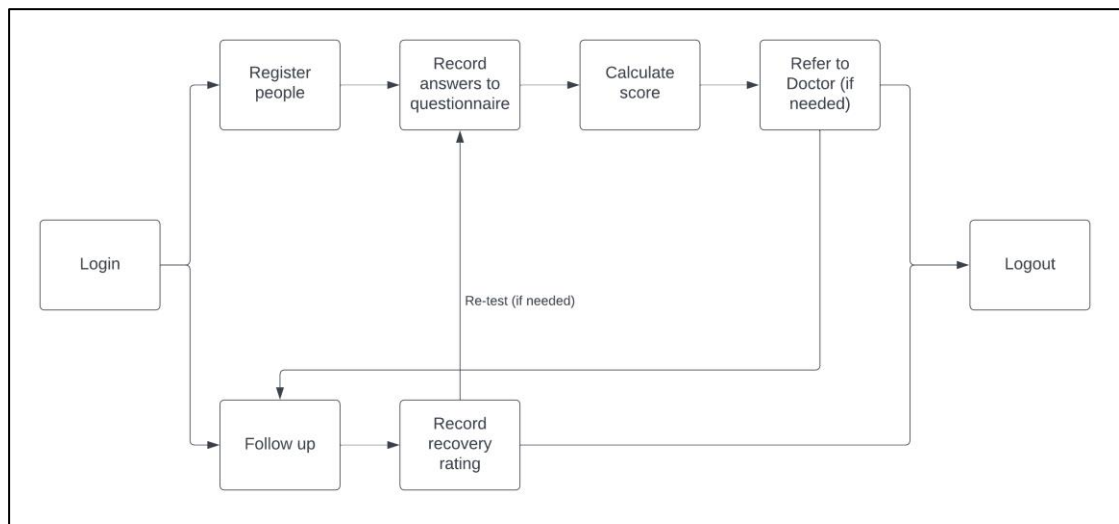
3.1.2 Supervisor:



3.1.3 Doctor:

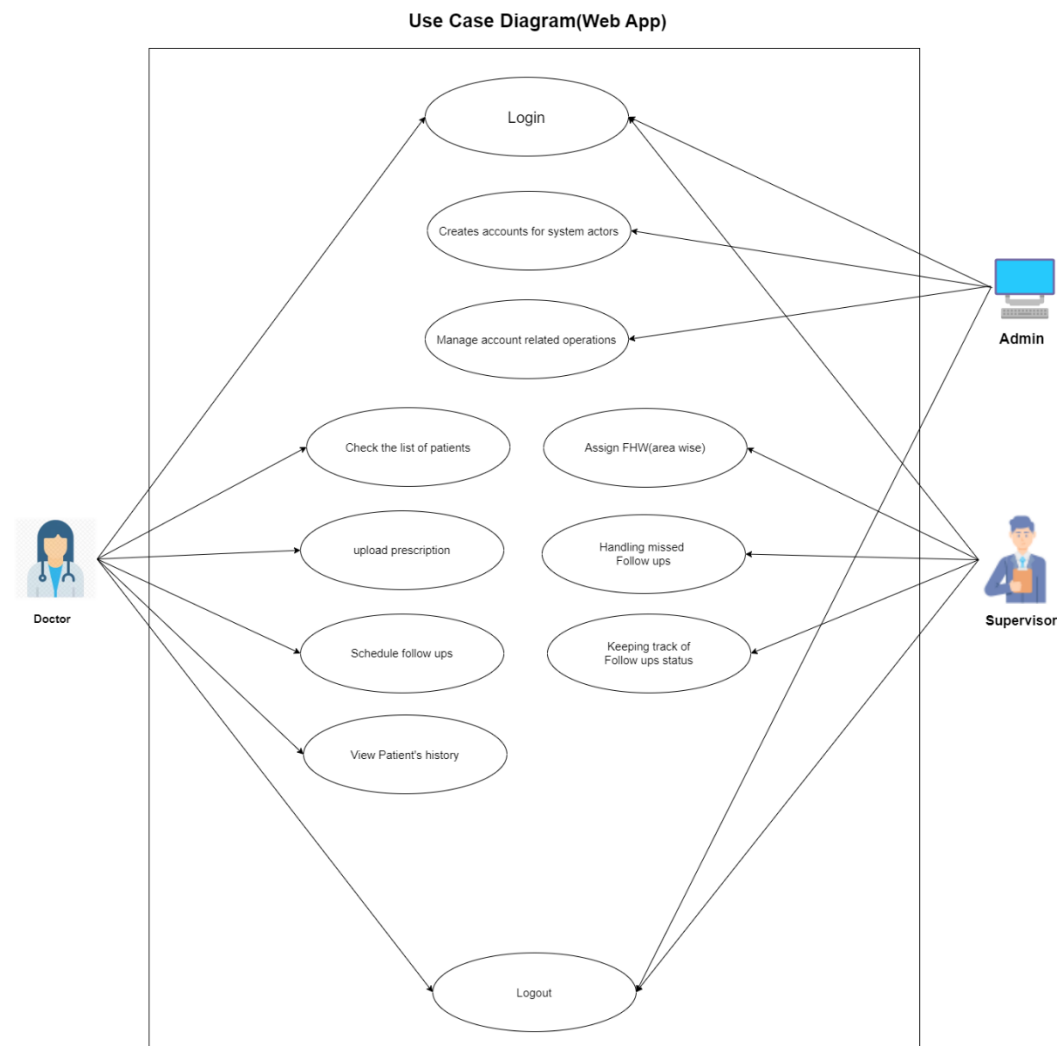


3.1.4 Field Health Worker:



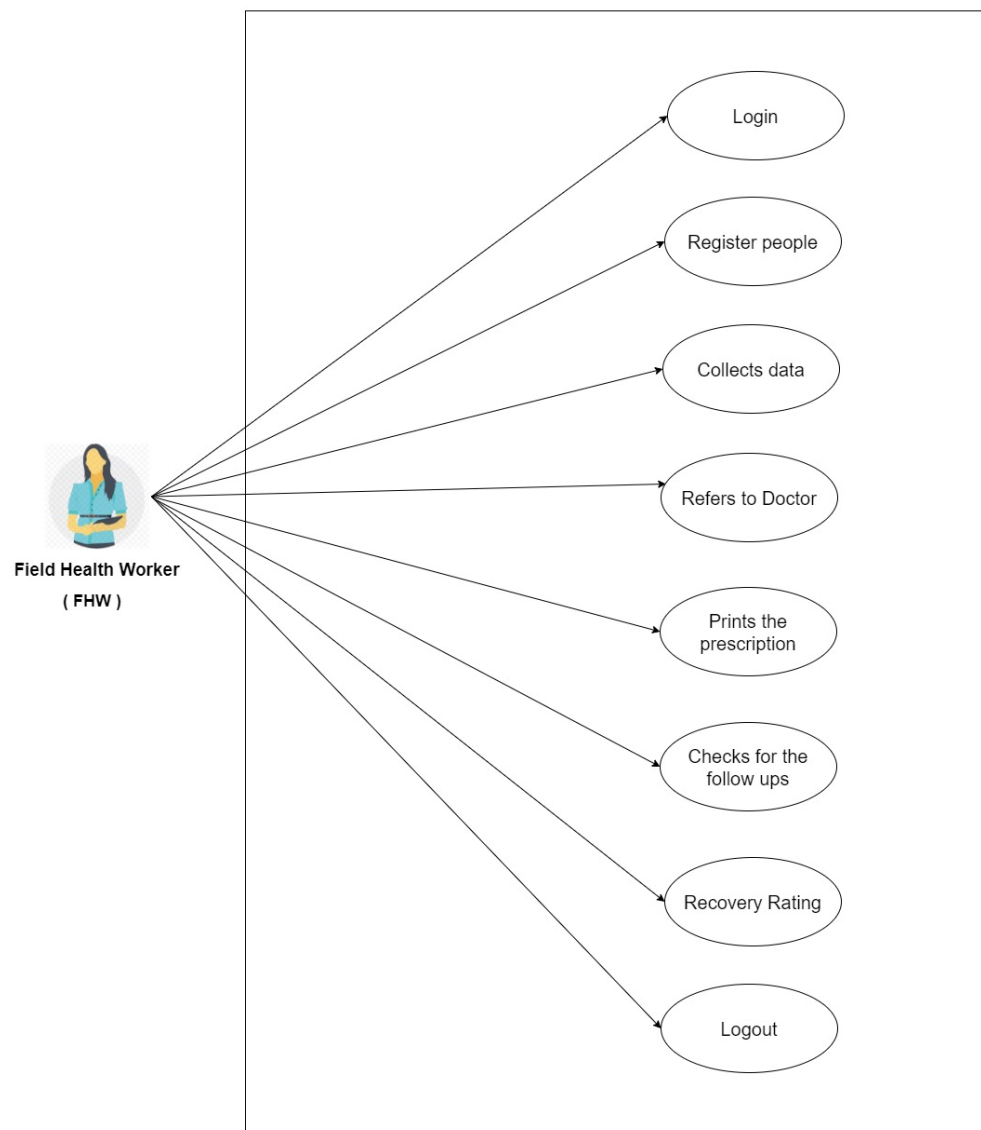
3.2 Use Case Diagram:

3.2.1 Web Application:



3.2.2 Mobile Application:

Use Case Diagram (Mobile App)



3.2.3 Data View:

