

Connect2Bahmni Flutter App for ordering Lab investigations & Drugs

This is a concept note document for ordering investigations and medications using Connect2Bahmni app. Bahmni is an Open Source Hospital Management System Licensed under AGPL License. For more details please refer to <http://www.bahmni.org>.

Note

PUBLICLY VIEWABLE DOCUMENT

Document Status: Under Research

Overview

Bahmni is a free and open source hospital system specifically designed for providing services for low resource clinics and hospitals all across the world.

Two features are required to be added under this issue. These features include booking of lab investigations by the practitioner for the patient and the secondly ordering medications for the patient. Once a particular investigation/drug is ordered, its added to consultation session. Subsequently on "finish" of session, the orders will reflect on Bahmni Server, and visible onto patient dashboard.

Stakeholders (Who is it for)

These features are to be used primarily by the doctors/practitioners and will help in the proper maintenance of the patient's records.

Why is it Helpful?

These features will be helpful for the doctors/lab practitioners to order lab investigations and medications for the patients. It will ensure proper management of the patient's records and to carry out the consultation from beginning to end smoothly.

Scope:

Currently the portal envisions to provide feature to order lab investigations and medications by the doctors for the patient. However, in future more features can be added.

User Stories:

1. User lands on the home screen where he sees the Active Patients and All Patients options:

The user(doctor/practitioner) lands on the dashboard from where he can select two options. Either he can go for the **Active Patient** option or else he can also take the **All Patients** option from where he can search and select a patient.

Alternatively the user can also create a new patient for which he needs to enter the basic details, attributes and address of the patient. The user saves the details and comes back to the home screen. Now under the All Patients tab he can search for the newly registered patient.

2. The user selects the patient:

The user selects the patient from the two options mentioned. This takes him to the patient chart which has multiple options like start a session, schedule appointment, start virtual, Graphs and discard session. The screen also shows the minimal information of the patient. The screen shows the list of past visits and encounter diagnosis of the patient.

3. User starts a new consultation:

The user can start a new consultation by tapping on the New Consult button present on the upper right of the app bar. On tapping the new Consult button, a new Consultation Context screen opens up which takes Visit type and Encounter type from the user. Also there is a Start button. On tapping the start button, the consultation start and the patient chart appears with a Draft at the bottom which contains the visit type and the encounter type. It also has an edit option on tapping which the user can update the visit and the encounter type. Once the consultation session is started, it can be saved using the save button present at the right of the app bar.

4. The navigation bar:

The Patient chart screen contains a navigation bar which has four icons:

- **Condition:** The user can add condition for the patient here.
- **Medication:** Here the user can add medications for the current patient.
- **Investigation:** Here the user can add the required lab investigations for the patient.
- **Consultation notes:** This is the final part of the consultation session where the user can add consultation notes for the patient.

5. The Investigation screen:

On tapping the investigations icon at the navigation bar, the user enters the investigation screen. This screen consists of a search bar where the user can enter the name of the lab test he wants to add and select it. It also contains a form which keeps all the lab tests selected by the user. Finally it contains a save button which saves all the investigations selected by the user and returns to the patient chart screen. The draft at the bottom shows the added investigations. There is an edit option which the user can use to edit the investigations.

6. The Medications screen:

On tapping the medications icon at the navigation bar, the user enters the medication screen. This screen includes a search tab where the user can search for a particular drug. Below the search tab exists more inputs such as dose, units (eg; capsules, tablet, ml ,etc.) frequency, route, start date, duration, units(eg: days, weeks, months), total quantity, additional instructions. Below this is an add button which adds the drug to the list of added drugs and all the inputs are cleared. Also the screen contains a save button which saves the list of all the drugs prescribed and the user reaches back to the

patient chart where the draft shows the visit and encounter types, investigations, medications and the consultancy note. The user may save the consultation using the save button at the upper right of the app bar.

Possible JIRA stories

1. Investigations Screen:

A page where the user navigates on tapping the investigations button. This page contains:

- A search bar where the user can search for a particular lab investigation.
- An add button to add the investigation in the list of investigations displayed below the search bar.
- A save button which the user can tap to finally save all the investigations selected and come back to the patient chart where these investigations reflect under the draft section at the bottom of the screen.

2. Medications Screen UI design:

A page where the user navigates on tapping the medications button. This page contains:

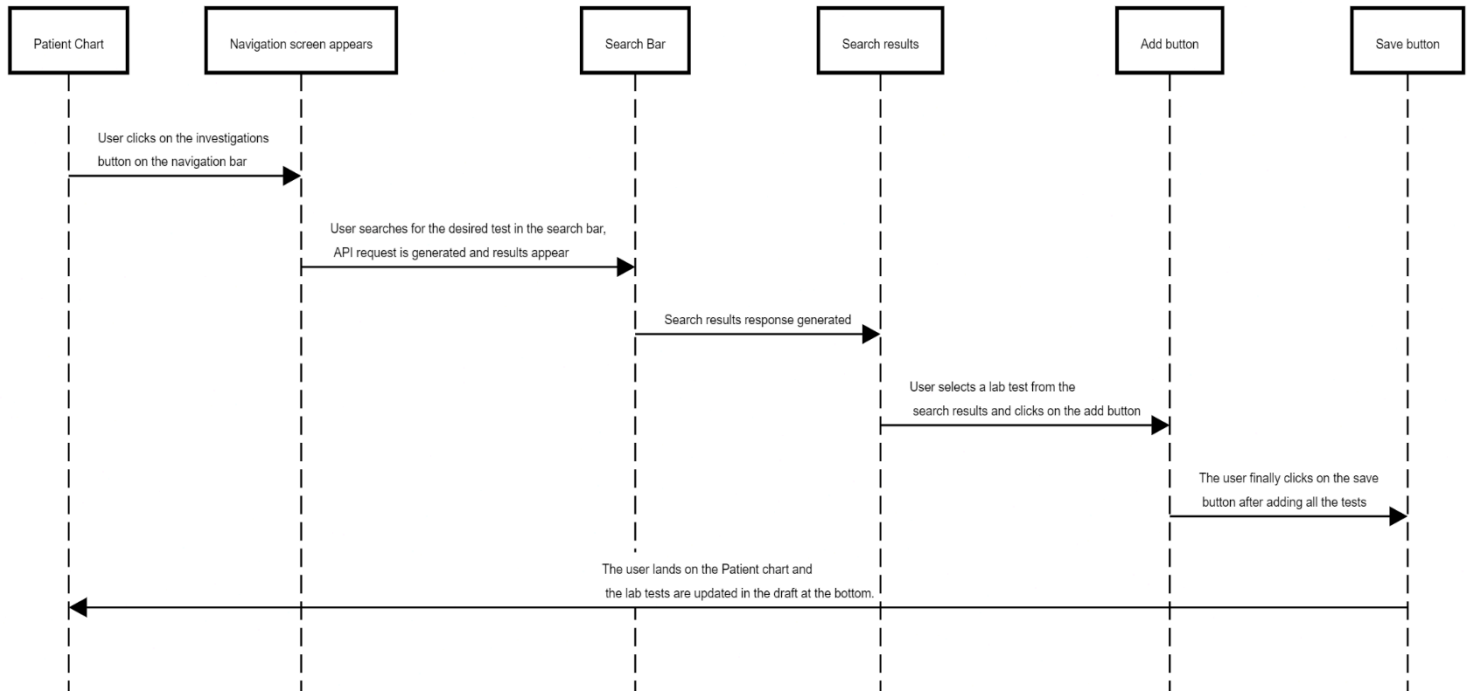
- A search bar where the user can search a particular drug. On selecting a particular drug, the drug is added to the search bar.
- Below the search bar exists inputs such as dose, units (eg; capsules, tablet, ml, etc.) frequency, route, start date, duration, units(eg: days, weeks, months), total quantity, additional instructions.
- Below this is an add button which adds the drug to the list of added drugs and all the inputs are cleared.
- Also the screen contains a save button which saves the list of all the drugs prescribed and the user reaches back to the patient chart where the draft shows the visit and encounter types, investigations, medications and the consultancy note. The user may save the consultation using the save button at the upper right of the app bar.

3. Medications Screen Backend:

- This involves connecting the Search Bar input to make an API request and allowing the user to select a specific drug from the response.
- Allowing the users to add extra details of the drug and adding it with the drug name when the user selects the add button.
- Adding the backend code to save the list of drugs added and the same to be reflected under the draft column in the patient chart.

Architecture

Ordering investigations



Ordering medications

