



Raxa EMR

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Raxa

What is Raxa EMR?

- Open-source Information Management System
- Aims to : Enhance care delivery, administration, quality improvement, research and patient access by digitizing information
- Name taken from Hindi word: “Raksha” which means “To Protect”
- Demo Page: <http://demo.raxa.org>
- Uses:
 - OpenMRS
 - iDart
 - & other Opensource projects
- Licensed under the Apache License, Version 2.0
- Will be first deployed at JSS, Chattisgarh, India

Raxa EMR Modules

- **Registration**

- First interaction of user with Raxa-EMR
- Allows basic operation like searching, adding and modifying Patient Details

- **Screeener**

- Easy-to-use Mobile/Tablet App used by Nurse to assign Patient to (the best suited) Doctor

- **Laboratory**

- Complete Specimen-centric App for Laboratory

- **Pharmacy**

- Module with all features a Pharmacist would require keeping in mind its implimentation at point of care

- **Out-Patient**

- App supported on Handheld devices, which effectively handles outpatients for dignosis, lab/drug orders,etc.

Raxa EMR Modules

- **In-Patient**

- Aim to cater the needs when patient is admitted to the hospital by effectively managing routine observations by nurse, drug/lab orders, billing, etc

- **Community Health Worker**

- Important Health Care providers with primary task of making people aware nutrition, healthy practices, healthcare services,etc

- **Patient Facing**

- Interactive Mobile App which allows patient to check her/his pill schedule, precautions, next appointment etc

- **Radiology**

- To integrate tests like CT Scan, MRI, X-Ray,etc (uses iDart)

- **Interactive Voice Response**

- Provide relevant health information via telephony
- Useful in spreading knowledge about socially awkward issues

Technical Approach

- **Sencha**

- **What is Sencha?**

- Development framework that help you design, develop, and deploy applications for desktop and mobile devices

- **Why Sencha?**

- Works on MVCS (Model-View-Controller-Store)
 - Different from MVC as it has storing capability
 - Rich, Modern & Customisable UI Widgets
 - Respects HTML5 standards
 - Well Documented
 - Supports REST Calls (details of which is on next slide)
 - Provides
 - “Touch” for Mobile App
 - “ExtJS” for Desktop App

Technical Approach

- **REST Services**

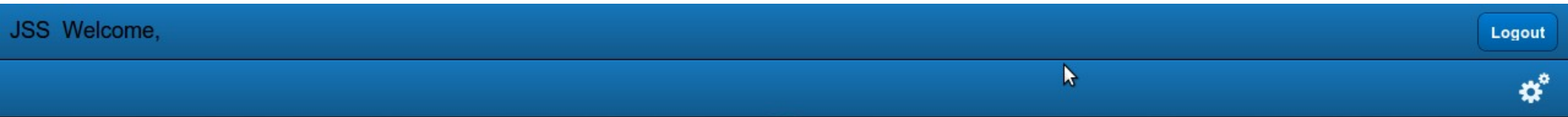
- **What is REST?**

- REpresentational State Transfer
 - Stateless, client-server, cacheable communications protocol

- **Why REST?**

- Simple
 - Avoid using complex mechanisms such as CORBA, RPC or SOAP to connect b/w machines and simple HTTP is used to make calls between machines.
 - Simple yet Powerful
 - REST is fully-featured; there's basically nothing you can do in Web Services that can't be done with a RESTful architecture

Screenshots



Jan Swasthya Sahyog

Please Login

Username

Password

Sign In

Login Screen to Raxa EMR

Select your module

Screenshots



Module Grid

Screenshots

Raxa You are logged in as admin | Log Out

New Patient Registration (Patient Profile Info)

Old Patient Registration Number:

Patient Name:

Father/Husband's name:

Age (Enter DOB or Current Age):

Sex: Male Female Other

Education Details:

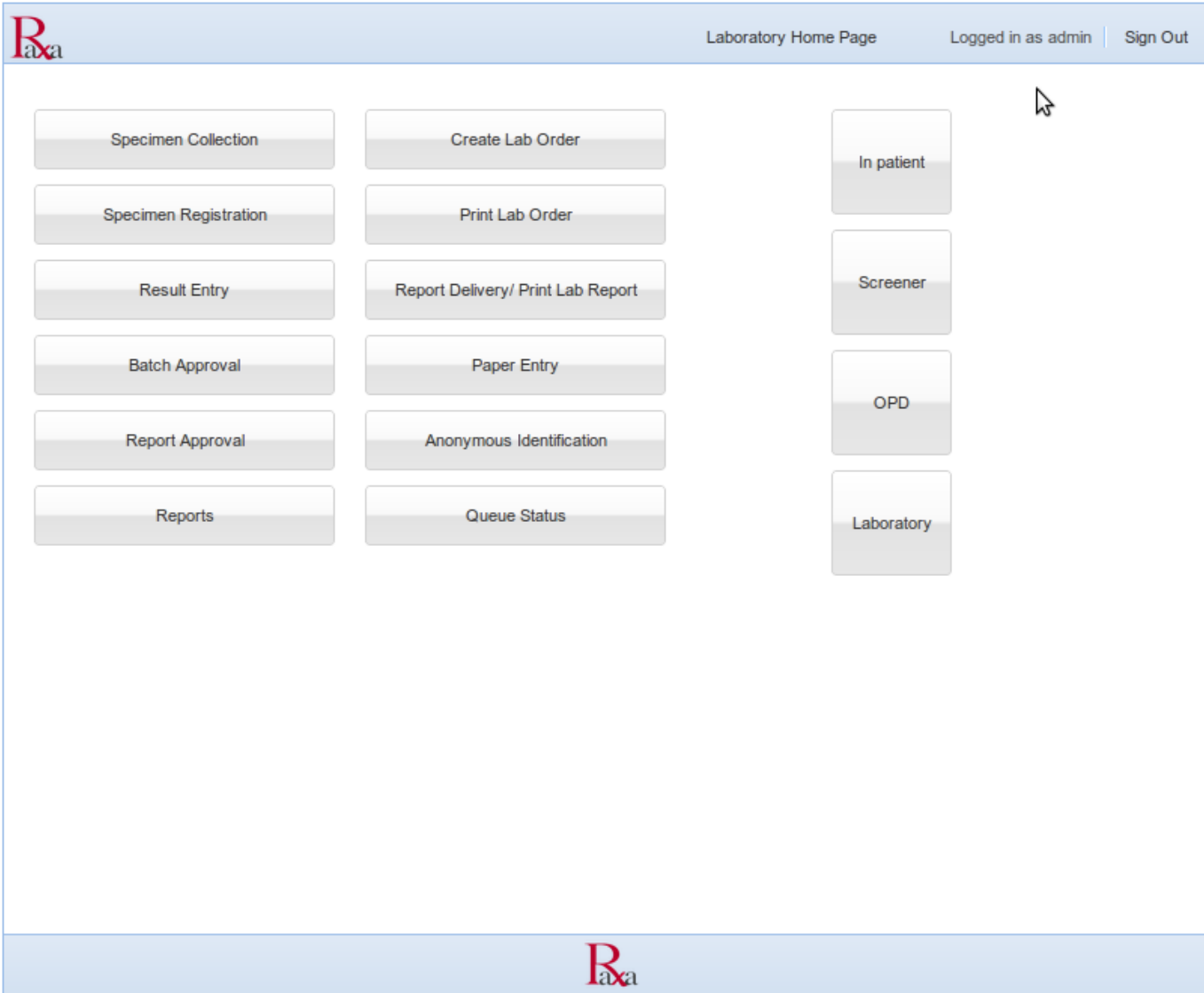
Caste:

Occupation:

Raxa

Registration Page

Screenshots



Lab Module Grid

Screenshots

Browser Stuff

Report Approval Report Approval Page **LAB HOME** User Name Log Out

3SS Logo

Today's Pending Approvals (12)

Urgent

Report No. 20120416xxx1
Patient Name: Ram Singh | M/25
Provider: Yogesh

Report No. 20120416xxx3
Patient Name: Buri Singh | F/38
Provider: Yogesh

Regular

Report No. 20120416xxx5
Patient Name: Dragon Singh | M/22
Provider: Yogesh

Report No. 20120416xxx1
Patient Name: Ram Singh | M/12
Provider: Yogesh

Report No. 20120416xxx3
Patient Name: Maysa | F/23
Provider: Yogesh

Report No. 20120416xxx5
Patient Name: Divya K | F/28
Provider: Yogesh

Report No. 20120416xxx5
Patient Name: Ramya Sriram | F/32
Provider: Yogesh

Patient

Name Ram Singh
Female | 32 years | **DOB** 15 Oct 1970
Patient ID 88-20402-6

Provider

Name Yogesh
Location Satellite 3

URINALYSIS | Lab Order no. 212999-89-9676
Specimen id 1898983242 | 12312312313 | Collection Date - 23/10/12
Lab Tech Rameeh, Saranya

| Test | Result | Normal Range | Units | Flag | Actions |
|-------|--------|--------------|-------|------|----------------------------|
| Odor | Putrid | | | AA | Approved, Rejected, Retest |
| pH | 4.5 | (2.5 - 4.4) | - | A | Approved, Rejected, Retest |
| Sugar | 48 | (19 - 30) | mg/dl | A | Approved, Rejected, Retest |

HEMATOLOGY | Lab Order no. 212999-89-9825
Specimen id 1898983242 | 12312312313 | Collection Date - 23/10/12
Lab Tech Rameeh, Saranya

| Test | Result | Normal Range | Units | Flag | Actions |
|---------------------|--------|--------------|-------|------|----------------------------|
| White Blood Cells % | 18 | (36 - 44) | % | A | Approved, Rejected, Retest |
| Red Blood Cells % | 22 | (20 - 40) | % | A | Approved, Rejected, Retest |

Reset Save Only

Preliminary Final Revised **RELEASE**

Lab Module

Screenshots

The screenshot displays the 'Out Patient Department' (OPD) module interface. At the top, it shows the 'JSS logo' and the time '9:24 PM'. The patient's name is 'Firstname Lastname', and the doctor is 'Dr. Amarnath'. The patient's ID is '745341'. The interface includes a 'Back' button and a 'Logout' button.

The patient's vital signs are displayed in a table:

| Height | Weight | BMI | Blood pressure | Pulse | Respiratory rate | Temperature | Oxygen saturation |
|---------|--------|-----|----------------|-------|------------------|-------------|-------------------|
| 5'8" cm | 70 kg | 20 | 110/65 | 72 | 12 | 38 | 30 |

The 'Chief Complaint' section contains the text: 'Pain in lower abdomen, Pain in right knee, swelling'. The 'Additional factors' section is empty. A yellow callout box says 'Add another complaint by this '+' icon'.

The 'Complaints' section shows a list of complaints with checkboxes:

- 1. Lower abdomen Pain
- 2. Right Knee Pain Swelling

The interface also features a 'History' sidebar and a 'Complaints' list. A blue human figure is shown with markers for various body parts. Two yellow callout boxes provide instructions: 'The complaints are added in the right section automatically.' and 'The complaints can remain selected or deselected by the doctor.'

OPD Module

Screenshots

Out Patient Department

Medication history

Dr. Amarnath

FirstName lastname
whereheistrom
Age: 45
ID: 745341

Search by name

| No. | DRUG NAME | DURATION | LAST FILLED | PRESCRIBER | DRUG REACTION | DOSAGE | ROUTE OF ADMINISTRATION |
|-----|-------------------------------|----------|-------------|--------------|---------------------------------|-----------------|-------------------------|
| 1 | Albuterol self HFA 90 MCG | 30 days | 8/04/2012 | Dr. Amarnath | | once daily | Injection IV |
| 2 | Ambien 10 MG tablet | 30 days | 8/04/2012 | Dr. Amarnath | | once daily | Injection IV |
| 3 | Ceclor 250 MG Pulvule | 30 days | 6/04/2012 | Dr. Shama | Headache on skipping the tablet | once daily | Injection IV |
| 4 | Lanoxin 125 MCG tablet | 10 days | 6/04/2012 | Dr. Bhatia | | once daily | Injection IV |
| 5 | Lipitor 20 MG tablet | 15 days | 1/03/2012 | Dr. Amarnath | | twice daily | Oral |
| 6 | Novolog Flexpen syringe | 7 days | 1/03/2012 | Dr. Shama | | once @all days | Injection IM |
| 7 | Prozac 10 mg | 7 days | 17/02/2012 | Dr. Singh | | once daily | Injection IM |
| 8 | Prevacid | 15 days | 15/01/2012 | Dr. Singh | | once weekly | Oral |
| 9 | Unisik 2 Normal 0.81mm device | 15 days | 28/12/2011 | Dr. Amarnath | | once weekly | Oral |
| 10 | Unisik 2 Normal 0.81mm device | 30 days | 28/12/2011 | Dr. Bhatia | Initial nauseatic effect | twice daily | Oral |
| 11 | Prozac 10 mg | 7 days | 18/10/2011 | Dr. Shama | | twice daily | Injection IM |
| 12 | Lipitor 20 MG tablet | 4 days | 15/10/2011 | Dr. Shama | | once daily | Oral |
| 13 | Lanoxin 125 MCG tablet | 7 days | 10/07/2011 | Dr. Bhatia | | once daily | Injection IV |
| 14 | Albuterol self HFA 90 MCG | 15 days | 10/07/2011 | Dr. Singh | | once @ all days | Injection IV |
| 15 | Prozac 10 mg | 30 days | 09/08/2011 | Dr. Amarnath | | twice daily | Injection IM |
| 16 | Unisik 2 Normal 0.81mm device | 7 days | 12/02/2011 | Dr. Amarnath | Improved effects - minimal | once daily | Oral |



Select and edit

Patient's Drug History

Screenshots

जन स्वास्थ्य सहयोग
(पंजीकृत)
गनीयारी, जिला-बिलासपुर

दिनांक : 12/03/2012
रजिस्ट्रेशन : 6543210
नाम : राजेश कुमार
उम्र : 25 साल
लिंग : पुरुष
वजन : 65 किलो
गाँव : गनीयारी
तहसील : बिलासपुर

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
|  | 0 |  |

Patient Facing Module

Screenshots



Patient Facing Module

Thank you

We would love to hear from you!

- Demo site: demo.raxa.org
- Email: raxa.jss.emr@gmail.com
- Mailing list: groups.google.com/group/raxa-jss-emr-contributors
- Wiki: raxaemr.atlassian.net/wiki/display/RAXAJSS/
- Read Me github.com/Raxa/Raxa-JSS/blob/master/README.md