

VMedico - Application Requirements

Objective:

VMedico is an online medical services company recently established by a pharmaceutical company to enable not only tele-consulting services integrating doctor and patients but also to integrate laboratory reports and to monitor the health of patients.

Functional Requirements:

- Build an application that can be integrated with multiple hospitals, health care providers and testing laboratories.
- Provision to capture the patient details and their doctor details.
- To capture prescription details and next appointment date and to send automated reminders.
- To track laboratory results and to monitor health details of patient.
- Automated email notification to the doctor and patient.
- Tracker to track the status of action items in the subsequent meeting.

Nice to Have Features:

- To track health details of patients.
- To send medication reminders.
- An audit trail to include the history of meetings and individual action items.
- Admin module for user administration and task updation.

Input/Pre-Condition:

- An integrated platform that could connect patients with specialized medical practitioners.
- Platform to be connected with help-line numbers and the database of hospitals, doctors and their respective specializations.

Output/Post-Condition:

- Records Persisted in Success & Failure Collections.
- Standalone application/Deployed in an app Container.

Non-Functional Requirements (NFR):

- Security: Username/Password based credentials, sensitive data stored securely, secure connection for data transmission.
- Performance: Peak Load - eCommerce < 3 Sec, Admin < 2 Sec; Non Peak Load - eCommerce < 2 Sec, Admin < 2 Sec.
- Availability: 99.99% Availability standard.
- Scalability, Maintainability, Usability, Failover.
- Logging & Auditing: Support logging (app/web/db) & auditing at all levels.
- Monitoring: Should support existing enterprise monitoring tools.
- Cloud: Solution should be Cloud-ready with minimal impact on migration.
- Browser Compatibility: IE 7+, Mozilla Firefox (Latest-15), Google Chrome (Latest-20).
- Mobile Ready.

Technology Stack:

- Front End: Vue JS (Latest), Google Material Design, BootStrap/Tailwind CSS.
- Server Side: Java Spring Boot (Rest API + Security) / PHP (Laravel + Security).
- Database: MySQL.