

# Phase II - Requirement Analysis

## Customer Journey map

STAGES	ENTICE <i>BECOME AWARE</i>	ENTER <i>TRY THE PRODUCT</i>	ENGAGE <i>BUILD &amp; CUSTOMIZE FORMS</i>	EXIT <i>FORM SHARED OR PUBLISHED</i>	EXTEND <i>POST-SUBMISSION &amp; INSIGHTS</i>
STEPS	Discover Medley Pharma through search, ads, or referrals. Land on homepage.	Sign up or start a free trial. Explore dashboard and templates.	Use drag-and-drop builder to create forms. Customize, preview, and test.	Publish form and share via link or embed. Collect submissions.	Analyze responses. Export data or integrate with third-party apps.
INTERACTIONS	<b>People:</b> Influencers, ads, peers. <b>Place:</b> Website, social media. <b>Things:</b> Landing page, promo video.	<b>People:</b> Support bot or help center. <b>Place:</b> Onboarding dashboard. <b>Things:</b> UI tour, tooltips.	<b>People:</b> Team collaborators. <b>Place:</b> Form builder UI. <b>Things:</b> Drag-and-drop tool, preview panel.	<b>People:</b> End-users (form respondents). <b>Place:</b> Public web form. <b>Things:</b> Shareable link, embed code.	<b>People:</b> Admins, clients, managers. <b>Place:</b> Analytics dashboard. <b>Things:</b> Charts, export tools, email alerts.
GOALS & MOTIVATION	Help me find a tool that's easy and secure.	Help me start without too much learning curve.	Help me create forms quickly and customize them.	Help me collect responses safely and professionally.	Help me understand responses and make data-driven decisions.
POSITIVE MOMENTS	Clean UI, demo video is convincing. Easy signup.	Quick setup, pre-designed templates are helpful.	Real-time preview and field options. Responsive design.	Notifications on submission, live tracking.	Data visualization, integration with Google Sheets.
NEGATIVE MOMENTS	Confusion if landing page lacks clarity.	Onboarding feels too text-heavy. Trial limitations unclear.	Lack of guidance for complex form logic.	User drop-offs if form load time is high.	Exporting options limited or require manual work.
AREAS OF OPPORTUNITY	Add use-case based landing content (e.g., healthcare, education). Add short product demo videos.	Improve onboarding with short interactive walkthrough. Allow skip intro option.	Add pre-built logic blocks and conditional flows. Provide auto-save and undo/redo options.	Offer branded URLs and smart share settings.	Auto-send reports via email. Include insights like drop-off points in analytics.

## Solution Requirement

### Functional Requirements Table

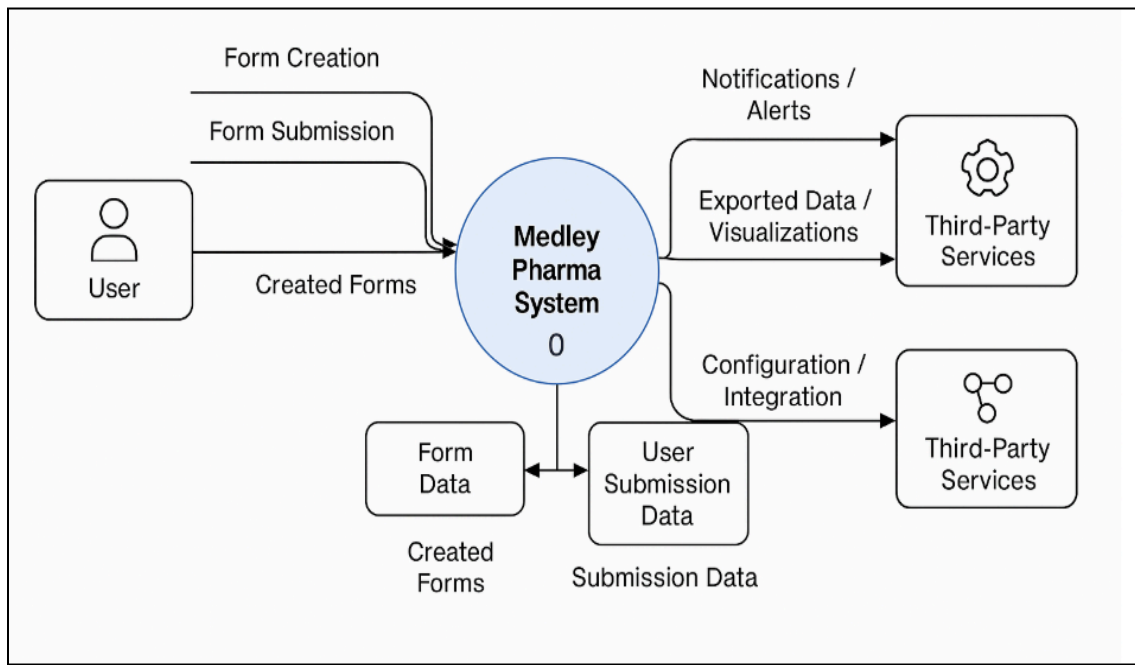
FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
1	User Registration	- Registration through Form- Registration through Gmail- Registration through LinkedIn
2	User Confirmation	- Confirmation via Email- Confirmation via OTP

3	Form Creation	- Drag-and-drop form builder- Add various fields (text, checkbox, dropdown, etc.)- Apply validations
4	Form Submission & Storage	- Store responses securely- Support file uploads- Submission tracking and limitations
5	Analytics & Reporting	- Generate charts/graphs from form data- Export responses in CSV/Excel- Visualize trends
6	Integration & Notifications	- Connect with third-party tools (Google Sheets, Mailchimp)- Set email alerts and automated actions on submission

### Non-functional Requirements Table

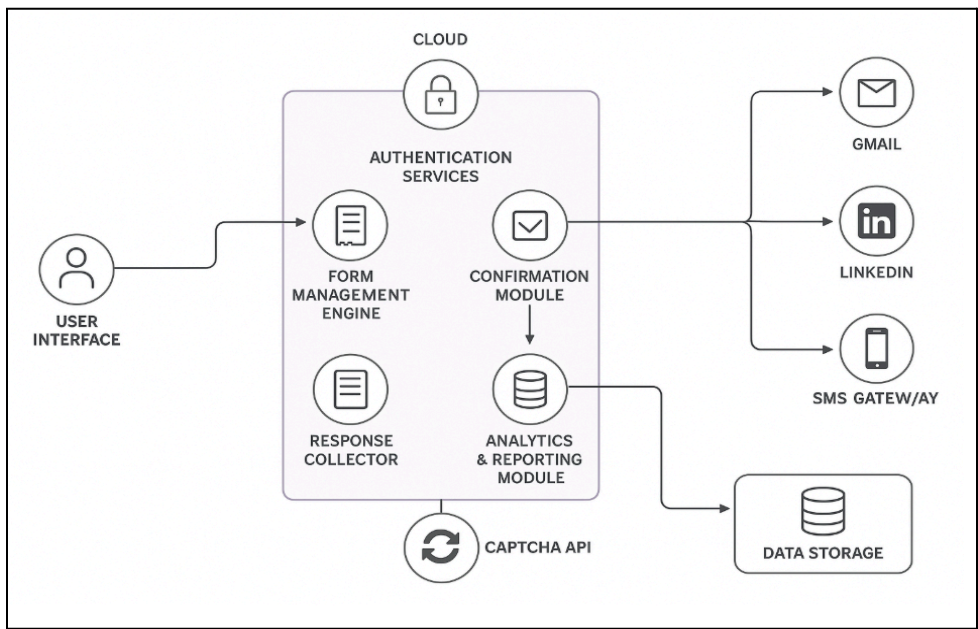
FR No.	Non-Functional Requirement	Description
1	Usability	Intuitive drag-and-drop interface for easy form creation without technical knowledge
2	Security	SSL encryption for data, CAPTCHA to prevent spam, secure authentication methods
3	Reliability	System should ensure zero data loss and smooth submission handling under load
4	Performance	Fast form load time, quick processing of submissions, optimized data storage
5	Availability	24/7 uptime with minimal downtime for maintenance or updates
6	Scalability	Capable of handling large number of users/forms and high submission volumes

Data Flow Diagram



Technology Stack

Technical Architecture:



**Table-1: Technical Architecture**

S.No	Component	Description	Technology
1	User Interface	How users interact with the platform to create and manage forms (drag-and-drop UI)	HTML, CSS, JavaScript, ReactJS / Angular
2	Application Logic-1	Handles form creation (drag and drop interface, layout customization)	JavaScript / ReactJS Logic / Node.js
3	Application Logic-2	Manages form submissions, validations, and CAPTCHA integration	Express.js / Node.js, reCAPTCHA API
4	Application Logic-3	Handles analytics, report generation (charts, graphs) from responses	Chart.js / D3.js / Python (Flask or FastAPI for back-end)
5	Database	Stores user profiles, form metadata, and submitted data	MySQL / MongoDB
6	Cloud Database	Cloud-hosted storage for form data for scalability	IBM DB2 / IBM Cloudant / Firebase Realtime DB
7	File Storage	For storing uploaded files from form submissions	IBM Cloud Object Storage / Firebase Storage
8	External API-1	For email notifications on form submissions	SendGrid API / SMTP APIs
9	External API-2	For third-party integration and automation (e.g., Google Sheets, Slack)	Zapier API / Google Sheets API
10	Machine Learning Model	(Optional/Future) Smart suggestions for form field types based on title/content entered	ML Model using Python & scikit-learn (if implemented)
11	Infrastructure (Server / Cloud)	Application hosted on cloud platforms with secure deployment	IBM Cloud / Kubernetes / Docker / Firebase Hosting

**Table-2: Application Characteristics**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology Used</b>
1	Open-Source Frameworks	Medley Pharma uses open-source frameworks for building responsive UI and scalable backend services.	ReactJS / Node.js / Express.js / Chart.js / MongoDB
2	Security Implementations	Data security is ensured through SSL encryption for form submissions, CAPTCHA to prevent bots, and role-based access control.	SSL, reCAPTCHA, HTTPS, SHA-256 Hashing, JWT (Token Auth)
3	Scalable Architecture	Built with a modular design using a 3-tier architecture (Presentation, Logic, and Data Layer) enabling independent scaling of each layer.	Node.js backend, React frontend, MongoDB database, Docker
4	Availability	Ensured via cloud hosting with distributed architecture and use of load balancers for high uptime and fault tolerance.	IBM Cloud / Firebase Hosting, Load Balancers, Docker Swarm
5	Performance	Designed for high performance using CDN for static assets, data caching, and optimized queries to support multiple form submissions per second.	CDN (Cloudflare), Redis (Caching), MongoDB indexing