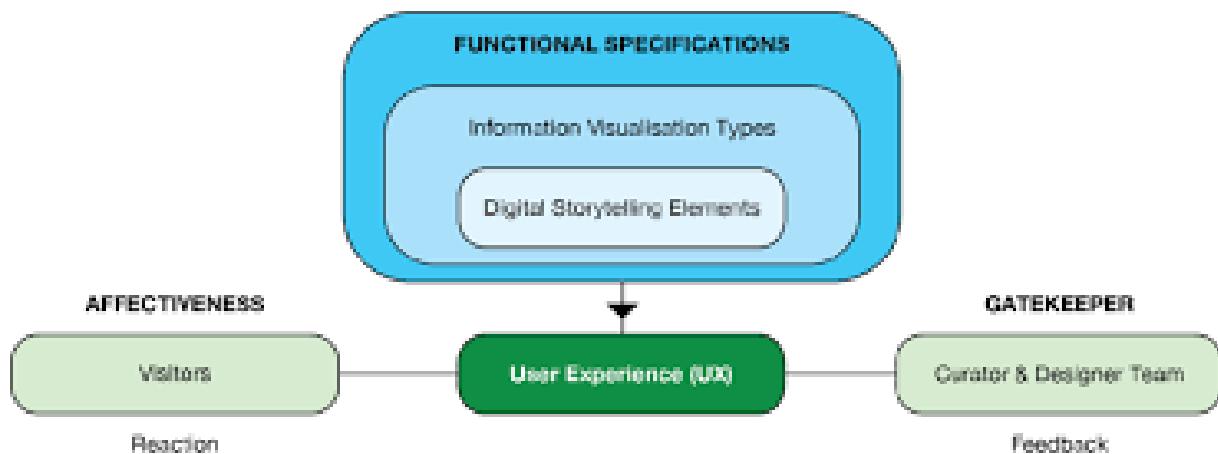


**Ideation Phase**  
**Brainstorm & Idea Prioritization**  
**Template**

Date	01.11.2025
Team ID	NM2025TMID02942
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

**Core Functional Ideas**

- **Real-time inventory tracking** using barcode/RFID scanning
- **Automated stock alerts** for low inventory levels
- **Expiry date monitoring** with notifications
- **Batch and lot tracking** for recalls and compliance
- **Integration with EHR systems** to sync usage data
- **Mobile app interface** for on-the-go inventory updates
- **AI-powered demand forecasting** based on historical usage
- **Multi-location inventory visibility** across departments or branches



**2. User Experience Enhancements**

- **Role-based dashboards** for pharmacists, nurses, and administrators
- **Voice-enabled search** for quick item lookup
- **QR code-based item check-in/out**
- **Offline mode** for remote clinics with poor connectivity
- **Customizable alerts and reports**

**3. Compliance & Safety Features**

- **Audit trail logging** for every inventory transaction
- **Regulatory compliance modules** (e.g., FDA, CDSCO)
- **Temperature-sensitive item tracking** (e.g., vaccines, insulin)
- **Controlled substance management** with access control



#### 4. Advanced Technologies

- **IoT integration** for smart cabinets and fridges
- **Blockchain for traceability** and tamper-proof records
- **Predictive analytics** for procurement planning
- **Chatbot assistant** for inventory queries and training

Idea	Impact	Feasibility	Priority
Real-time inventory tracking	High	High	★★★★★
Expiry date monitoring	High	Medium	★★★★★
AI-powered demand forecasting	High	Low	★★★
Mobile app interface	Medium	High	★★★★★
Compliance modules	High	Medium	★★★★★
IoT integration	Medium	Low	★★
Blockchain traceability	Medium	Low	★★
Voice-enabled search	Low	Medium	★★