Requirements Elicitation Activity Guide

Ransem Foundation Youth Empowerment Management System

Part 1: Role-Playing Stakeholder Interviews (15 minutes)

Foundation Director Role-Play Responses

As Foundation Director (Rachael Wanjiru), respond to developer questions like this:

Q: What are your main pain points with current operations? *"We're drowning in paperwork. I have beneficiary files scattered across different spreadsheets, mentor assignments written on paper, and financial records in multiple systems. When board members ask for progress reports, it takes days to compile the information. We need one system where everything connects."*

Q: What would success look like for this new system? *"I should be able to see at a glance how many young people we're helping, which programs are most effective, and where our budget is going. Our program directors should spend time with beneficiaries, not updating spreadsheets. Mentors should easily connect with their mentees without calling our office."*

Q: What's your biggest fear about implementing new technology? *"That our staff and beneficiaries can't use it. Many of our young people are from rural areas with basic phones. Our administrative staff are not tech experts. If it's too complicated, people will avoid using it and we'll be back to paper."*

Q: How do you measure program success currently? *"We track school completion rates, job placements, and feedback from beneficiaries. But it's all manual counting. I want to see trends over time - are our mentorship programs really helping? Which scholarships lead to the best outcomes?"*

Part 2: User Stories (15 minutes)

Template:

As a [user type], I want [functionality] so that [benefit/value].

Sample User Stories from SRS:

Beneficiary Management:

- **As a Program Director**, I want to register new beneficiaries with complete profiles so that I can track their progress from enrollment through graduation

- **As a Beneficiary**, I want to update my contact information and academic status so that the foundation has current information about me
- **As an Administrative Staff member**, I want to search beneficiary records quickly so that I can answer questions during phone calls

Mentorship System:

- **As a Mentor**, I want to view my assigned mentees' profiles and goals so that I can prepare for effective mentoring sessions
- **As a Program Director**, I want to match mentors with mentees based on skills and interests so that mentorship relationships are more successful
- **As a Mentee**, I want to schedule sessions with my mentor so that we can meet regularly without phone tag

Financial Management:

- **As an Executive Director**, I want to see real-time financial reports so that I can make informed budget decisions
- **As a Donor**, I want to track how my donations are being used so that I feel confident about continued giving
- **As Administrative Staff**, I want to record scholarship payments automatically so that I don't have to enter the same information multiple times

Communication:

- **As a Program Director**, I want to send SMS updates to groups of beneficiaries so that important information reaches them quickly
- **As a Beneficiary**, I want to receive notifications about program deadlines so that I don't miss opportunities
- **As a Mentor**, I want to get reminders about upcoming sessions so that I don't accidentally miss appointments

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Part 3: Non-Functional Requirements Categories

Performance Requirements:

- **Response Time**: System responds within 3 seconds
- **Throughput**: Supports 100 concurrent users
- **Scalability**: Handles 50% user growth without degradation

Security Requirements:

- **Data Protection**: AES-256 encryption for sensitive data

- **Access Control**: Role-based permissions

- **Compliance**: Kenya Data Protection Act adherence

- **Session Security**: 30-minute timeout

Usability Requirements:

- **Learning Curve**: New users productive within 30 minutes

- **Accessibility**: WCAG 2.1 AA compliance

- **Language Support**: English and Swahili minimum

- **Help System**: Context-sensitive assistance

Reliability Requirements:

- **Uptime**: 99.5% availability

- **Recovery**: System recovers within 15 minutes of failure

- **Backup**: Automatic daily backups

Compatibility Requirements:

- **Browser Support**: Modern browsers (Chrome, Firefox, Safari)

- **Mobile Responsive**: Works on smartphones and tablets

- **Operating System**: Platform independent (web-based)

Environmental Requirements:

- **Connectivity**: Works with intermittent internet

- **Offline Mode**: Critical functions available offline

- **Low Bandwidth**: Optimized for mobile data users

Part 4: Requirements Traceability Matrix Template

Req ID	User Story	Functional Requirement	Non-Functional Requirement	Test Case	Status
REQ-001	As a Program Director, I want to register beneficiaries...	FR-3.2.1: System shall allow registration of new beneficiaries	NFR-5.4.4: New users complete tasks within 30 min	TC-001: Register beneficiary test	Draft
REQ-002	As a Mentor, I want to schedule sessions...	FR-3.4.3: System shall enable scheduling of sessions	NFR-5.1.1: System responds within 3 seconds	TC-002: Schedule session test	Draft
REQ-003	As Executive Director, I want financial reports...	FR-3.5.4: Generate financial reports	NFR-5.1.3: Database queries execute within 2 sec	TC-003: Generate report test	Draft

Interview Questions for Developers to Ask:

Functional Requirements Questions:

1. "Walk me through a typical day - what tasks do you do repeatedly?"

2. "What information do you need to see together on one screen?"

3. "Who else needs to know when you complete a task?"

4. "What reports do you create and how often?"

5. "What happens when something goes wrong with current processes?"

Non-Functional Requirements Questions:

1. "How many people will use this system at the same time?"

2. "How quickly do you need the system to respond?"

3. "What happens if the internet goes down?"

4. "Who should and shouldn't have access to different information?"

5. "What devices will people use to access this system?"

Priority Questions:

1. "If you could only have three features, what would they be?"

2. "What would happen if this feature wasn't available for 6 months?"

3. "Which users would be most impacted if this didn't work?"

Activity Timeline (45 minutes):

Minutes 1-15: Stakeholder Interview

- 1 student plays Foundation Director
- Others play development team
- Ask questions, take notes

Minutes 16-30: Requirements Documentation

- Convert interview notes to user stories
- Identify non-functional requirements
- Categorize by priority

Minutes 31-40: Traceability Matrix

- Map user stories to functional requirements
- Link non-functional requirements
- Assign requirement IDs

Minutes 41-45: Review & Discussion

- Present findings
- Validate requirements make sense
- Identify any missing requirements

Success Criteria:

- ✅ Documented 8-10 user stories in proper format
- ✅ Identified 5+ non-functional requirements across different categories
- ✅ Created traceability matrix with at least 5 requirements
- ✅ All team members participated in role-play
- ✅ Requirements align with stakeholder needs from interview