Requirements Elicitation Report

# Blood Donation Management System

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## 1. Requirements Elicitation

Requirements elicitation is the process of collecting the necessary information from stakeholders to determine the functional and non-functional requirements of a system. For the Blood Donation Management System, this process involved gathering input from potential users (donors, recipients, and admins), stakeholders (healthcare professionals), and relevant data sources to ensure the system meets the needs of all parties involved.

## 2. Elicitation Techniques

The following elicitation techniques were used to gather requirements for the system:

2.1 Interviews:

Interviews were conducted with potential system users including donors, recipients, and healthcare providers to understand their needs and expectations. Questions focused on how users interact with blood donation processes, common challenges, and desired features.

2.2 Surveys:

Surveys were distributed to a broader audience to collect quantitative data regarding the general public’s willingness to donate blood, preferred system features, and usability concerns.

2.3 Focus Groups:

Focus groups with potential system users helped identify key priorities for both blood donors and recipients, such as the importance of easy registration, accurate search features, and the ability to track donation history.

## 3. Elicitation Preparation

Before conducting elicitation sessions, the following preparations were made:

3.1 Defined Stakeholders: Blood donors, recipients, healthcare professionals, and system admins were identified as primary stakeholders.

3.2 Defined Objectives: The key objectives for the system were defined, including ease of use, quick access to nearby donors/recipients, and a secure and reliable system for blood donation management.

3.3 Developed Questionnaires and Interview Scripts: Clear and structured questionnaires were created for interviews and surveys to ensure the collection of consistent and relevant data.

3.4 Identified Existing Systems: Observations and analysis of existing blood donation systems were conducted to understand best practices and incorporate them into the new system.

## 4. Conduct the Elicitation

4.1 Introduction:

The elicitation process began with initial meetings with stakeholders. These included interviews and surveys aimed at understanding both technical and non-technical needs. Informed consent was obtained from all participants to ensure ethical data collection.

4.2 Body:

The elicitation process involved various techniques like one-on-one interviews, focus group discussions, and surveys with a diverse group of participants. The team made sure to capture all input in detail, ensuring each requirement was well understood and documented.

4.3 Close:

After all elicitation sessions were completed, a follow-up meeting was held to verify the gathered data. This helped ensure that all functional and non-functional requirements were accurately captured and understood. Participants were thanked for their cooperation.

4.4 Follow-up:

A follow-up session was conducted after a month to review the initial gathered requirements and to confirm that the system was on track to meet user expectations. Any missing requirements or changes to the system were discussed and incorporated.

## 5. Analyze Elicitation Results

Once the elicitation sessions were completed, the gathered data was analyzed. Key findings included:

1. Users wanted a simple, easy-to-use registration process, with the ability to track donations and requests.

2. Admins required an effective management system to view users, approve donations, and remove accounts when necessary.

3. Donors and recipients emphasized the importance of filtering blood donors by location and blood type.

These results formed the foundation of the functional and non-functional requirements defined in the system features section.

## 6. Difficulties of Requirements Elicitation

While conducting the elicitation process, the following difficulties were encountered:

6.1 Conflicting Requirements: Different stakeholders had conflicting requirements, such as some users wanting a detailed tracking system while others prioritized a simplified user interface.

6.2 Limited Access to Stakeholders: It was sometimes challenging to access all stakeholders, particularly healthcare professionals and remote donors.

6.3 Evolving Requirements: As the elicitation process progressed, some requirements evolved, making it necessary to revisit and update the documentation periodically.

6.4 Balancing Security and Usability: Ensuring data security while maintaining an easy-to-use interface was a recurring challenge throughout the process.