Sortware Requirements Specfication

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A project to develop a system for automating and managing the Um al-Zanar Center for Relief and Development

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<<Any comments inside double brackets such as these are *not* part of this SRS but are comments upon this SRS example to help the reader understand the point being made.

Refer to the SRS Template for details on the purpose and rules for each section of this document.

This work is based on the request of the doctors to undertake a project by the students.

This project was carried out by the following students: Christen Sattouf, Qamar Samoul

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# 1.0. Introduction

## 1.1. Purpose

The purpose of this document is to provide a detailed and accurate explanation of the

system to be developed, and to present all the tasks assigned to it to meet the desire of the

customer. In addition, the document contains the development timeline.

## 1.2. Scope of Project

Umm Al-Zanar Center for Relief and Development is considered one of the important

humanitarian organizations as it had a great role in providing various aid in 14 regions

distributed over 3 governorates (Homs - Hama - Tartous) where its main center is

located in Fayrouzah - Homs countryside where there is data for all beneficiaries and

from It is with this in mind that the importance of developing a system to manage it

flexibly reduces the burdens on employees and runs the affairs of beneficiaries easily and

quickly. This document provides a description of the work system in the Umm Al-Zanar

Center, where its director requested the development of a system to automate work in all

its aspects in order to abandon paper documents and rely on the software in full, so the

team members dealt with the workers in this center directly to know the progress of work

with its detailed details and to determine the work requirements and basic ideas for the

project, which we will present in the following paragraphs of this document .

## 1.3. Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| The director of the institution | has full powers and he is the one who communicates with the funding bodies |
| The Beneficiary | is the person who benefits from the Relief Center and its services |
| Database | Collection of all the information monitored by this system. |
| The volunteer | records the registration requests |
| Health support program | through which we provide health assistance to beneficiaries (prescription medications) |
| The house wages program, | through which monthly assistance is provided so that the beneficiary can pay the house rent |
| An employee responsible for a specific program | is recording requests for beneficiaries in the program |
| Automation process, | converting all paperwork to a computer operation |
| General support | may be through food or health rations, or provide personal assistance or distributions to university students or |
| Prescription | paper containing a set of drugs that a patient needs |
| The beneficiary region | . means the region in which it resides or the region near the areas covered by the center |
| query | means bringing people’s information, we would like to provide some aid |
| validity | : Means the tasks in which the employee follows |
| The external sponsor | is the dono |
| Volume | is a folder |
| Fingerprint reader | The following is a fingerprint scanner that takes the fingerprint and compares it with the stored fingerprints |

## 1.4. References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

## 1.5. Overview of Document

The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

# 2.0. Overall Description

## 2.1 System Environment

Houses Wages Program

Volunteer

Officer

Program Officer

Beneficiary

General Support

Health Support Program

Pharmacist

Director Of The Foundation

Program officer

Figure - System Environment

The Automation system Um Al-Zanar Center for Relief and Development has five active actor .

Houses Wages Program

The pharmacist and health support program officer communication through email , The Director accesses the entire system directly.

## 2.2 Functional Requirements Specification

This section outlines the use cases for each of the active actor separately . The Health Support Program employee has two use case whereas the House Wages Officer , the general staff and the volunteers have one use case while the Director is main actor in this system.

### 2.2.1 Health Support Program Employee Use Case

#### Use case: Pharmacy registration

**Diagram:**

Health Support Program Employee

Pharmacy registration

**Brief Description**

Every pharmacy dealt with must have a profile inside the center, so the employee’s job is to record the pharmacy’s data .

**Initial Step-By-Step Description**

Before this use case can be initiated, The pharmacist agreed to join the center in his region.

1. The employee register the pharmacy and pharmacist data .

2. Printing a contract between the center and pharmacist with 10% discount .

3. The employee gives the beneficiaries' data to the pharmacist along with prescriptions for their medications to secure the medicine .

#### Xref: Section 3.2.3, Pharmacy registration

**Use case:** register within the Health Support Program

**Diagram:**

Health Support Program Employee

register within the Health Support Program

**Brief Description**

Verifying the beneficiary’s registration with the center previously, then data for this program will be recorded.

**Initial Step-By-Step Description**

Before this use case can be initiated, the Employee has already connected to the Health Support Section

1. Verifying the beneficiary’s registration with the center previously .
2. Pricing Of medical recipes in the pharmacist .
3. Determine the month in which you want to start providing assistance .
4. Record the data of the beneficiary .
5. Send the request to the manager for approval .
6. In the event of approval, the beneficiary information is sent to the relevant pharmacist
7. add the beneficiary to the list for the specified month.

**Xref:** Section 3.2.4, register within the Health Support Program .

### 2.2.2 Houses Wages Program Employee Use Case

#### Use case: register within the Houses Wages Program

**Diagram:**

Houses Wages Program Employee

register within the Houses Wages Program

**Brief Description**

Verifying the beneficiary’s registration with the center previously, then data for this program will be recorded.

**Initial Step-By-Step Description**

Before this use case can be initiated, the Employee has already connected to the Houses Wages Section

1. Verifying the beneficiary’s registration with the center previously .
2. Checking the required papers .
3. Determine the month in which you want to start providing assistance .
4. Record the data of the beneficiary .
5. Send the request to the manager for approval .
6. If approved, add the beneficiary to the list for the specified month

**Xref:** Section 3.2.2, Register House Wages

2.2.3 Volunteer Use Cases

#### Use case Register New Beneficiary

**Diagram:**

Volunteer

#### Register New Beneficiary

**Brief Description**

The Volunteer enters a new beneficiary .

**Initial Step-By-Step Description**

Before this use case can be initiated, the Volunteer has already accessed the main page of the General Support

1. The Volunteer selects to *Add beneficiary .*
2. The Volunteer selects the beneficiary region .
3. Enter the beneficial information .
4. Family assessment .
5. Send the request to the manager for approval .
6. If approved, a card is printed for each beneficiary, with a serial number .

**Xref:** Section 3.2.1, New beneficiary registration

2.2.4 Officer Use Cases

#### Use case: Establishment of general distributions

**Diagram:**

Officer

**Establishment of general distributions**

External sponsor

**Brief Description**

The Officer is responsible foe setting up the Distribution in all its details .

**Initial Step-By-Step Description**

Before this use case can be initiated, the employee has already accessed the main page of the General Support

1. Establish the necessary inquiry .
2. Print distribution lists that include beneficiary data .
3. Send receipt lists to the external sponsor by email.

**Xref:** Section 3.2.5, Establishment of general distributions

2.2.5 Director Use Cases

The Director has the following sets of use cases:

Figure 2 - Director Use cases

Director

Coordinate with the external sponsor

Approval of registration requests for all programs

**Use case:** Employee data management

**Diagram:**

Director

Employee data management

**Brief Description**

The Director can add, delete or amend the validity of any worker in the center

**Initial Step-By-Step Description**

Before this use case can be initiated, the Editor has already accessed the Worker page in the General Support .

1. The Editor selects to *add / remove / Update worker*.
2. The system presents s list of Workers .
3. The system presents the information about the chosen Worker.
4. The Director do the action he wants .
5. The system verifies the information and returns the Director to the Worker Page with new Information .

**Xref:** Section 3.2.6 , Employee data management

**Use case:** Coordinate with the external sponsor

#### Diagram:

Director

Coordinate with the external sponsor

External sponsor

**Brief Description**

The Director Coordinate with the external sponsor To support programs and public assistance .

**Initial Step-By-Step Description**

Before this use case can be initiated, the Director has already accessed to the Beneficiaries page

1. The manager attends a volume containing the type of aid along with the number of beneficiaries with their information .
2. Send the folder to the concerned authority by email .

**Xref:** Section 3.2.7, Coordinate with the external sponsor .

**Use case:** Approval of registration requests for all programs

**Diagram:**

Director

Approval of registration requests for all programs

**Brief Description**

The manager is responsible for approving general support requests or program requests .

**Initial Step-By-Step Description**

Before this use case can be initiated, the Editor has already accessed the Pending orders page .

1. The manager selects to View the Pending order .
2. The system presents the orders .
3. The manager checks every request and special conditions for approval.
4. The manager sends either approval or rejection to the concerned employee to complete the necessary procedures .

**Xref:** Section 3.2.8, Approval of registration requests for all programs .

## 2.3 User Characteristics

2.3 User Properties

It is expected that both the manager, the health support program and the pharmacist will be familiar with the use of the email.

The rest of the employees are expected to be familiar with Windows and be able to use the button, dropdown menus, and similar tools.

The detailed look of these pages is discussed in section 3.2 below.

## 2.4 Non-Functional Requirements

All devices in the center must be connected to each other through a network to exchange information with the installation of windows on it, in addition to the presence of an access database .

All devices will be connected to a fingerprint reader for employee verification and system protection .

A color printer is required within the center .

# 3.0. Requirements Specification

## 3.1 External Interface Requirements

The only link to an external system is the link to the center’s database to verify beneficiary data. The employee believes that the beneficiary person meets the requirements for registration at the center. The fields of the center’s database are personal information of the beneficiary.

The use case of the new beneficiary registration is sent to the center’s database and a serial number indicating its accession is given. The beneficiary is registered in the center’s programs according to the request he submitted.

## 3.2 Functional Requirements

The Logical Structure of the Data is contained in Section 3.3.1.

3.2.1 New beneficiary registration

|  |  |
| --- | --- |
| **Use Case Name** | New beneficiary registration |
| **XRef** | Section 2.2.3, Volunteer Use Case . |
| **Trigger** | The beneficiary requested to register within the center |
| **Precondition** | That the beneficiary be affiliated with one of the parishes that the center gives |
| **Basic Path** | 1- The beneficiary brings the necessary papers for registration within the center  2- The volunteer enters his data to store it  3- Family evaluation  4- Print the card with its serial number |
| **Alternative Paths** | none. |
| **Postcondition** | Store the beneficiary data, grant the card |
| **Exception Paths** | None. |
| **Other** | The categories list is generated from the information provided when article are published and not predefined in the Online Journal database. |

3.2.2 Register house wages

|  |  |
| --- | --- |
| **Use Case Name** | Register house wages |
| **XRef** | Section 2.2.2, Houses Wages Program Employee . |
| **Trigger** | Submit an agar application from the beneficiary to the center. |
| **Precondition** | The presence of a record of the beneficiary within the center |
| **Basic Path** | 1- The beneficiary brought the required papers  2- Verify that there is a record of the beneficiary within the center  3- Check the papers  4- Calculating the value of the rent and the number of months |
| **Alternative Paths** | None. |
| **Postcondition** | Store the beneficiary data in a special record |
| **Exception Paths** | The attempt may be abandoned at any time. |
| **Other** | None |

3.2.3 Pharmacy registration

|  |  |
| --- | --- |
| **Use Case Name** | Pharmacy registration. |
| **XRef** | Section 2.2.1, Use case: Pharmacy registration |
| **Trigger** | The center asked the pharmacy to participate in this program within its region. |
| **Precondition** | The pharmacist approves a 10% discount rate for a number of fixed customers per month. |
| **Basic Path** | 1- Register the pharmacy and pharmacist data  2- Determine the quantity that you can cover  3- Printing a contract between the center and the pharmacist  4-send the prescription to the pharmacist for pricing.  5-the pharmacist returns the prescription with its final value. |
| **Alternative Paths** | None. |
| **Postcondition** | Add them to the center base and deal with them |
| **Exception Paths** | The attempt may be abandoned at any time. |
| **Other** | None |

3.2.4 Register within the Health Support Program

|  |  |
| --- | --- |
| **Use Case Name** | register within the Health Support Program |
| **XRef** | Section 2.2.1, Use Case : register within the Health Support Program. |
| **Trigger** | Submit a request for medicines from the beneficiary to the center |
| **Precondition** | A record of the beneficiary in the center |
| **Basic Path** | 1- Bring the beneficiary with the required documents  2- Verify that there is a record of the beneficiary within the center  3- Check the papers  4-Pricing the prescription attached to the papers at a pharmacy.  5- Calculating the value of the support that the center will provide and the number of months |
| **Alternative Paths** | None. |
| **Postcondition** | Store patient data in a special record and print the receipt for the medicine from the pharmacy |
| **Exception Paths** | The employee may abandon the operation at any time. |
| **Other** | Show error if beneficiary exceeds the time limit for assistance within this program (6 months) |

3.2.5 Establishment of general distributions

|  |  |
| --- | --- |
| **Use Case Name** | Establishment of general distributions |
| **XRef** | Section 2.2.4, Officer Use Case . |
| **Trigger** | Establishing inquiries that fulfill the required specifications |
| **Precondition** | Determining the specifications of the persons to whom distribution will take place |
| **Basic Path** | 1-Send the funding agency supporting the distribution  2-Establishing the necessary inquiries  3-Print the required list  4- Establishing the distribution process and scanning the list to be sent to the funded entity |
| **Alternative Paths** | None. |
| **Postcondition** | Submit the list with the signatures of the recipients  . |
| **Exception Paths** | None. |

3.2.6 Employee data management

|  |  |
| --- | --- |
| **Use Case Name** | Employee data management |
| **XRef** | Section 2.2.5, Director . |
| **Trigger** | The editor’s access to the worker’s page in general supports. |
| **Precondition** | There is a record of this employee in the center. |
| **Basic Path** | 1-The Editor selects to *add / remove / Update worker*.  2- The system presents s list of Workers .  3-The Editor’s select employees from the list.  4- The system presents the information about the chosen Worker.  5- The Director do the action he wants . |
| **Alternative Paths** | None. |
| **Postcondition** | The system verifies the information and returns the Director to the Worker Page with new Information . |
| **Exception Paths** | None. |
| **Other** | None |

3.2.7 Coordinate with the external sponsor

|  |  |
| --- | --- |
| **Use Case Name** | Coordinate with the external sponsor |
| **XRef** | Section 2.2.5, Director ,section, 2.2.4 Officer. |
| **Trigger** | The beneficiary page reaches the manager. |
| **Precondition** | There is coordination between the manager and the external sponsor for program support and general assistance. |
| **Basic Path** | 1. The manager attends a volume containing the type of aid along with the number of beneficiaries with their information . 2. Send the folder to the concerned authority by email . |
| **Alternative Paths** | None. |
| **Postcondition** | Receive approval email from the sponsor. |
| **Exception Paths** | None. |
| **Other** | None |

3.2.8 Approval of registration requests for all programs

|  |  |
| --- | --- |
| **Use Case Name** | Approval of registration requests for all programs |
| **XRef** | 1. Section 2.2.5, Director ,section 2.2.2, Houses Wages Program Employee Use Case,section,2.2.1, Health Support Program Employee Use Case |
| **Trigger** | 1. The manager selects to View the Pending order . |
| **Precondition** | The editor access the pending orders page. |
| **Basic Path** | 1. View the Pending order . 2. The system presents the orders. 3. The manager checks every request and special conditions for approval. 4. The manager sends either approval or rejection to the concerned employee to complete the necessary procedures . |
| **Alternative Paths** | None. |

|  |  |
| --- | --- |
| **Postcondition** | The employee’s takes the necessary procedures. |
| **Exception Paths** | None. |
| **Other** | None |

## 3.3 Detailed Non-Functional Requirements

### 3.3.1 Logical Structure of the Data

The logical structure of the data to be stored in the internal Article Manager database is given below.

External sponsor

director

beneficiary

employee

register

sent to

coordinatee

has

Approval or rejection

rejection

oro

***Figure 4 - Logical Structure of center data.***

The data descriptions of each of these data entities is as follows:

**Employee Data Entity:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Item** | **Type** | **Description** | **Comment** |
| Name | Text | Name of employees |  |
| Phone number | Number | Number of his phone |  |
| beneficiary | Pointer | beneficiary entity | May be several |
| director | Pointer | Director entity |  |

**Beneficiary** **Data Entity:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Item** | **Type** | **Description** | **Comment** |
| Name | Text | Beneficiary’s full name |  |
| ID | Integer | The serial number of the beneficiary within the center. | This number is shown when reviewing the position. |
| Phone number | Number | Number of his phone |  |
| Home address | Text | The place where the beneficiary resides. |  |
| Employee | Pointer | Employee entity | The employee who registered the beneficiary. |
| External sponsor | Pointer | External sponsor entity | Number of not returned reviews |
| Director | Pointer | Director entity |  |

**Director Data Entity:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Item** | **Type** | **Description** | **Comment** |
| Name | Text | Name of the director of the center. |  |
| Phone number | Number |  |  |
| Email Address | Text | Internet address |  |
| beneficiary | Pointer | Beneficiary entity | May be several |
| External sponsor | Pointer | External sponsor entity |  |
| Employee | Pointer | Employee entity | May be several |

**External sponsor** **Data Entity:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Item** | **Type** | **Description** | **Comment** |
| Name | Text | Name of the director of the center. |  |
| Phone number | Number | Phone number of the external sponsor’s office.. |  |
| Office Address | Text | The location of the external sponsor’s office. |  |
| beneficiary | Pointer | Beneficiary entity | May be several |
| Director | Pointer | Director entity |  |

### 3.3.2 Security

### The PC on which the center Manager resides will have its own security. Only the Employee will have physical access to the machine and the program on it.

### The data within the software is accessed by fingerprint for confidentiality.