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# Software Requirements Specification

Workshop Aluminum System

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Introduction

# Purpose

The Main Purpose of this System is Manage Company of Aluminum Products With it all Components, From Apply It Functional and Non-Functional Requirements, Also We Describe the System Using UML Analysis Models and Diagrams to Be Readable.

# Scope

The Scope of this System is Giving the Company ability to be faster & more regular to be more Qualified fat it services, this from the ability to store all Customers & Works & Other Components with Organized Shape and to be able to get repeated reports about working quality & working pros and cons & incrementing the profits & getting more Customers.

# Actors

|  |  |
| --- | --- |
| Software Admin | The Person who Creating The software & making all maintenance at it & developing it |
| Company Owner | The Person who Created the Company & have all powers of controlling the system |
| Staff Member | The Person who works at company |
| Supplier | The Person who dealing with the company to sell his products to it |
| Customer | The Person who dealing with the company to get it services |
| System User | The Person who has ability to deal with the system to control it |

Overall Descriptions

# Product Perspective

The Software is described in this SRS the system of the Company for aluminum products, the software merge between the software system and the hardware system.

# Product Functions

System User will be able to Manage Customers

System User will be able to Manage Staff Members

System User will be able to Manage Company Services

System User will be able to Manage Suppliers

System User will be able to Manage Company Components

System User will be able to Manage Extracting Reports

System User will be able to

# Constraints

The Software Must be Used by Only the Registered Used who have Username & Password to Login into System, Must Check Connection Between Laptop and Printer and Connection of Reliable Internet Connection.

# Assumptions and Dependences

The System User must be able to using the laptop or the pc which running the system on it, must be have knowledge about English & Arabic to can dealing with the application.

Software Requirements Specification

# Functional Requirements

## Manage Customer

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| MC | The System allows admin add new Customer to System. |
| MC | The System allows admin modify Customer data. |
| MC | The System allows admin Remove Customer from System. |
| MC | The System allows admin Show all Customers data. |
| MC | The System allows admin Show Customer data with it deals with the company. |
| MC | The System allows admin Search for a Customer & get action as modify, remove and show. |
| MC | The System update the Customer data, when effected by another components as order offer price, etc. |

Table 1 of Functional Requirements of Manage Customers

# Non-Functional Requirements

## Performance

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| PR | The System must run each operation in time less than 5 seconds. |
| PR | The System must response for the operation with message box in time less than 3 seconds. |
| PR | The System must run at each device using Window operating system. |
| PR | The System is responsive for each device screen size. |

Table 1 of non-Functional Requirements of Performance Requirements

## Security and Safety

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| SSR | The System can’t have ability for using if have not Username & Password. |
| SSR | The System Closed Automatic if not used for more than 1 hour without Use IT. |
| SSR | The System order the password when taking important action as removing data. |
| SSR |  |

Table 1 of non-Functional Requirements of Security and Safety

## Reliability

|  |  |
| --- | --- |
| Requirement ID | Requirement Description |
| R | The System Using object-oriented programming to divide the software into sub systems with separated Modules. |
| R | The System Using Exception Handling for each operation make by the admin. |
| R | The System have rules for each uncleared operation to be clearer. |
| R |  |

Table 1 of non-Functional Requirements of Reliability

## Useability

The System is Friendly for the user, so design of user graphical interface is clearer design for each user and using Arabic language to be easy for using.

## Availability

The System developed to be active all over the day for 24 hours in 7 days “week”, and developed to get the maintenance operation at less than 30 minutes.

System Design

# Login

## User Story

|  |  |
| --- | --- |
| User Story ID | US #1 |
| User Story Name | Login |
| Actors | Admin, Owner |
| Description | As Admin or Owner  I need to login for the system  So, I can access all application functions as create, Enter Bill. |
| Acceptance Criteria | Given I’m Admin or Owner and Logged in System,  When I fill inputs with correctly data,  Then system redirect me for home page. |

## Scenarios

### Normal Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. User Enter his Username 2. User enter his password 3. User Click Login button |  |
|  | 1. System Check all fields filled 2. System Validation |
|  | 1. Display Home Page |

### Exceptional #1 Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. User Click Login button |  |
|  | 1. Check Validation |
|  | 1. Pop up Error message Fill fields |

### Exceptional #2 Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. User enter Username 2. User Click Login button |  |
|  | 1. Check Validation |
|  | 1. Pop up Error message Fill all fields |

### Exceptional #3 Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. User enter Password 2. User Click Login button |  |
|  | 1. Check Validation |
|  | 1. Pop up Error message Fill all fields |

### Exceptional #4 Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. Uset enter Username 2. User enter Password 3. User Click Login button |  |
|  | 1. Check Validation |
|  | 1. Pop up Error message data is not correct |

### Exceptional #5 Scenario

|  |  |
| --- | --- |
| 1. User Click Program Icon |  |
|  | 1. System Display the Login page 2. System Display the fields to fill it |
| 1. User enter Username 2. User enter Password 3. User Click Login button |  |
|  | 1. Check Validation |
|  | 1. Pop up Error message have no Users |

## Use Case Diagram

## Activity Diagram

## Sequence Diagram

## 

## Collaboration Diagram

## Design Screen

## Data Dictionary

|  |  |
| --- | --- |
| Input | Constraint |
| Username | < 50 of chars |
| Password | < 50 of Chars |
| BrachID | Must be 1 |

# Entities Relationship Digrams

## Entities titles

Users

Customers

# Relationship Between Entities

## Customers with Offer prices

## 

Offer Prices

Customers

1. M

* Each Customer have More 1 Offer Prices.
* Each Offer Prices have only one Customer.

# Entities Dictionary

## Table: Users

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column | Type | NULL | Default | Comment |
| ID | INT | NO | Primary Key |  |
| Username | NVARCHAR(50) | NO |  |  |
| Password | INT | NO |  |  |
| Status | NVARCHAR(50) | NO |  |  |

## ERD Diagram