

Software Requirements Specification

for

Umawi Bank

Version 1.0

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1. Introduction

1.1 Purpose

The purpose of this document is to provide a comprehensive overview of the Umawi Bank. It aims to clarify the system's purpose, features, interfaces, functionalities, operational constraints, and responses to outside influences. This document targets both stakeholders and developers, as a proposal for approval by Dr. Baydogan.

1.2 Document Conventions

- Font: Microsoft JhengHei UI
- Font Size: 20 for Main Headings
- Font Size: 16 for Subheadings
- Font Size: 12 for the rest of the document

1.3 Intended Audience and Reading Suggestions

The document serves as a guide for developers, managers, and stakeholders of the Umawi Bank, detailing the Requirements Specification. It begins with use-cases for actors then program's requirements.

1.4 Product Scope

The Umawi Bank software system is designed for bank management, enabling customers to send and receive money in different currencies.

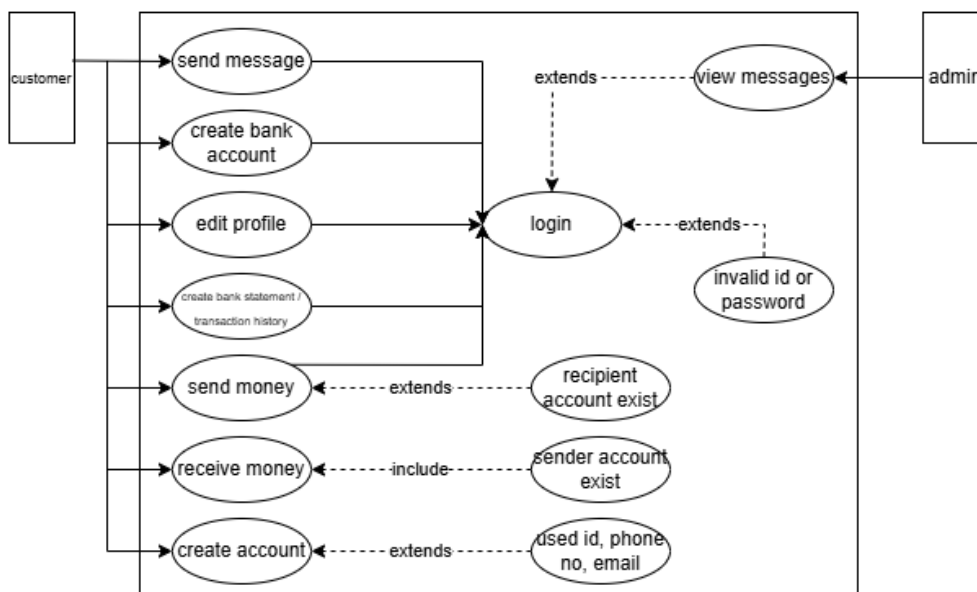
1.5 References

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

2. Overall Description

2.1 Product Perspective

has two actors: Customers, Admin.

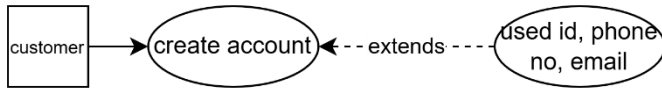


2.2 Product Functions

This section outlines the user use cases. We have three users: customer, admin.

2.2.1 Customer Use Cases: The customer has the following sets of use cases:

1. Create Account:



Brief Description / Goal: The "Create Account" functionality enables customers to register for a new account on the Umawi Bank website.

Pre-conditions:

1. The customer must have a computer connected to the internet with email and phone number.

Initial Step-By-Step Description / Scenario:

Accessing Registration Page: The customer navigates to the "sign up" page.

Providing User Information: The customer fills out the registration form, providing necessary details such as Full Name, Email Address, Password, and Contact Information.

Submitting Registration Form: The customer clicks on the "sign up" button.

Confirmation: Upon successful registration, the system confirms the creation of the account.

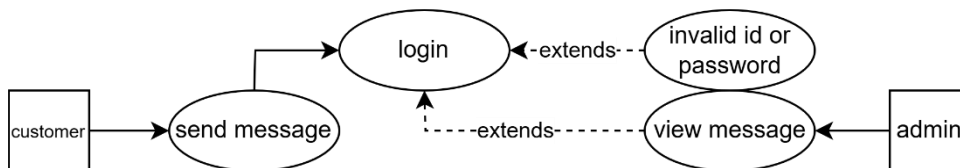
Post-conditions:

1. The customer's account information is securely stored in the Umawi Bank database, and they receive confirmation of successful registration.
2. The customers can log in using their provided credentials.

Exceptions:

1. Used id number, phone number or email: If the id no, phone number or email address is already used, the customer is prompted to provide a different username or email address.

2. Send Message:



Brief Description / Goal: Allows customers to send messages or inquiries to the bank's support team.

Pre-conditions:

1. Customers must be logged in.

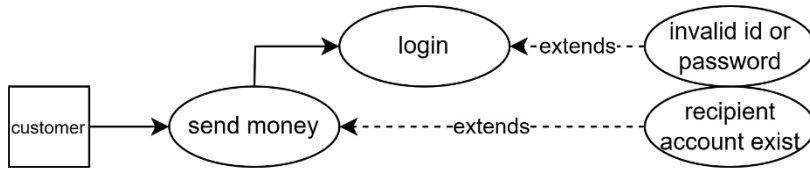
Initial Step-By-Step Description / Scenario:

1. Navigating to the "Contact" section and click on "message" button.
2. Composing a message and click on "send" button.

Post-conditions:

1. Message is delivered to bank support.

3. Send Money:



Brief Description / Goal: Allows customers to transfer funds to other accounts.

Pre-conditions:

1. Customers must be logged in and have sufficient balance.
2. Recipient account information is available.
3. Or the customer should have two accounts to exchange currency between them.

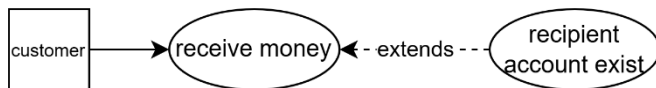
Initial Step-By-Step Description / Scenario:

1. Accessing "transactions" section, "send money button".
2. Entering recipient details and amount.
3. Confirming and submitting transaction.

Post-conditions:

1. Funds are transferred successfully.
2. Transaction details are recorded.

4. Receive Money:



Brief Description / Goal: Allows customers to receive funds transferred from other accounts.

Pre-conditions:

1. Customer must have an active account.

Initial Step-By-Step Description / Scenario:

1. Viewing transaction history to confirm receipt.

Post-conditions:

1. Funds are reflected in the customer's account balance.

4. Create Bank Account:



Brief Description / Goal: Allows customers to create new bank accounts (e.g., my account, USD).

Pre-conditions:

1. Customer must be logged in.

Initial Step-By-Step Description / Scenario:

1. Navigating to "account management" section.
2. Selecting account currency and providing necessary information.

3. Clicking on "create account" button.

Post-conditions:

1. A new bank account is being created and linked to the customer's main profile.

5. Edit Profile:



Brief Description / Goal: Enables customers to update their personal information.

Pre-conditions:

1. Customer must be logged in.

Initial Step-By-Step Description / Scenario:

1. Accessing "Profile" page then "edit profile" button.
2. Updating details such as password, phone number, email.
3. Saving changes by clicking on "save" button.

Post-conditions:

1. Updated profile information is saved securely.

7. View Bank Statement / Transaction History:



Brief Description / Goal: Allows customers to view their transaction history and bank statements.

Pre-conditions:

1. Customer must be logged in.

Initial Step-By-Step Description / Scenario:

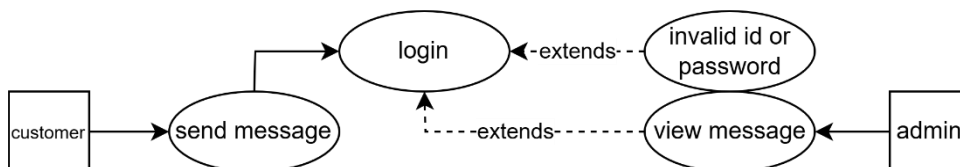
1. Navigating to the "Reports" section.
2. Click on "transaction history" or "bank statement".
3. Select the account you would the document for it and click on "generate" button.

Post-conditions:

1. Report will be saved as a pdf file.

2.2.2 Admin Use-Cases: The Admin has the following use cases:

1. View Messages:



Brief Description / Goal: Allows the admin to view messages sent by customers.

Pre-conditions:

1. Admin must be logged in with appropriate privileges.

Initial Step-By-Step Description / Scenario:

1. Navigating to the "contact" section, "Messages" button.
2. Reviewing customer messages.

Post-conditions:

1. Admin manages customer communications efficiently.

2.3 User Classes and Characteristics

The main users of the Umawi Bank are customers. customers will primarily use it to send/receive money.

2.4 Operating Environment

Umawi Bank requires Windows 10 or later. Minimum: Pentium 4, 500 MB disk space. Recommended: Intel Core i5, 1 GB disk space. Email account needed.

2.5 Design and Implementation Constraints

require essential technologies, and databases, enforced by security protocols to save user information.

2.6 User Documentation

Umawi Bank has comprehensive user documentation to facilitate efficient utilization of its features.

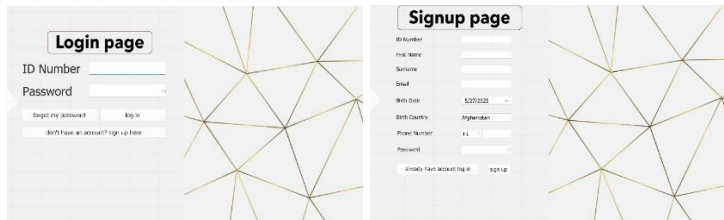
2.7 Assumptions and Dependencies

It is assumed that users possess basic computer skills and have reliable internet access.

3. External Interface Requirements

3.1 User Interfaces

Umawi Bank offers an intuitive and functional interface for customers, admin.

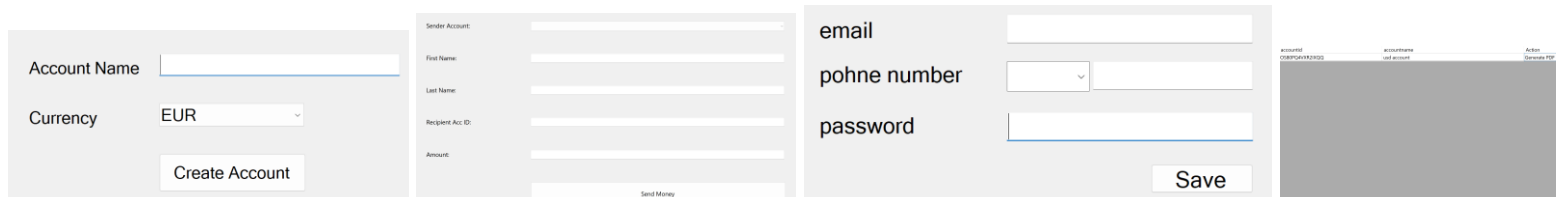


3.2 Hardware Interfaces

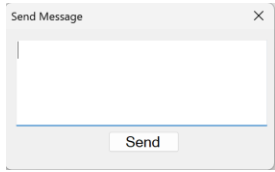
Basic computer setup with a keyboard, mouse is required. requires a connection over the internet.

3.3 Software Interfaces

Umawi Bank is platform where Customers transfer money, and admin manages user accounts.



3.4 Communications Interfaces



4. System Features

4.1 Authentication

4.1.1 Description and Priority

This feature enables customers to securely register and log in to the Umawi Bank system.

4.1.2 Stimulus/Response Sequences

1. User navigates to the login page.
2. Users enter their ID number/email and password.
3. The system validates the credentials against stored data.
4. If valid, the system grants access to the customer dashboard or admin panel.
5. If invalid, the system displays an error message and prompts the user to try again.

4.1.3 Functional Requirements

Input: ID number/email and password

Output: Access granted to customer or admin dashboard

REQ-1: The system shall provide a registration form for new customers to create accounts.

REQ-2: The system shall validate user credentials against the database records.

REQ-3: The system shall restrict access to features based on user roles (customer or admin).

REQ-4: If credentials are invalid, the system shall show an error message.

4.2 Account Management

4.2.1 Description and Priority

This feature allows customers to create new bank accounts (e.g., USD account) linked to their profiles.

4.2.2 Stimulus/Response Sequence

1. Customer logs in and navigates to the "Account Management" section.
2. The customer selects the desired currency and fills in required details.
3. Customer clicks the "Create Account" button.
4. The system creates a bank account and links it to the customer's profile.

4.2.3 Functional Requirements

REQ-1: The system should provide a bank account creation form.

REQ-2: The system shall link new bank accounts to existing customer profiles.

REQ-3: The system shall confirm successful account creation to the customer.

4.3 Fund Transfer (Send and Receive Money)

4.3.1 Description and Priority

This feature allows customers to send money to other accounts and receive funds.

4.3.2 Stimulus/Response Sequence - Send Money

1. The customer logs in and navigates to the "Transactions" section.
2. Customer clicks the "Send Money" button.
3. Customer enters recipient account details and the amount to transfer.
4. The customer confirms and submits the transaction.
5. The system processes the transfer and updates account balances.

4.3.3 Stimulus/Response Sequence - Receive Money

1. Customer logs in and views their transaction history.

4.3.4 Functional Requirements

REQ-1: The system shall provide an interface to send money.

REQ-2: The system shall verify sufficient balance before processing a transfer.

REQ-3: The system should update balances and transaction records after transfers.

REQ-4: The system shall allow customers to view incoming transfers in transaction history.

4.4 Messaging and Customer Support

4.4.1 Description and Priority

This feature allows customers to send messages or inquiries to Umawi Bank support and allows admins to view these messages.

4.4.2 Stimulus/Response Sequence

1. Customer logs in and navigates to the "Contact" section.
2. Customer composes a message and clicks the "Send" button.
3. The system delivers the message to the bank's support inbox.
4. Admin logs in and accesses the "Messages" section to review customer messages.

4.4.3 Functional Requirements

REQ-1: The system shall allow logged-in customers to send messages to support.

REQ-2: The system shall notify admins of new messages.

REQ-3: Admins shall be able to view and manage customer messages efficiently.

4.5 Profile Management

4.5.1 Description and Priority

This feature enables customers to update and manage their personal profile information.

4.5.2 Stimulus/Response Sequence

1. Customer logs in and navigates to the "Profile" page.
2. Customer selects the "Edit Profile" option.
3. Customer updates details such as password, phone number, or email.
4. Customer saves changes by clicking the "Save" button.

5. The system securely updates the profile information.

4.5.3 Functional Requirements

REQ-1: The system should provide an interface for customers to edit profile details.

REQ-2: The system shall validate and securely save updated profile information.

REQ-3: The system shall notify customers upon successful profile update.

4.6 Reports and Statements

4.6.1 Description and Priority

This feature allows customers to view and generate bank statements and transaction history reports.

4.6.2 Stimulus/Response Sequence

1. Customer logs in and navigates to the “Reports” section.
2. Customer selects “Transaction History” or “Bank Statement”.
3. Customer selects the account and clicks “Generate”.
4. The system generates and provides the report as a downloadable PDF.

4.6.3 Functional Requirements

REQ-1: The system shall allow customers to generate transaction history and bank statements.

REQ-2: The system should provide reports in PDF format for download or printing.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The Umawi Bank aims to ensure user satisfaction and efficient operation by offering quick response.

5.2 Usability

enables customers to send and receive money easily.

5.3 Security Requirements

Protection is integrated into this system other than allowing users to create accounts.

5.4 Software Quality Attributes

Umawi Bank meets reliability and usability with user-friendly GUI.

5.5 Business Rules

The Umawi Bank is designed to streamline and secure the banking management system.

Appendix A: Glossary

Term	Definition
SRS	Software Requirements Specification.
customer	People use the program to send and receive money.
Admin	Person managing the bank