Software Requirements Specification

for

WishList.com

Version 1.0

Prepared by Akın Kemal DOĞANGÜN

doftdare company

www.doftdare.com

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Revision History

Name	Author	Date	Reason For Changes	Version
SRS	Akın Kemal Doğangün	17.12.2022	First Version Created	1.0

1. Introduction

1.1 Purpose

Mobile Application Project for WishList.com is a practical mobile application that helps people to populate a list of items that they want for their birthday, wedding, or any special day. It has been prepared to specify the requirements of the "Mobile Application Project for WishList.com" software project.

1.2 Scope

Mobile Application Project for WishList.com is a mobile application that helps people fill out a list of items they want for birthdays, weddings, or any special occasion. The application will be for free. Wishers will need to create an account to use the application. When registering to the application, the Wisher must fill in the following information in order: name, surname, e-mail, password, age, gender, job, favourite colour, size (XS, S, M, L, XL, XXL, XXXL, XXXXL), weight, hobbies, education level, shoe size. The Wisher can register for the application after filling in the required information. The Wisher can check profile information and update profile information at any time. The Wisher can go to the app's settings to view and change user profile information. However, the Wisher's friends must create a private account to be able to view the Wisher's wish list. When creating an account, the Wisher's friends' names and surnames, e-mail addresses and passwords are requested. The Wisher's friends only have the right to see the Wisher's wish list and reserve the product in the Wisher's wish list. When the Wisher's friend wants to create a wish list for him or her, she/he will have to fill in all the information like the Wisher. When the Wisher and the Wisher's friends forgets their password, there can reset their password by clicking the "forget password" button. The Wisher can create the wish list after filling in the necessary information. When creating the wish list, the Wisher must fill in the following information in order: list name, purpose, list of things, date information. A URL will appear after saving. The Wisher can copy the URL and share it with their friends. The Wisher's friends must click the URL to see the wish list. The Wisher's friends can select an item from the list and the status is "reserve" with their name. This means that the Wisher's friend will purchase that item. When a friend selects a product from the wish list, the system will find and recommend related products on Amazon using the "Amazon Product Search API". System will show the 5 most relevant links under the wish list to help The Wisher's friends. When one of the Wisher's friends clicks on one of these links, they will be directed to the Amazon website to view the product details. 1 friend can reserve a maximum of 1 item. The Wisher's friends can also view some profile information of the user, such as age, gender, favourite colour, size, weight, hobbies, education level, and shoe size. The Wisher can create multiple wish lists. The Wisher can view the status of the wish list. The Wisher can close the wish list when the celebration is over. The administrator can block the Wisher. The administrator can view the following reports: List of wishers, list of wish lists, most desired gifts based on age, gender, job, education level.

1.3 Definitions, Acronyms, and Abbreviations

WishList.com: Mobile Application Project for WishList.com

1.4 References

1. "IEEE Guide for Software Requirements Specifications," in *IEEE Std 830-1984*, vol., no., pp.1-26, 10 Feb. 1984, doi: 10.1109/IEEESTD.1984.119205.
2. BRUSAW, C. T., ALRED, G. and OLIU, W., Handbook of Technical Writing, New York, St. Martin's Press, 1976.

1.5 Overview

This SRS contains all requirements and constraints of WishList.com project.

- Section 2 describes the general factors that affect the product and its requirements.

- Section 3 contains all the details the software developer needs to create the software.

- Section 4 defines technologies, infrastructure, performance, scalability, quality attributes, and other non-functional requirements.

2. General Description

2.1 Product Perspective

WishList.com is an application where Wisher can create wish list and share wish list with friends. Also, the Wisher's friends can view the Wisher's wish list. System Wisher's friends can make suggestions. User and administrator account required and is a free application.

2.2 Product Functions

This product will have the functions below:
1. The Wisher encounters an interface where he can create an account or log in to his account.
2. Information requested when creating an account: name, surname, e-mail, password, age, gender, occupation, favorite color, size (XS, S, M, L, XL, XXL, XXXL, XXXXL), weight, hobbies, education level, shoe size.
3. The Wisher profile information can be updated.
4. The Wisher can create wish list.
5. Information requested when creating a The Wisher wish list: list name, purpose, list of things, date information.
6. The Wisher can share the created wish list with their friends.
7. The wisher can be viewed the status of wish list
8. The Wisher can create multiple wish lists.
9. The Wisher's friends can be viewed wish list.
10. The Wisher's friends can reserve products from the Wisher's wish list.
11. The system makes recommendations based on gifts selected by the Wisher's friends.
12. The Wisher's friends can view the Wisher's profile information.
13. The Wisher can close the wish list after the celebration day.
14. The administrator can block the Wisher.
15. Admin can view reports.

2.3 Users and Characteristics

It will be used by Doftdare Company employees and stakeholders by creating an account. The user has basic computer and telephone skills. It is intended for all users over the age of 18. Anyone who has a hard time choosing a gift for their friends can use it.

2.4 General Constraints

a. This product is a new and independent product to be developed as a mobile application.
b. Natural and vibrant colors should be preferred in the interface design of the project.
c. The theme color of the app is green, white, gray, and cream.
d. The Wisher must create an account to use the application.
e. Information requested when creating an account: name, surname, e-mail, password, age, gender, occupation, favorite color, size (XS, S, M, L, XL, XXL, XXXL, XXXXL), weight, hobbies, education level, shoe size. If any of this information is missing, the account will not be created.
f. Users and administrators can create a password of up to 8 characters, and passwords can contain numbers, uppercase and lowercase letters.
g. The Wisher should be allowed to view and update their profile information.
h. The Wisher can create multiple wish lists.
i. Information requested when creating a The Wisher wish list: list name, purpose, list of things, date information. If any of this information is missing, the wish list will not be created.
j. The Wisher 's friends need to create a private account so that they can view the Wisher's wish list via the shared URL.
k. The Wisher can add a maximum of 300 items in the wish list.
l. The Wisher cannot make any changes after creating the list.
m. The system can recommend a maximum of 5 products to the Wisher 's friend.
n. The Wisher's information will be kept confidential until the account is deleted.
o. The Wisher 's friends will also be allowed to access only the Wisher's age, gender, favorite color, size, weight, hobbies, education level and some profile information, such as shoe size.
p. The administrator will be allowed to access the user's profile information.
q. The Wisher's friends can only reserve one product.
r. The product default language will be English and Turkish, but since other languages will be added in the future, the language infrastructure should be designed as extensible.
s. The system is expected to be used by 1000 users per hour.
t. The product must support the SQL server engine.
u. Wishers' contact information must be verified.

2.5 Assumptions and Dependencies

For password management, third party tools like KeePass can be used in the future. When the Wisher's friends select a product from the wish list, the system will find and recommend related products on Amazon using the "Amazon Product Search API". Further information and scenarios about this integration will be provided by Doftdare Company.

3. The Specific Requirements

3.1 External Interface Requirements

3.1.1 User Interfaces

3.1.1.1 Sign-In and Sign Up

The Sign-Up page is an interface where users and administrators can create their accounts. Mandatory fields on this page are the user's name, surname, e-mail, password, age, gender, occupation, favorite color, size (XS, S, M, L, XL, XXL, XXXL, XXXXL), weight, hobbies, education level, shoe size. Account creation is successful after user and administrator provide required and valid information and click "Sign Up" button. Figure 1and 2 is the wireframe design of the page. If the user forgets her/his password while logging into the system, she/he can reset her password by clicking the "Forgot Password?" button.

The Login page is an interface where the user and administrator can log into their accounts. Required fields for this page are User e-mail address and password. After the user and administrator provide valid information and click the "Login" button, the account is successfully opened. Figure 3 is the wireframe design of the page.

Figure 1: Sign-in Page Part-01

Figure 2: Sign-in Page Part-02

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Figure 3: Sign-up Page

3.1.1.2 Home Page:

The Home Page is the page where the Wisher-created wish lists are displayed. The Wisher can see more details by selecting any of the wish lists. There is also a section on this page where the Wisher can see which friend has reserved the products in all their wish lists. By clicking on the reserved product, the Wisher can open the wish list to which that product belongs. Towards the end of the page, there is a link to the social media accounts of the application. There is a "plus" button at the bottom of the main page. If the Wisher wants, his/her can go to the wish list creation page directly by clicking this button. There is a "settings" button at the top right of the home page. The user can access profile information and application settings by clicking this button. There is a profile picture of the Wisher at the top left of the main page. Below these two buttons, there are buttons that allow switching between pages. With the help of these buttons, the Wisher can easily perform the desired operation. Figure 4 is the wireframe design of the page.
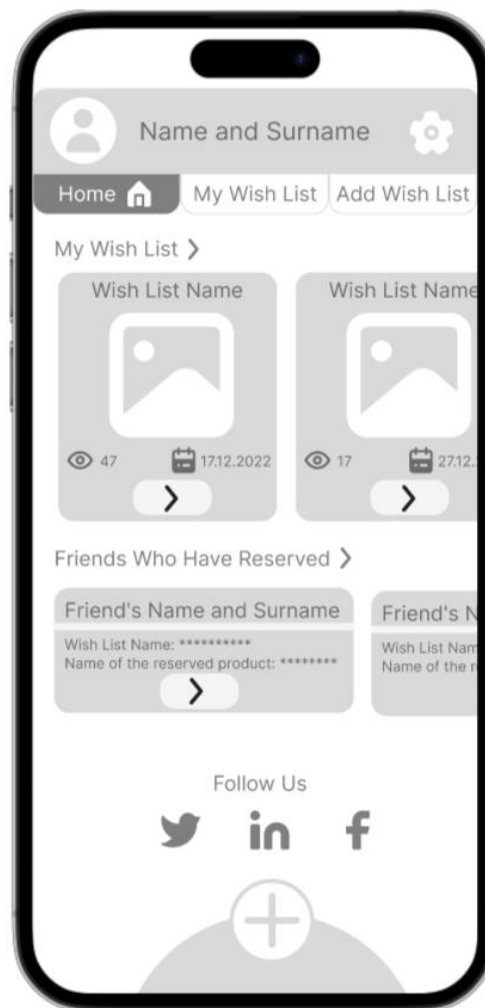
Figure 4: Home Page

3.1.1.3 **My Wish List Page***:*

On this page, the Wisher can see the previously created wish lists. When the Wisher clicks on one of the wish lists, the properties of the wish list are opened below. The Wisher can see the date and purpose of the special day on this page. In addition, the Wisher can see which of the products on the wish list are reserved by whom. The Wisher can copy the URL of the wish list by pressing the picture of the wish lists for a long time. Also, the Wisher can see how many people viewed the wish list. Figure 5 is the wireframe design of the page.
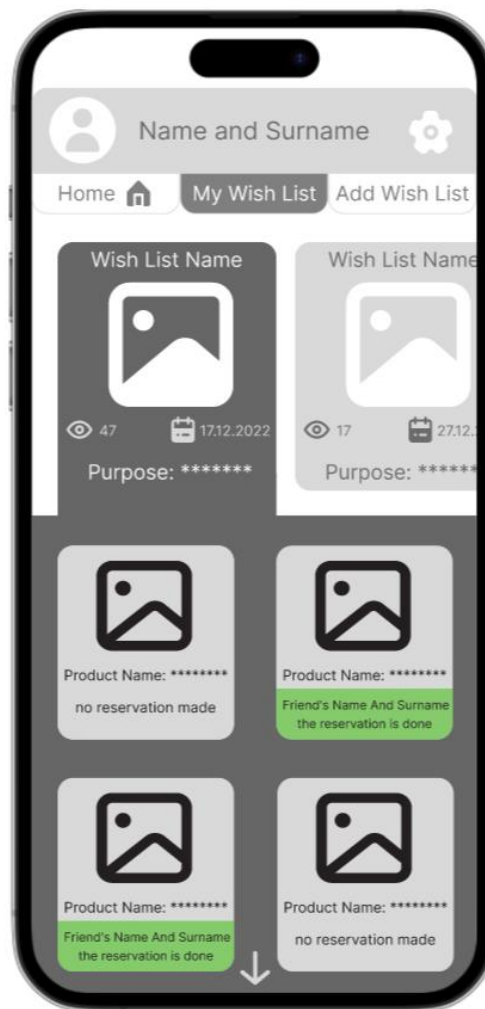
Figure 5: My Wish List Page

3.1.1.4 Add Wish List Page:

The My Wish List page is the page where The Wisher can create new wish lists. There are sections on the page for the Wisher to enter the "list name, purpose, list of things, date" information while creating a new wish list. It is very important for the Wisher to fill in these sections. In the middle of the page, there is a section where the Wisher can enter the product name and picture. The Wisher can add the picture of the product they want to add from the internet, phone camera or my files. There are buttons on the page where the Wisher can perform these operations. The Wisher can realize what he wants to remove from the products he added, with the button on the top right of the product. The Wisher can save the wish list after doing all the operations. Figure 6 is the wireframe design of the page.

After the Wisher saves the wish list, the Generated URL page appears. The Wisher can share generated URL with friends. The Wisher can send it to friends with the help of social media applications at the bottom of the page. Figure 7 is the wireframe design of the page.
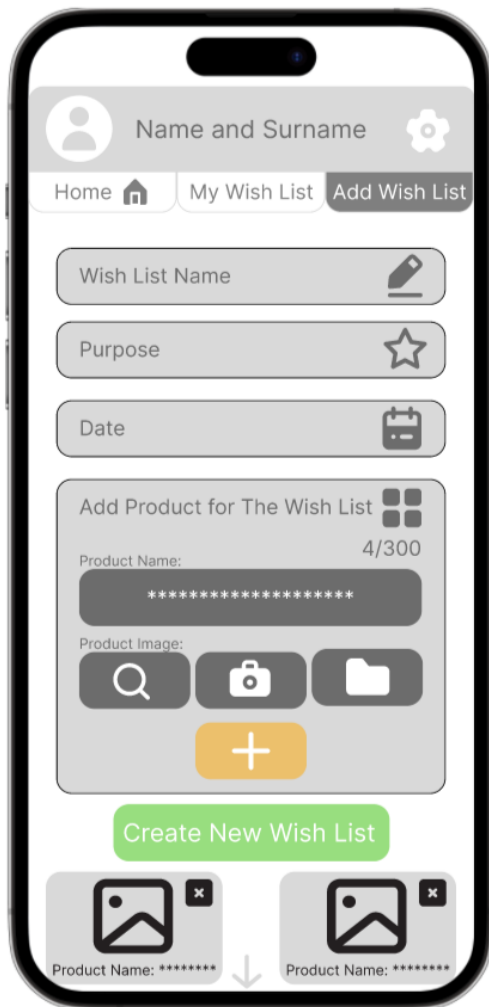
Figure 6: Add Wish List Page

Figure 7: Generated URL Page

3.1.1.5 Reserve Page:

The Wisher's friends can reach this page with the link given by the Wisher. At the top of this page are the name of the Wisher who created this wish list and the specific characteristics of the Wisher. Below this section are the name, date, and purpose of the wish list. The Wisher's friends can reserve the desired product from the non-reserved products in the list. When the Wisher's friends click on a non-reserved product in the wish list, the system shows the 5 most liked products. The Wisher's friends can choose one of these products and reserve this product. Figure 8 is the wireframe design of the page.
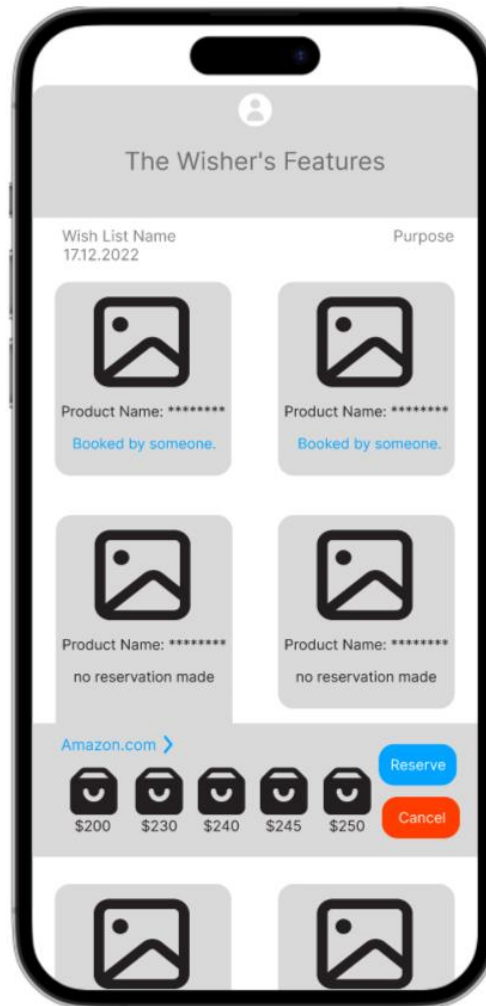
Figure 8: Reserve Page

3.1.2 Hardware interfaces

There are no interfaces

3.1.3 Software interfaces

There are no interfaces

3.1.4 Communications Interfaces

This product features account-based authorization and authentication. You cannot use this service without creating an account. Secure wish list creation, storage and access should be considered as part of the software architecture at the design stage.

3.2 Functional Requirements

In this part, the functional requirements for the "WishList.com" project will be defined by system features and the major services provided by the product. The use-case diagram below (Figure 9) demonstrates the users and their operations in high level.
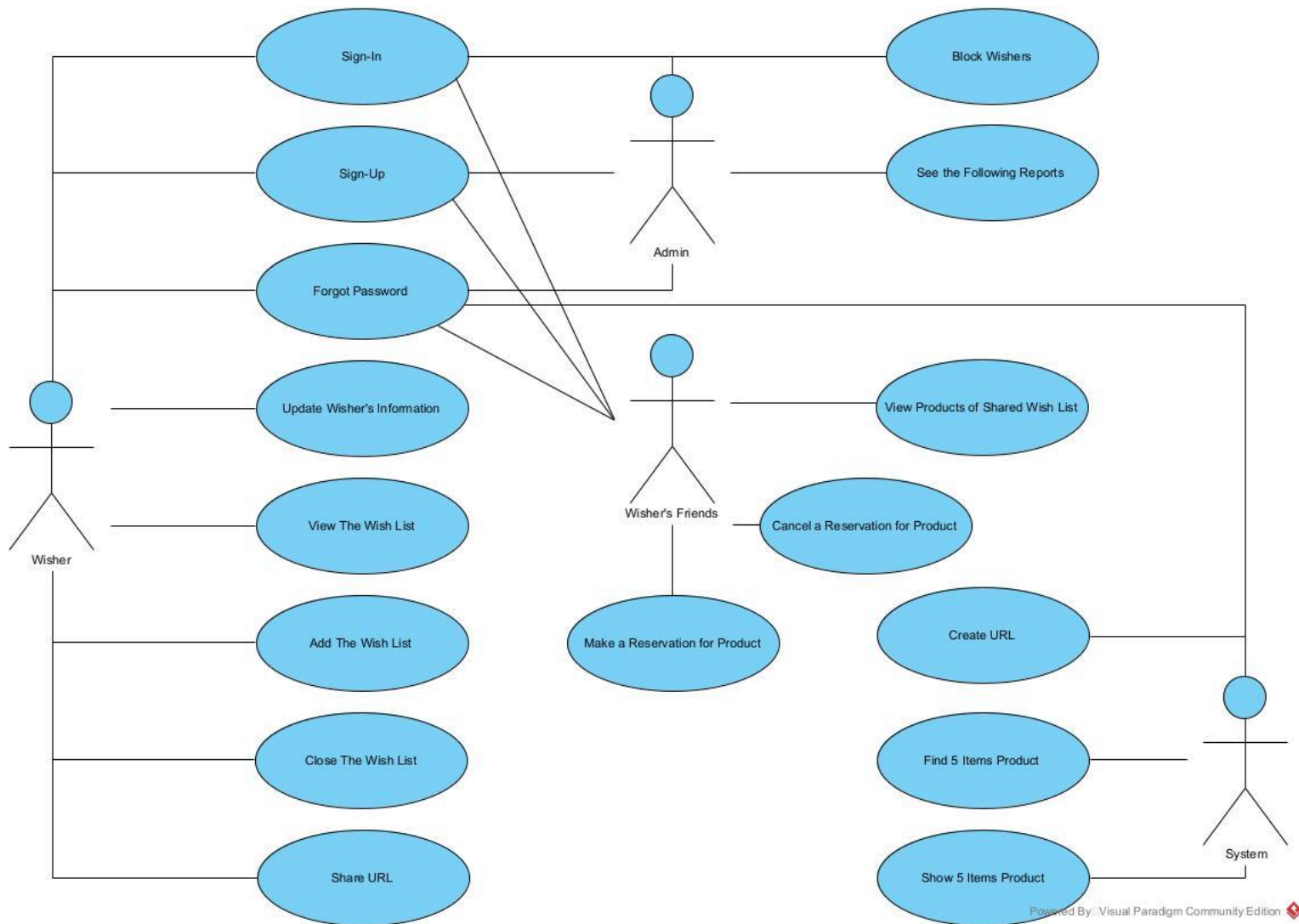

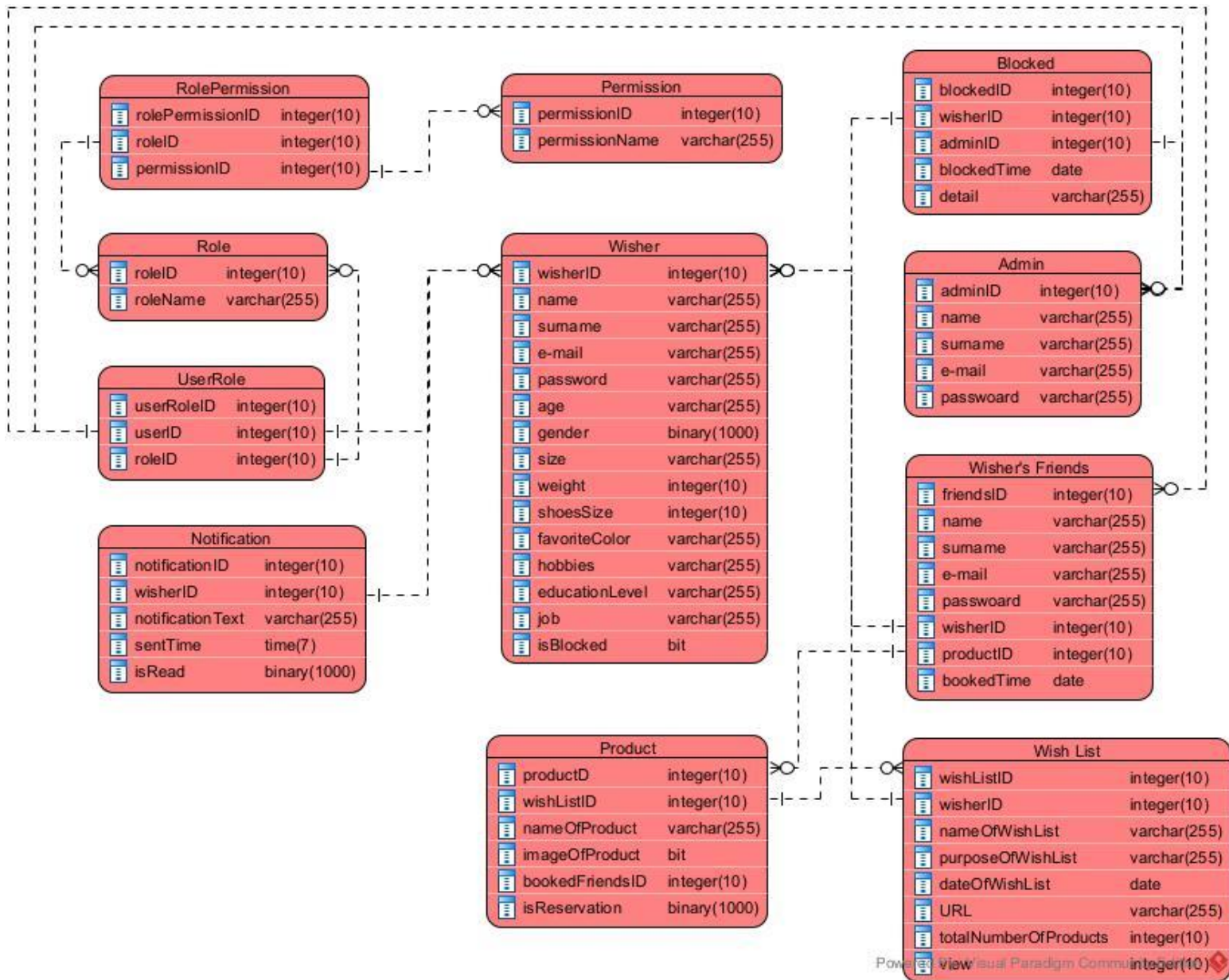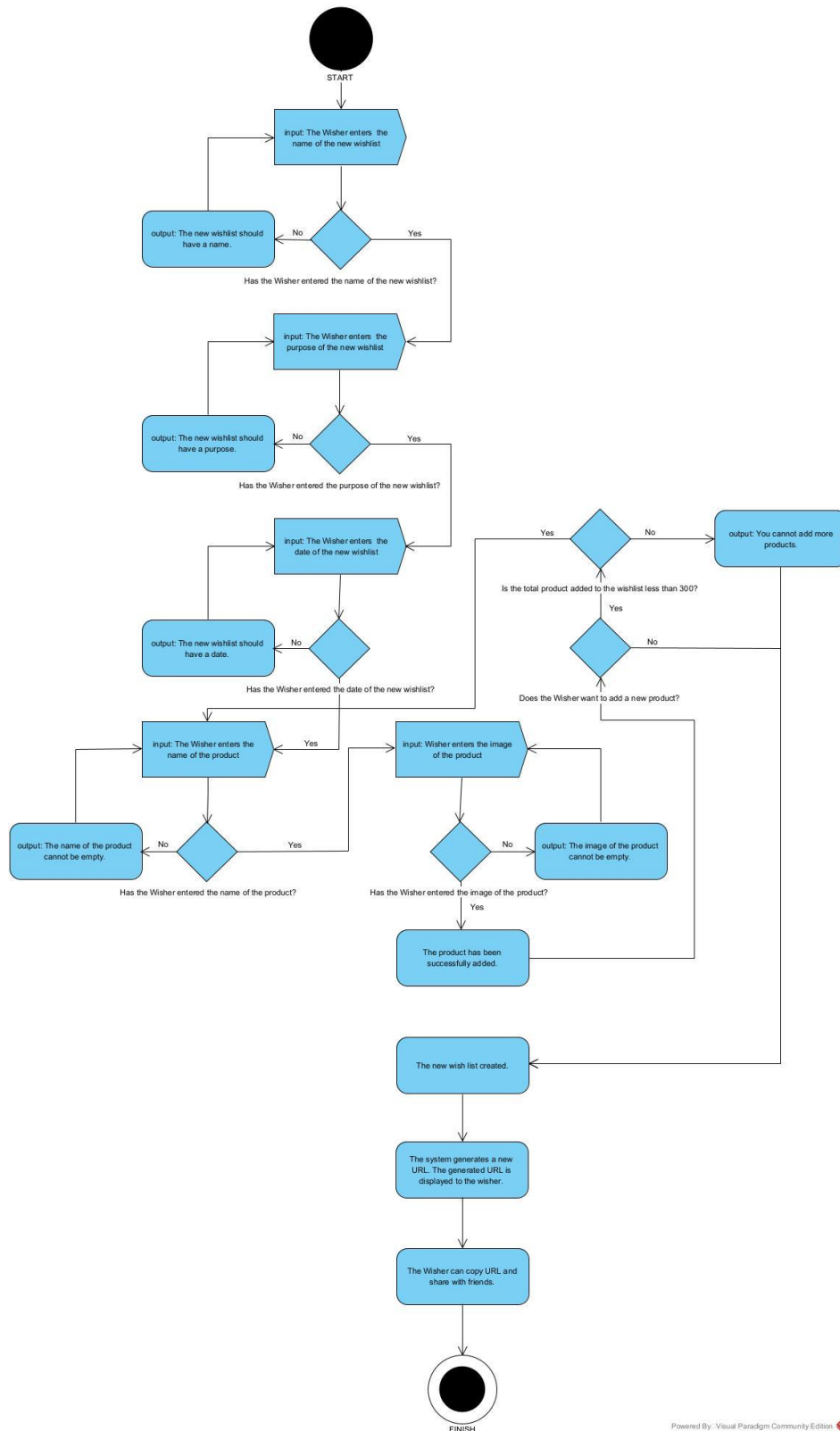*Figure 9: Use-Case Diagram for WishList.com*

Figure 10: Data Base for WishList.com

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3.2.1 Add Wish List

3.2.1.1 Description and Priority

The new wish list creation feature is the wish list creation feature of the user's wishes. Thanks to this feature, the Wisher can share what her/his wants for a certain day with his friends. To create a new wish list, the Wisher must specify the name of the wish list, its purpose, list of things, and date. Entered entries are controlled by this feature. Control criteria are determined by the system.

Figure 11: Activity Diagram for Add Wish List

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3.2.1.2 Stimulus/Response Sequences

The sequences of user actions and system responses are listed below:

1. Wisher: Must give any name to the new wish list.
2. System: Checks whether the given name input is empty.
3. System: If the name input is empty, it gives a warning message. (Output: The new wish list should have a name.)
4. Wisher: Must give any purpose to the new wish list.
5. System: Checks whether the given purpose input is empty.
6. System: If the Purpose input is empty, it gives a warning message. (Output: The new wish list should have a purpose.)
7. Wisher: Must give any date to the new wish list.
8. System: Checks whether the given date input is empty.
9. System: If the date input is empty, it gives a warning message. (Output: The new wish list should have a date.)
10. Wisher: His/her should give the name of the product his/her wants to add to the wish list.
11. System: Checks whether the input of the given product name is empty.
12. System: If the product name input is empty, it gives a warning message. (Output: The name of the product cannot be empty.)
13. Wisher: Must add a picture for the product whose name is entered.
14. System: Checks whether the given product image input is empty.
15. System: If the product image input is empty, it gives a warning message. (Output: The image of the product cannot be empty.)
16. System: Notifies the Wisher when the product is successfully added. (The product has been successfully added.)
17. User: May want to add a new product.
18. System: Looks at the total number of products added.
19. System: If the number of added products is more than 300, it gives a warning message. (Output: You cannot add more products.)
20. Wisher: Creates the new wish list.
21. System: Creates a URL for the Wisher to share with their friends and displays it to the Wisher.
22. Wisher: Her/His can share the generated URL with friends.

3.2.1.3 Functional Requirements for Add Wish List

Functional requirements associated with the "Add Wish List" feature is listed below:
- REQ-1: The functional requirements for the "Message" feature are listed below:
- REQ-2: The Wisher opens the "add wish list" page.
- REQ-3: The Wisher must give name to the new wish list the Wisher has created.
- REQ-4: The system checks whether the name input is empty. When the system detects any error, it repeats the process.
- REQ-5: The Wisher must give purpose to the new wish list the Wisher has created.
- REQ-6: The system checks whether the purpose input is empty. When the system detects any error, it repeats the process.
- REQ-7: The Wisher must give the date to the new wish list the Wisher has created.
- REQ-8: The system checks whether the date input is empty. When the system detects any error, it repeats the process.
- REQ-9: The Wisher must enter the product name in the wish list and proceed to the second stage of adding the product.
- REQ-10: The system checks whether the product name input is empty. When the system detects any error, it repeats the process.
- REQ-11: It performs the process of adding products by adding images to the products that the Wisher give names.

> ➢ REQ-12: The system checks whether the product image input is empty. When the system detects any error, it repeats the process.
> ➢ REQ-13: The Wisher may want to add more products.
> ➢ REQ-14: The system looks at the number of products added. If the number of added products will be more than 300, the system will not allow the Wisher to add new products.
> ➢ REQ-15: The Wisher creates the new wish list.
> ➢ REQ-16: The system creates a URL that the Wisher can share with his friends and shows the URL to the Wisher.
> ➢ REQ-17: The Wisher can share URL with friends.

4. Other Nonfunctional Requirements

4.1 Performance Requirements

- A maximum of 300 items can be added to the Wisher-created wish list.
- Users and administrators can create a password of up to 8 characters, and passwords can contain numbers, uppercase and lowercase letters.
- The system is expected to be used by 1000 users per hour.
- The system can recommend up to 5 products to the Wisher's friend.

To make the product usable in all conditions, all performance measures must be adjusted for maximum data size and maximum user frequency.

4.2 Security Requirements

This product should run only in HTTPS. Any data transferred to or from the server should be encrypted. Decryption key should not be stored in the server. It is expected to encrypt messages using the science of cryptography.

4.3 Software Quality Attributes

Product should have following quality attributes:
ability to achieve the purpose with the least effort and time,

- easy to use,
- easy to remember,
- satisfying design in the first use,
- allowing the users to take back their mistakes,
- preventing mistakes,
- a pleasant user experience,
- security create new wish list.