Software Requirement Specification Document

wolower

Social Payment

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Contents

1. Introduction

This section will describe the scope of this software requirement specification document. You will also find the purpose of this document.

1.1. Purpose

The purpose of this document is to give you a detailed description of the requirements for the project. The wolower is a twitter-based application that is analyzed, designed, developed and managed for the lesson SWE-573 Software Development Practice at Bogaziçi University.

1.2. Scope

As of 4th quarter 2017, some of Twitter's statistics are as follows;

- Active Twitter user count: 330m
- Percentage of US companies that use Twitter for marketing purposes: 65.8%
- Percentage of Twitter advertising budgets that is dedicated to mobile: 25%
- US Online customer trusting information and advice from Twitter: 73%

When we look at the statistics above It is quite crucial to leverage social media for marketing purposes and all brands leverage the power of social media. With the wolower, we are going to take Twitter (not all social media) to a different level for retail. It is possible to use your Twitter account to sell your unused belongings. Actually, There are some people who have been already doing this on social media websites such as Twitter and Instagram. But there is a significant problem when you want to sell and buy something on Twitter, payment. Twitter does not provide a social payment infrastructure for this kind of sales. There is one more option which is pay-at-door, but it is not useful for international sales. You cannot wait for someone abroad to accept the payment on behalf of you. A trusted, secure, and automated payment mechanism is needed. Let's recognize the wolower.

Users will be making its sales and payment on Twitter without going out thanks to the wolower. All payment process will be carried out within Twitter. Everyone who wants to sell something on Twitter is able to share, bargain and confirm payment within Twitter itself, the wolower will be waiting for you background to complete your payment.

The system will be a web-based application. Users will access the system by using the web-browser installed on their PCs and their mobile devices.

2. Requirements

2.1. Functional Requirements

2.1.1. Functional requirement 1

ID : FR1

Description : Users shall be able to log in to the system by using the feature of "Sign in with Twitter".

2.1.2. Functional requirement 2

ID : FR2

Description : The system shall be providing the users that they can change their profile details such as active email.

Dependency : FR1

2.1.3. Functional requirement 3

ID : FR3

Description : The system shall be providing an integration with Masterpass payment mechanism.

Dependency : FR1

2.1.4. Functional requirement 4

ID : FR4

Description : The system shall provide “Masterpass Express Checkout Pairing Outside Checkout” functionality for automated payments.

Dependency : FR1 and FR3

2.1.5. Functional requirement 5

ID : FR5

Description : The user should pair its Masterpass profile with the system.

Dependency : FR1 and FR4

2.1.6. Functional requirement 6

ID : FR6

Description : The user should be able to review his/her current orders together with their tweets.

Dependency : FR1

2.1.7. Functional requirement 7

ID : FR7

Description : The system shall store payment information like who paid for whom and how much.

Dependency : FR1

2.1.8. Functional requirement 8

ID : FR8

Description : The system should be able to display the users’ old payments together with their tweets.

Dependency : FR1

2.1.9. Functional requirement 9

ID : FR9

Description : The system shall be warning mechanism for the users who want to buy something without pairing Masterpass.

Dependency : FR1 and FR3 and FR4

2.1.10. Functional requirement 10

ID : FR10

Description : The system should be able to display the users’ payment report such as total money spent on Twitter, order dates and amount.

Dependency : FR1 and FR7

2.1.11. Functional requirement 11

ID : FR11

Description : The system shall be displaying amount of money of every user stored in the system.

Dependency : FR1

2.1.12. Functional requirement 12

ID : FR12

Description : The system shall allow the users to pay something that they bought on Twitter by the money earned from old sales stored by the system.

Dependency : FR1

2.2. Non-functional Requirements

2.2.1. Non-functional requirement 1

ID : NFR1

Description : The system shall be designed in a way to fulfill the further requirements supporting other platforms like mobile phones.

2.2.2. Non-functional requirement 2

ID : NFR2

Description : The system should have unit tests for the back-end of its user interface and test coverage should be at least 65 – 70%

2.2.3. Non-functional requirement 3

ID : NFR3

Description : The system shall be reliable for users. It shall need any personal information to operate.

2.2.4. Non-functional requirement 4

ID : NFR4

Description : The system shall be scalable, resource-efficient and high-performer.

2.2.5. Non-functional requirement 5

ID : NFR5

Description : The system shall be user-friendly, easy to use and self-explanatory.

2.2.6. Non-functional requirement 6

ID : NFR6

Description : The system should be responsive to the platforms that are accessed through. It should support the modern web-browser engines and should be accessible and easily usable from the variety of devices like mobile phone, tablets, and PCs.

2.2.7. Non-functional requirement 7

ID : NFR7

Description : The system should be able to run on the various devices.

2.2.8. Non-functional requirement 8

ID : NFR8

Description : The system shall be runnable on the various operating systems such as Windows and Linux, in particular on the Linux-derivative operating systems.

2.2.9. Non-functional requirement 9

ID : NFR9

Description : The system shall be fast enough and has a high performance. The integration with Twitter shall be less than 3 seconds.

3. User Stories

3.1. Kyle Sang's story

Kyle is an accountant in a startup company. He is twenty-seven years old, tall, and likes using Twitter very much. He spends about 2 hours on Twitter every day. He leverages Twitter in the almost every manner, he tweets in political topics, about football, he sends direct messages to his followers, and he follows renowned people in accounting. Also, he loves learning new things. Finally, he is an American man in London ☺

As a Twitter-buyer, I want to buy something, which is being bought on Twitter, without going to another website for the operations such as payment. I can see and review what I am going to buy on Twitter and I can carry out the payment on Twitter as well so that I can buy something faster and easier.

3.2. Tracy Panwar's story

Let me introduce you, Tracy. First of all, she is a mother who has 3 children. She got divorced her husband about three years ago and she lives in Norfolk, Virginia. She is a very successful manager in a famous healthcare company. That's way she has to work late hours and does not have that much time to surf on Twitter. Because in the other times remaining from her job she takes care of her children.

As a Twitter-buyer, I want to fulfill my payments in a secure manner because I will never ever share my credit card details to anyone in the internet.

3.3. Dennis Cooper's story

I think you already know that big Cooper Incorporated. Dennis is the successor of the high-level leadership of the company, but guess can he become CEO of the company? Well, does he want to become a CEO? Exactly no, he only wants to become a Twitter phenomenon. He spends his all time in Twitter by sharing information with his followers in the topics that he finds interesting and he is consistently searching Twitter for interesting topics. Finally, he wants to move on India.

As a Twitter-seller, after selling something on Twitter, it is the hardest part to fulfill the payment. I want to take my money from buyers in an easy, secure and effective manner so that I will not be worrying about my money.

4. User Scenarios

4.1. New user scenario

Kyle is surfing on Twitter one day and he saw something really interesting image. He realized that someone tries to sell his PlayStation 4. So far, he did not know that some people sell their belongings on Twitter. After a little looking at tweet, he saw a mention in tweet which is @wolower_payment and he searched the term "wolower_payment" on Google to learn what it is. He reached to the **wolower** social payment website. His wonder was raised when he saw "Sign in with Twitter" button. He signed into the **wolower** with his twitter account to look at what there is inside.

When he logged into the system, he saw a message “Please pair the wolower with Masterpass” and a detail description why he needs to pair the wolower with Masterpass. He clicked the “pair” button and the system redirected him to the Masterpass paring page. In this page, Kyle logged into his Masterpass account and paired the wolower with his account. He is a user of the wolower now.

4.2. A Twitter-buyer user scenario

Tracy is going to bed and before sleeping, she wanted to review what is being sold on Twitter. A few minutes later, she found a brilliant handbag used with evening wear. She really wanted to buy it because a few week later she will have a dinner with the managers from one of the biggest customers of her company. She only wrote a comment of “Pay this for me @wolower_payment”.

Her new lovely handbag is delivered to her in the morning 2 day later.

4.3. A Twitter-seller user scenario

Dennis, as always, is on Twitter and is searching for new interesting things to share with his followers and he decided to sell his LG TV on twitter. He shot a few photo of his TV and shared these images on Twitter. When sharing these on Twitter, he realized that he has already a wolower account for receiving his payments so he is mentioned “@wolower_payment” in his tweet.