Cairo University Faculty of Computers and Artificial Intelligence



CS251

Intro. to Software Engineering

Project Name

Software Requirements Specifications

Version 1.0

Team Names and Emails and Phone of Team Leader

Month & Year





Software Requirements Specifications

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Software Requirements Specifications

Team

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Document Purpose and Audience

Purpose

The purpose of this document is to clarify software requirements that are agreed upon by the stakeholders by specifying the needed functionalities of the software to minimize development time and cost by making the requirements clear.

Audience

- Software Development Team
- Stakeholders

Introduction

Software Purpose

The purpose of Toffee is to sell sweets and candy online whether it's by kilo or a package and Link between seller and buyer.

Software Scope

- The major feature of this system is to sell candy and sweets online whether it's by kilo or a package.
- It's also had an admin to control the amount of candy left or adding a new amount and control prices of candy and so on.





Software Requirements Specifications

Definitions, acronyms, and abbreviations

Phrase	Definition
Smart Wallets	An electronic device, online service, or software program that allows one party to
	make electronic transactions with another party bartering digital currency units
	for goods and services.
OTP	One Time Password it's a temporary, secure PIN-code sent to you via SMS or e-
	mail that is valid only for one session used to verify an email or phone number.
shopping cart	Is a place where you put the things you want to buy in.
sealed items	sealed item means an unbroken or unopened item which cannot be opened
	without damaging the container.
Loose items	free or released from confinement or restraint not in a package.
gift voucher	Is a card or piece of paper that you buy at a shop and give to someone, which
	entitles the person to exchange it for goods worth the same amount
gift voucher code	Is a unique code and can be redeemed once when making an order to reduce the
	total price by the value of the voucher.
Loyalty points	Is points give to a customer after buying something only give by admin and the
	customer can redeem it with candy and sweets.
catalog	It's like a main page that contain all goods.
"re-corder" button	makes the same exact order with the same exact conditions.
Maintainability	The ease with which a software system or component can be modified to correct
	faults, improve performance or other attributes, or adapt to a changed
	environment."
Scalability	The ability of the software to support a growing number of users while offering
	good performance.
Usability	The degree to which a software can be used by specified consumers to achieve
	quantified objectives with effectiveness, efficiency, and satisfaction in a
	quantified context of use.
Portability	Portability defines how a system, or its element can be launched on one
	environment or another.
Availability	Availability measures the ability of a piece of equipment to be operated if
	needed.
Reliability	reliability measures the ability of a piece of equipment to perform its intended
	function for a specific interval without failure





Software Requirements Specifications

Requirements

Functional Requirements

Requirement ID	Requirement Statement
FR01	 The application should have a login/sign-up system and screen and make a login or sign up. check if the user is signed up make them go to the next page if not make him sign up and then login. Registration requires secure password guidelines. Registration is completed by sending an OTP to the email used
FR02	After the login the next screen should display the goods with its price.
FR03	The user has the option to buy by packet or kilo.
FR04	The user can put the items he wants to buy in shopping cart.
FR05	The user can pay in different ways. - eWallet (smart wallets) - credit card - in delivery
FR06	A system admin can update catalog with new items, cancel items or update item info.
FR07	The user can buy sealed items or Loose items.
FR08	Admin can view all orders, set loyalty points scheme, suspend a user, and view statistics. - Statistics provide store owners with a view of how the store is doing. This may include daily and monthly sales, sales of each item in a period among other statistics.
FR09	user can re-order a previous order
FR10	Upon making an order, shoppers must specify the shipping address; if it is the same address registered on their profile or another address.





Software Requirements Specifications

Non Functional Requirements

Non runctional requirements		
Measure	Details	
Performance	 The Sign-in/sign-up screen should take about 7 seconds to load. 	
	 Every panel in the system should take less than 10 seconds to load. 	
	 Confirmation code must be sent within 2 minutes. 	
	 Reserving or canceling a order must take 20 seconds. 	
	The system should be able to manage a high volume of requests	
	and transactions with minimal delays or performance concerns.	
Scalability	The system should be able to scale up or down to meet changing demand.	
Security	The system should protect sensitive client data and maintain the security of	
	all transactions like storing the RNR encrypted and storing the way that the	
	passenger pays encrypted (credit card, PayPal account,).	
Maintainability	The system should be simple to maintain and update, with low downtime.	
	The system should have a 90% chance of maintainability for 1 day. Which	
	means that if a component in the system had a critical issue, there is a 95%	
	chance that this component will be fixed in 2 days.	
Reliability and	The system should be active 93% of the day.	
availability	The system should be always available, with as little downtime as possible	
	for maintenance or updates.	
Usability	The system should be simple to use for both customers and staff, with a	
	simple and straightforward interface.	

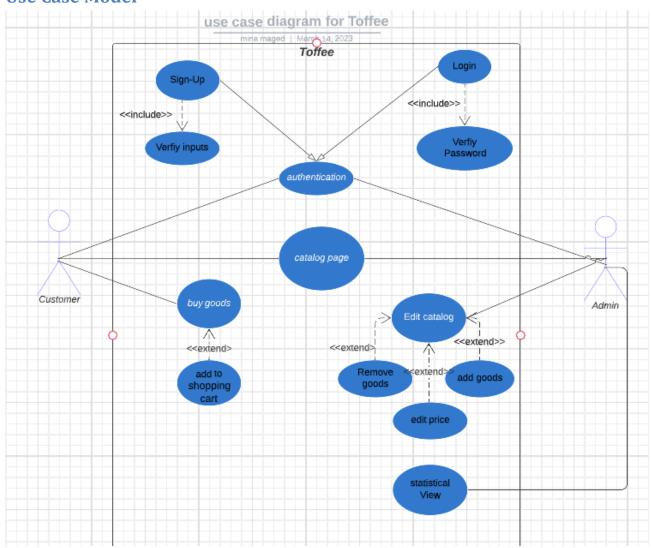




Software Requirements Specifications

System Models

Use Case Model







Software Requirements Specifications

Enriched User Stories

- Using below table template, <u>for each</u> requirement write an enriched user story specifying the details of each use case and showing the interaction to implement this use case.
 - o If one requirement is so big, you could divide it to more than one user story.
 - o If some requirements are not major, you could plugin them in other user stories.
- Flow of events should be very detailed
- User Story #1

User Story ID	US #1
User Story Name	
Actors	
	As a
Description	I like to be able to
	So
Per condition	
Post condition	
	Describe when we can decide that this user story is correctly
	implemented and accepted. For example:
	Given I'm a logged-out system user and I'm on the Sign-In page
Acceptance Criteria	When I fill in the "Username" and "Password" fields with my
	authentication credentials and I click the Sign-In button
	Then the system signs me in

Scenarios

Normal Scenario

Actor Action	System Response
1- User Enter Card and Password.	
2- Click Submit	
	3- System Verify user data
	4- System displays list of Mobile companies
5- User Select Vodafone from the list	
	6- System retrieves Vodafone bills





Software Requirements Specifications

7- And so on	

Exceptional Scenario

Actor Action	System Response
1- User Enter Card and Password.2- Click Submit	
	3- Card is invalid4- Systems rejects card and displays an error message

• Screen Design

Give a draft design of the screen(s) on which this user story will be implemented.

Do it as a swireframe or a mockup. Use a tool to do that. Give each screen a number and name.

• Data Dictionary:

Element Label	Type/Length	Data Validation / Business Rule





Software Requirements Specifications

User Story #2

User Story ID	US #2
User Story Name	
Actors	
	As a
Description	I like to be able to
	So
Per condition	
Post condition	
	Describe when we can decide that this user story is correctly
	implemented and accepted. For example:
	Given I'm a logged-out system user and I'm on the Sign-In page
Acceptance Criteria	When I fill in the "Username" and "Password" fields with my authentication credentials and I click the Sign-In button
	Then the system signs me in

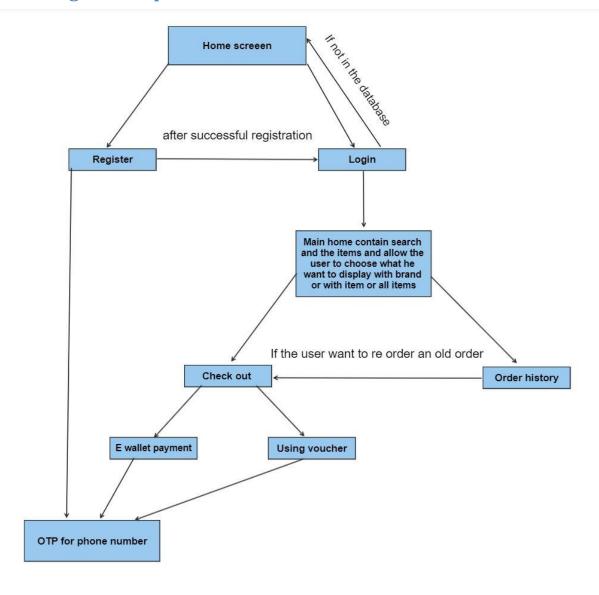
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Software Requirements Specifications

System Navigation Map



Tools

- Lucid chart
- www.mockflow.com for System Navigation Map

Ownership Report





Software Requirements Specifications

Student	Items he created
Mina Maged Faris	Use Case Model, Functional Requirements, Document Purpose and Audience, Introduction
	And Some Definitions.
Eslam Sayed	Non-Functional Requirements, some definitions
	System Navigation Map and tools