Cairo University Faculty of Computers and Artificial Intelligent



SCS252 Software Modeling

Project Name

Software Requirements Specifications

Team Names

Month & Year







Software Requirements Specifications

Contents

Instructions [To be removed]	3
Team	3
Document Purpose and Audience	3
Introduction	3
Software Purpose	3
Software Scope	4
Definitions, acronyms, and abbreviations	4
Requirements	4
Functional Requirements	4
Non Functional Requirements	4
System Models	5
Use Case Model	5
Use Case Tables	5
Ownership Report	6
Policy Regarding Plagiarism:	6



Project: <Project Name>



Software Requirements Specifications

Instructions [To be removed]

- IMPORTANT. Rename this document to SCS252-TAName-LeaderID-SRSDocument.docx (e.g. SCS252-MohamedSamir-20040752-SRSDocument.docx)
- Remove the following notes and any red notes.
- This document is the template document for your SRS.
- For further guidelines and information, READ project details document (SCS252-Project Description-v1.0).

Team

ID	Name	Email	Mobile
	1st name is team leader		

Document Purpose and Audience

- Any document anywhere should tell us 2 things: (1) what this document is and (2) who is excepted to read it.
- Write in simple notes: What is this document?
- List the target audience to read this document (e.g. CEO? Project Manager? Customer...?)

Introduction

Software Purpose

Summarize the purpose of the software

Software Scope

- Any software could have too many components / Major features .. but we should implement specific things...this is the scope
- In simple points, what is the software scope (focus on components / Major features, not tiny things)

Definitions, acronyms, and abbreviations

In a table, list all needed ones. Consider the audience



Project: <Project Name>



Software Requirements Specifications

Think as following: Document has abbreviation ATM..IFF audience doesn't know it, let's clarify it.

Requirements

Functional Requirements

- This is the most critical part... functional requirements describe what the system should do
 - o E.g. an ATM allows you to enter Card, enter user name password and withraw a money
- List all the system requirements, respecting the problem statement giving by your TA
 - Make sure to go in the missing details for the mentioned features/components
 - Discuss with TA
 - Going beyond them (e.g. adding new complete major feature / component) is breaking the statement scope
- Each requirement should be clearly described, such that it can be understood <u>without</u> the
 presence of the one who wrote it.
- This part is the basis for writing the contract with client and estimating the size, time and cost of developing the software.

Non Functional Requirements

- Non-functional requirements describe how the system works
 - E.g. Withdraw operation will be done within 20 second. Network is using secured protocols. System allows up to 30,000 withdrawals per minute.
 - Think about the operation / system quality
- There are too many non functional requirements. Read in <u>wiki</u>. Pick the suitable ones for your system. Non-functional requirements must be VERIFIABLE, i.e., MEASURABLE.
 - Some Types as just examples: Usability, Reliability, Performance, Security, Scalability,
 Portability, Maintainability
 - Select the sutiable ones, for each one write the details
 - o Be realistic

	Details	
Performance	Withdraw operation will be done within 20 second	
Scalability	System should be able to support up to 1000 simultaneous game players.	

System Models

CS251: Phase 1 - Team Name

Project: <Project Name>



Software Requirements Specifications

Use Case Model

Using UML, write the use case model expressing the system actors & operations

Use Case Tables

- Using below table template, <u>for each</u> requirement write a use case table that shows user/system interaction
 - o If one requirement is so big, you could divide it to more than table
 - o If some requirements are not major, you could plugin them in other senario
 - E.g. you may not do Log In Usecase table as it is simple functionality
- Flow of events should be very detailed

Use Case ID:		
Use Case Name:		
Actors:		
Pre-conditions:		
Post-conditions:		
Flow of events:	User Action	System Action
	1- User Enter Card and Password.	
		2- System Verify user data
	3- User Select Vodafone from the list	
		4- System retrieves Vodafone bills
	and so on	
Exceptions:	User Action	System Action
	1- User Enter Card and Password.	
		2- Card is invalid and unreadable.
		3- System rejects cars.

CS251: Phase 1 - Team Name

Project: <Project Name>



Software Requirements Specifications

Includes:	
Notes and Issues:	

Ownership Report

- Remove the following notes and any red notes
- For every item in this document, write the owners. If someone is owner of something, s/he understands it 100%
- Team leader must verify the table with the team members.

Item	Owners

Policy Regarding Plagiarism:

Students have collective ownership and responsibility of their project. Any violation of academic honesty will have severe consequences and punishment for ALL team members.

- 1. تشجع الكلية على مناقشة الأفكار و تبادل المعلومات و مناقشات الطلاب حيث يعتبر هذا جوهريا لعملية تعليمية سليمة
 - 2. ساعد زملاءك على قدر ما تستطيع و حل لهم مشاكلهم في الكود و لكن تبادل الحلول غير مُقبول و يعتبر غشا
 - 3. أي حل يتشابه مع أي حل آخر بدرجة تقطع بأنهما منقولان من نفس المصدر سيعتبر أن صاحبيهما قد قاما بالغش.
 - 4. قد توجد على النت برامج مشابهة لما نكتبه هنا أي نسخ من على النت يعتبر غشا يحاسب عليه صاحبه.
 - 5. إذا لم تكن متأكدا أن فعلا ما يعد غشا فلتسأل المعيد أو أستاذ المادة.
 - 6. في حالة ثبوت الغش سيأخذ الطالب سالب درجة المسألة ، و في حالة تكرار الغش سيرسب الطالب في المقرر.