Software Requirements Specification

Version 1.0

Real-time Cupboard Design

Team 2

Member Name	Member Roll #	Primary Responsibility
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Important Note: This template has been adapted from the SRS Template by Karl E. Wiegers which is available for download at *http://www.processimpact.com/*.

Revision History

Name(s)	Date	Reason(s) For Change(s)	Version

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1. **Introduction**

Product

A desktop based application in which clients can make cupboard designs i.e. interior and exterior. Drawers and portions or shelves are included in interior and knobs are included in exterior design.

Scope

The scope of the project is only limited to one manufacturer i.e. clients can make designs and send an email of those images to the manufacturer who will then actually make cupboards accordingly and will deliver back.

Business Goals

Business goals includes giving relaxation to the clients so that they don't have to always come to the shop and have a proper conversation with the manufacturer but can make or choose designs while sitting in home. Also, since customers are having a portable system of getting cupboards ready so they will prefer this desktop application manufacturer over the ones where they have to visit and tell every detail in person so business of manufacturer having this application will grow.

Document Conventions

- – SM stands for Senior Manager.
- – DB stands for Database.
- – Citation format is APA.
- – All heading are in bold.

References

1. Bandakkanavar, R. (2018). Software Requirements Specification document with example - Krazytech. Retrieved from https://krazytech.com/projects/sample-software-requirements-specificationsrs-report-airline-database

2.   Overall Description

Product Features

User will download this application and then make design of cupboard. After designing the whole cupboard he will set budget and delivery time. Then after he Is done, the application will send an email to the manufacturer with all images of cupboard, delivery date and budget of the customer. The manufacturer will then respond in email to the customer whether he has accepted his order, rejected or is at stall. Once he has accepted the order and delivered it, the order will be stored in the personal database(DB) of the user's application. So that he can have records of all the orders he has placed till date.

User Classes and Characteristics

There will be just one user i.e. customer because manufacturer will just receive an email from which he has to decide whether to accept it or reject it or put it on hold. So only customer will use this application.

Customer

There will be no sign-up option because manufacturer doesn't care who is his customer, so any customer who has this application will open the application and start making cupboard designs, can then send email and will receive response in the email.

Operating Environment

Hardware requirements

A working PC, laptop and a working internet.

Software Environment

JRE(Java Runtime Environment)

No software requirements and operating system version restrictions.

Design and Implementation Constraints

Hardware limitations: Since application is desktop based so customer should only be able to run it on his laptop or computer.

Interfaces to other Applications: Just email will be sent i.e. email feature that will be used will use Google's Gmail API so a working Gmail account is mandatory.

Language and Communication Protocols are that language used throughout should be English with technical and precise wording and measurements will b made in inches or in meters.

Security Considerations are that he email will be open to any kind of phishing or hacking but responsible users can avoid that by making contact to the manufacturer so they can confirm their order or can discard one if someone placed an order using their email.

Design Conventions: The desktop application's graphical user interface is as simple and meaningful as possible so any customer can use it easily.

Programming Standards: Java fx and swing library was used along with java's canvas api to draw objects.

Assumptions and Dependencies

The assumptions made are that:-

- *Each user will use it just for meaningful purpose and won't give other people's emails to create confusion and false orders.*

- *Each user will have a working gmail id where they can get response regarding their order i.e. the application will not handle the response.*

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- *There is only one manufacturer, so all orders will go to just one fixed person whose email will be predefined in the application.*

- *Since response will be given in email so the entire user's orders will be added to db instantly because there is no other way for the application to keep track of customer's accepted orders.*

3. Functional Requirements

Identifier	Design cupboard in the application
Purpose	Customer can draw and design the cupboard according to his choice.
Priority	High
Actors	User
Pre-conditions	Application should be opened.
Post-conditions	User will know the cupboard design.

	Typical Course of Action	
S#	**Actor Action**	**System Response**
1	User clicks on application to open	system will open it
2	User will draw the design.	System will show the design.
3	User will save the design.	System will ask the design name to be saved.
4	User will name the design.	System will save the design.

	Alternate Course of Action	
S#	**Actor Action**	**System Response**
1	User wants to edit the design.	System will show the design.
…	UC-1	

Table 1: UC-1

3.2

Identifier	Analyze payment.
Purpose	User can analyze payment details in the application.
Priority	High
Actors	User
Pre-conditions	Design is built and saved.
Post-conditions	User will know the amount to pay.

Typical Course of Action		
S#	**Actor Action**	**System Response**
1	User clicks on the payment analysis tab.	system will open the amount details window
2	User will see the details and proceed.	System will show the payment methods.
3	User will provide the payment method and details.	System will accept the payment.

Alternate Course of Action		
S#	**Actor Action**	**System Response**
1		
2		
3		
…		

3.3

Identifier	Place Order
Purpose	Users will order their custom design via Email.
Priority	High
Actors	System and User
Pre-conditions	Design is built and saved.
Post-conditions	Order placed and now further correspondence will be done with manufacturer directly.

Typical Course of Action	

S#	Actor Action	System Response
1	User clicks on the payment analysis tab.	System will open the amount details window
2	User clicks on Order Now button	System opens order window
3	User enters all personal details required to place order	System sends all the entered details along with pictures of the design to the manufacturer via Email

4. Nonfunctional Requirements

Performance Requirements

- System shall send order form to Manufacturer within 1 minute given that user has stable internet connection.

Security Requirements

Authentication

The user must have a valid email address in order for him/her to send or place order to the manufacturer..

5. Other Requirements

Database used will be MySQL database for allowing multiple manufacturers list to order from.

Appendix A: Glossary

JavaFX

JavaFX is a set of graphics and media packages that enables developers to design, create, test, debug, and deploy rich client applications that operate consistently across diverse platforms. JavaFX have FXML and Scene builder, built-in UI controls and CSS and Canvas API for creating applications. The cross-platform compatibility enables a consistent runtime experience for JavaFX applications developers and users.
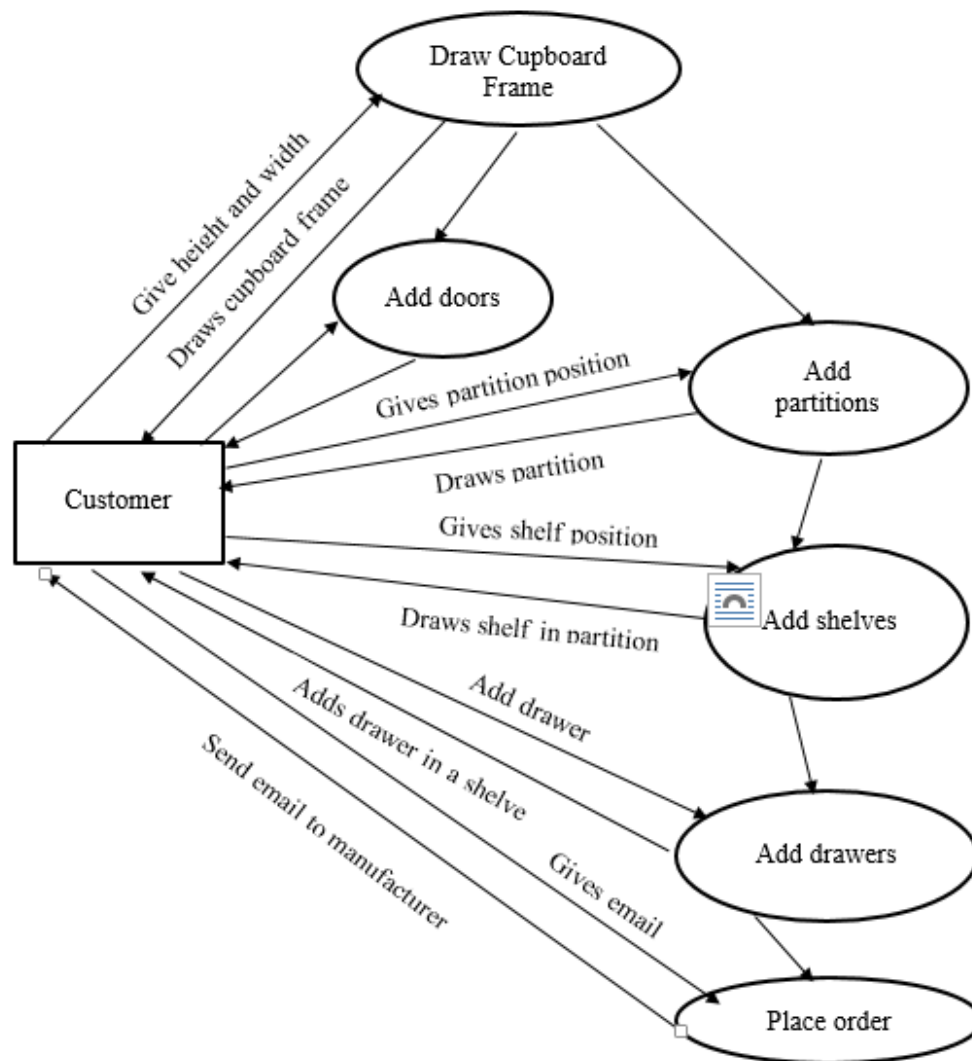
Appendix B: Analysis Models

Level 0 DFD:
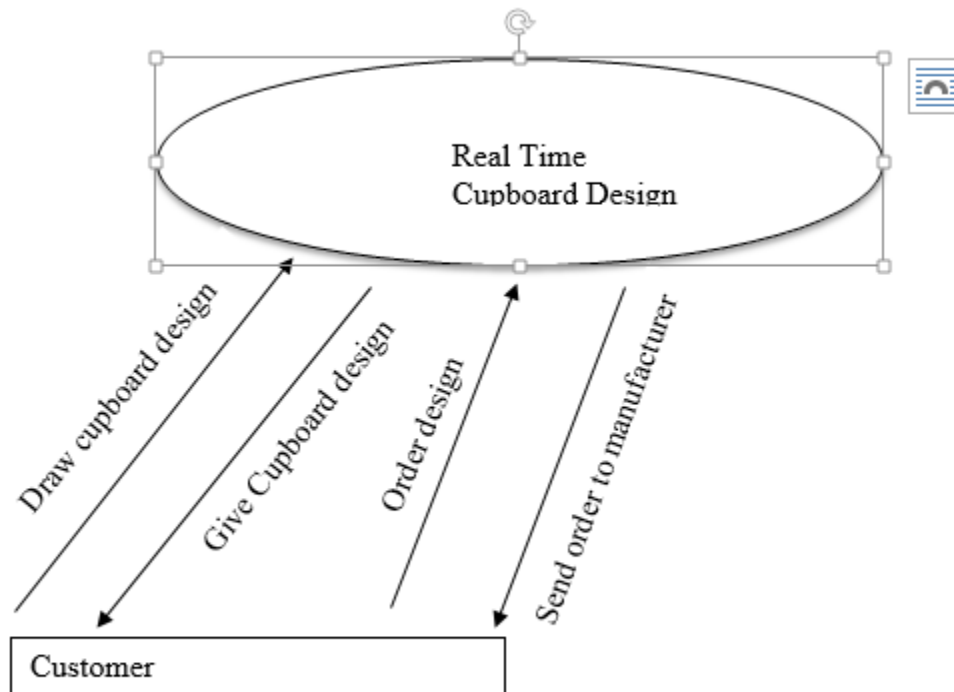
Level 1 DFD:

Appendix C: IV & V Report

IV & V Resource

Name   Roll #   Signature

S#	Defect Description	Origin Stage	Status	Fix Time	
				Hours	**Minutes**
1	Spelling mistakes throughout	Phase 1	Partially fixed		30
2	Use case diagram had missing sections	Phase 1	Fixed	1	0
3	Nonfunctional requirements had ambiguity	Phase 1	Fixed	1	0

Table 3: List of non-trivial defects

Appendix D: Risk Report

[1]Project Risks

Risk Description	Impact (1 – 10)	Probability (0 – 1)	[2]Risk Exposure	Weeks Active	Mitigation Strategy
Time Management risk	10	0.9	9.0	8	assigning deadlines to every team member and ever module of project
work schedule risk	8	0.8	6.4	1	Pre plan the flow of tasks. decide which tasks could be performed in parallel and which are dependent on other tasks.
Quality maintenance risk	7	0.5	3.5	8	checking the quality of every document and module in parallel with development
Design risk	5	0.35	1.75	3	meeting the client and discuss the design and proceed accordingly
Usability risk	5	0.3	1.5	1	designer will work to make user friendly design which is both efficient and easy to interact with
integration risk	4	2.5	1	8	following standard

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1   Risks should be sorted in descending order of risk exposure.

2   Risk Exposure = Risk Impact x Risk Probability

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					conventions to make module integration easy

Appendix E: Activity Timesheet

Activity	Time	
	Hours	**Minutes**
Requirements Engineering	14	0
Analysis and Design		
Implementation		
Testing		
Deployment		
Project Management		
IV & V	2	30

Project Manager

Muhammad Mujahid   15L-4105

Name   Roll #   Signature