

Automated Computer Shopping System

(ACSS)

Assignment 1

ICT 1123 System Analysis Design and Usability

by

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Declaration

“We certify that this project does not incorporate without acknowledgement, Any material previously submitted for an assignment in any institution and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text”

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Preamble

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1. Introduction

1.1. Introduction to the organization

Buykorea is a computer item and service providing company that is situated in Nugegoda, Sri Lanka. It provides all brand new and second hand items and services like computer repairing, computer software diagnose and computer assembly.

1.2. Current process of the organization

Currently this organization is running on a full manual system. Owners are willing to upgrade their system into more automated systems in the future.

1.3. Statement of the Problem

Because of the company's manual system, the customers only can access the services by coming to the store and requesting an order. This will consume the customer's time and money and the company's functionalities will be slower. The company's productivity is slower and it can affect the company's wellbeing.

1.4. Aims and Objectives

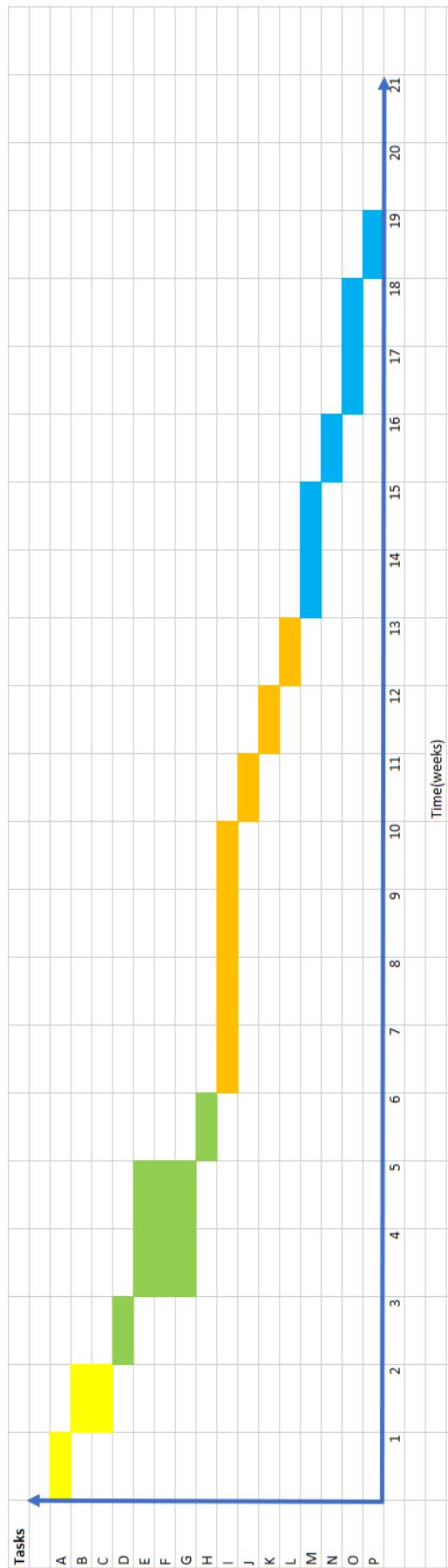
Project Automated Computer Shopping System(ACSS) is built upon the idea to fully or partially automate the processes that are handled by the previously mentioned company. Our aim is to reduce the human entity or the live-ware that is interacted with the company system.

1.5. Scope of the project

We are proposing a fully automated web based system that users can interact without any reception involved. With this system users will be allowed to order items and services, order system assemblies and order computer repairs.

1.6. Gantt Chart

Description	Task	Must Follow	Time(weeks)
Define Project scope	A	None	1
Conduct User Research	B	A	1
Gathering Requirements	C	A	1
High Level Design	D	B, C	1
Design database	E	D	2
Design Software	F	D	2
Design User Interface	G	D	2
Finalice Design	H	E, F, G	1
Develop System Modules	I	H	4
Integrate System Modules	J	I	1
Preform Initial Testing	K	J	1
Complete Development	L	K	1
Perform System Testing	M	L	2
Document Found Issues	N	M	1
Correct Found Issues	O	N	2
Finalize System	P	O	1
Total Weeks			19



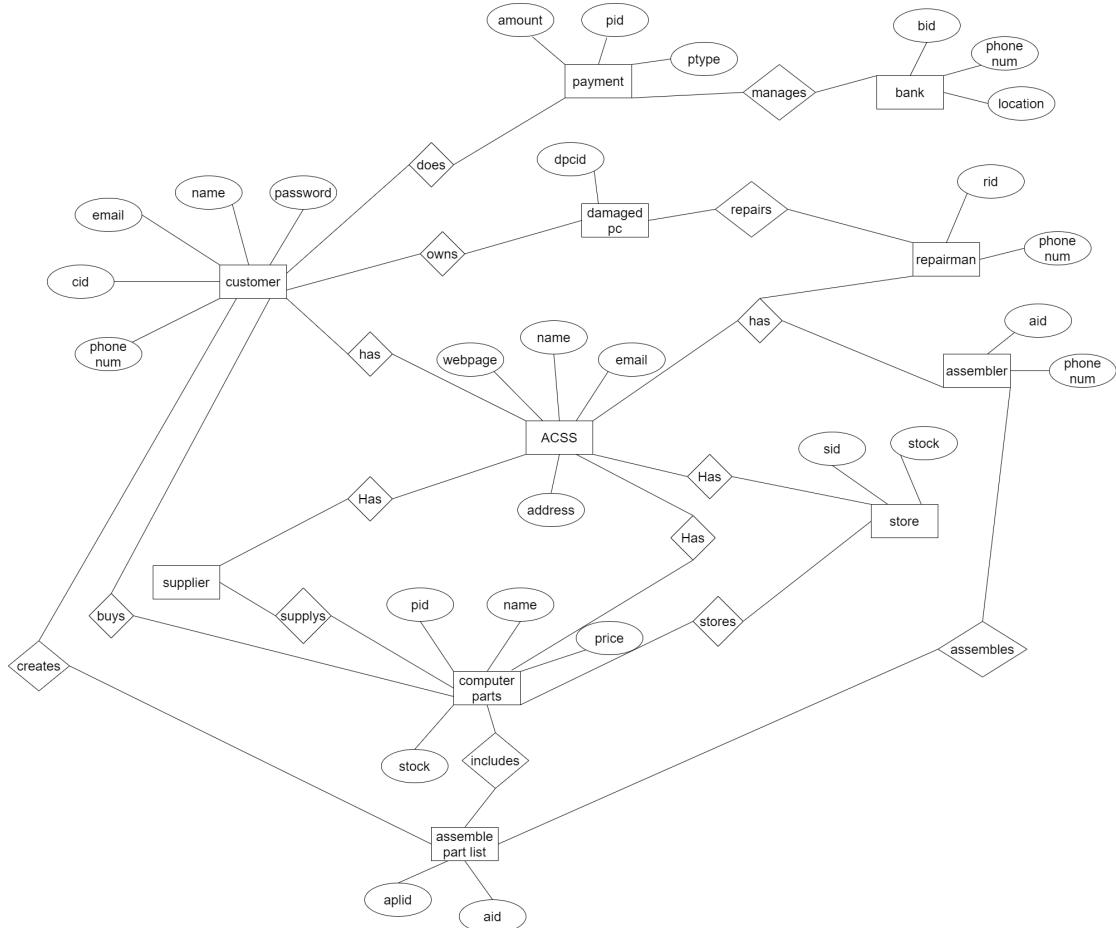
2. System Analysis & Design

2.1. Context diagram

2.2. Level 0 DFD

2.3. Level 1 DFD

2.4. ER diagram



2.5. Software Requirement Specification

ID	Description
Application	
1	Shall be able to register users
2	Shall be able to authenticate users

3	Shall be able to display services
4	Shall be able to display product information
5	Shall be able to read the order
6	Shall be able to read items inventory
7	Shall be able to lookup if some items miss from order and report that
8	Shall be able to read discounts for the items
9	Shall be able to process the bill
10	Shall be able to process the payment
User	
11	Shall be able to navigate through services
12	Shall be able to login to system
13	Shall be able to place a order or service
Staff	
14	Shall be able to login
15	Shall be able to lookup orders
16	Shall be able to update inventory
17	Shall be able to check bill

3. Proposed System Design

3.1. Proposed System Interfaces

3.2. Report Designs

Main Page : The main page of the site has the title of our system as BuyKorea ACSS(Automated Computer Shopping System). And it presents four choices as Pre-Built Systems, Price list, Pc Repair and Warranty claim & Computer Assembly. When a user selects Pre-Built Systems, the user will be forwarded to a collection of pre-built systems. In the Price List option, users will be forwarded to an updated price list of our newest and greatest computer items. When users select the Pc Repair & Warranty claim user will be forwarded to the page to claim their warranties and get their pc repair bill. In the computer assembly option users will get a list of parts to select as they prefer for their build.

Login Page : In this page users will get the option to login to save their builds and invoices. If they do not have an account they will need to create an account. That Option also provided here.

Price List Page : As described in the previous page, This Page will include all the items and some details about them. And item price. If users want they can click on the item and get more details about a specific item.

Pre-Built Systems Page - In this page users will be prompted with specific pre-built systems to select as they prefer. Basically our pre-built systems will be in three types.

Computer Assembly Page - In this page the user will be served with the ability to choose the parts for his system as they prefer. Main computer parts like Processor, Ram, GPU and Motherboard will be

prompt to choose. Other parts will be automatically chosen and sent to the assembler that you choose.

Select Assembler Page : In this page users will be prompted to choose the assembler that they want to assemble their pc build. As soon as the user selects the assembler, he will receive a receipt with a barcode and estimated assembly time. Either user can wait in the waiting area and he can do the whole process at another place and pick up his build as soon as it is completed.

Pc Repair and Warranty Claim - This is a manual process. In this step the user must go to the shop premises and verify his warranty card if it still remains.

Conclusion

References

Appendices