 **COMSATS University Islamabad (CUI)**

**Project Proposal**

for

 “**Computer Hardware Store Management System”**

**Version 1.0**

***By***

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# Abstract

The project entitled “Computer Hardware Management System” is a platform designed to keep track of computer hardware and its components. The project is so designed as to ease the workload of computer shop professionals. The project aimed to distinguish one event from the other and manage records with ease. It will help the user to insert, delete any computer hardware and its component. The system will provide the user-friendly user interface to view the desired results as per his needs. It will automate the process of manually keeping the record to the subject of maintaining the stock.

# Introduction

The process of manually keeping the record is somehow difficult and time consuming. Searching and getting the specific item requires long time and quite boring. Moreover, due to in unorganized form user finds it difficult to retrieve the data. So, our application “Computer Hardware Management System” will provide the platform where user can keep track of records of computers and their individual components which include motherboard, Graphics Processing Unit, Processors and RAM etc. This system will store the data in the form of tables at the backend to uniquely identify different objects. The system will provide the user with the authority to add or remove or perform various other operations with the stored data. The user will also be able to update the data and reveal the information already stored in the database. The system will help the user to perform the tasks as per his/her likings. It will help the user through the user interface to view the desired results as per his/her needs.

# Proposed System

This management system comprises of keeping the record of computers, laptop and their individual components. These components include motherboard, Graphics Processing Unit, Processors, Ram etc. Everything needs to be organized so the user doesn’t feel it difficult to retrieve the data.

This system provide convenience to the user because he/she has the authority to add and remove or perform various other operations with the stored data. It is going to be a consoled-based system with a user-friendly user interface and a database attached to help the user perform various tasks and operations as per his/her likings. This helps the user to distinguish one event from the other and manage records with ease. To manage the system **Oracle SQL Developer** database will be used and the Graphical User Interface (**GUI**) will be implemented by Java.

# Advantages and Benefits of the system

* Project shall save and track the records
* User can view details of hardware parts without going anywhere.
* It is convenient for users as this system shall provide market price and description price of components.
* User can view different categories of product of different brands at a single place.
* The system saves time, efforts and cost.

# Scope

The user needs to store data efficiently and above all that he/she needs to keep it in such a way that will facilitate in the future. Computer hardware management system will track the record of computer related hardware and its components. This system stores and manages the data which the user keens to keep. This management system will store data in the form of tables at the back-end to uniquely identify different objects.

It will help the user to insert or delete any computer hardware or its component. He/ She can even update the data and reveal the information already stored in the database to the user interface.In database terms,it will perform all the basic operations with ***CRUD***(create, read, update, delete) and to interact with other databases. It helps the user through the user interface to view the desired results as per his/her needs.

Without a user account, data cannot be accessed. No Artificial Intelligence is used in the system, so the user has to manually keep the track of all the activities involving data retrieval. The user will not be able to track the time when data is retrieved. Without internet connection, data cannot be updated

# Module

## Module 1 - Admin Profile

Admin will be able to login to the system. Admin has the prime authority to take any action he/she wants. He can add, remove, update and delete items and managers, and can keep a track of the sales and salaries

## Module 2 - Manager Profile

Manager will be able to login to the system. His/her powers are inferior to the admin. A manager can add, remove, update and delete items and can keep a track of the sales and salaries.

## Module 3 - Repair

A record will be set for customers who have repaired there hardware. It will keep a track of item names, quantities and price for repairing.

## Module 4 - Buy

This module will keep a track of all the equipment or hardware related components bought by the user. It will include item or component name, manufacturer, price, quantity and by whom it was bought.

## Module 5 - Sell

It will keep a track of all the equipment or hardware related components sold by the user. It will include item or component name, manufacturer, price, quantity and to whom it was sold.

# System Limitations/Constraints

* **Limited Time Frame:** Time frame for the project is limited.
* **Quality:** Quality of project is relatively low and can’t compete the professional projects in market.
* **No Human Interaction:** As this system doesn’t involve any human interaction any system failure may alter the record and pricing increasing chances of security breach.

# Tools and Technologies

Following are the tools and technologies that will be used in proposed project.

Table 1 Tools and Technologies for Proposed Project

|  |  |  |  |
| --- | --- | --- | --- |
| **Tools**  **And**  **Technologies** | **Tools** | **Version** | **Rationale** |
| MS Visual Studio | 2020 | IDE |
| Adobe Illustrator | 2021 | Design Work |
| MS Word | 2021 | Documentation |
| **Technology** | **Version** | **Rationale** |
| Java | JDK. 15.0 | Programming language |
| SQL | 2019 | Query Language |
| Oracle | 19c | Data Base |

# Conclusion

The purpose of this application is to automate the process of manually keeping the record to the subject of maintaining the stock. It will help the users to retrieve the data easily at any time. It is going to be a consoled-based system with a user-friendly user interface and a database attached to help the user perform various tasks and operations as per his/her likings.

# References

*Computer Hardware store management system* . (2022, 4 15). Retrieved from KashiPara: https://www.kashipara.com/project/idea/vb-net/computer-hardware-store-management-system\_2057.html

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