UNIVERSITY OF SCIENCE ANDTECHNOLOGY OF HANOI ADVANCED PROGRAMMING WITHPYTHON PROJECT REPORT

Furniture Store Management System

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1 Introduction This is group 13’s project report which makes up 50% of our final results of the\Advanced programming with Python" course. This course, including the most funda-mental parts that we should know about Python language namely: OOP, Modules andPackages. . . ,was led by the enthusiasm of Dr. Tran Giang Son.  
 In this report, we will explain and present our "Furniture Store Management System"  
program in more detail. What your program does ? Why we need to use your program  
? How we created it ? Database schema, Python modules, classes, input, output, UI  
structure.

2 The importance of the store system and what wewish to improve

Furniture is the soul of a house; it gives a sense of fulfilling of needs.Types of furniture  
are of many designs and categories. It can be as small as a mouse to as gigantic as an  
elephant.The proper fitting at the right place is also a matter of concern while choosing the  
furniture.It should be taken care that size of the room and the size of furniture align with  
each other. Sometimes furniture is available prepared one can go and buy and order. On  
the other hand, sometimes we want some furniture which we want to customize according  
to a choice.  
 Further, he will be provided dates of completion of the order. Now admin analyzes  
the order and takes the according to that assigned amount of wood to it and no.He will  
decide the tools that need to be used in this system and provided to the staff.  
Of staffs to that order and description is forwarded to them such that they can  
start with the preparation of the furniture. As the order completes it is given to the user,  
and he can take that to his home.

3 What is the goal of the program? This program is the result of our team’s work. With the knowledge we have learned  
through the\Advanced programming with Python", we hope that:  
Our program helps users easily manage the store system. At the same time, it also  
helps users to control the store (store owner).  
The program has a simple interface, we are confident it will make it easier for users to  
do business.  
 Besides, it shows the use of python in creating managed programs and Python’s simple  
approach to programming institutes

4 The Program 4.1 Database schemaThe database below is our database system. It describes in detail the relationship  
between the components in the system and the characteristics of each element in the  
system.  
  
 4.1.1 Relationship between tables• Bill: it is shown on the user structure  
• Stock: it is shown on the user structure  
• Time: it connects to the Bill table  
• AddStock: it’s only linked to the Stock table  
• Product: it links to Bill and Stock tables  
 4.1.2 Tables’ functions• Bill: it includes: Time, Product Name, Price, Quantity, Total Bill of custumers.  
• Stock: it includes all information of new product.  
• Time: it provides information in the form of "dates" for the Bill and Stock tables.  
• AddStock: it is used to enter information of new products as they are entered into  
the store.  
• Product: It includes information of that product such as: price, quantity, name.  
  
 4.2 Python modules, classes and packagesHere are the Modules, classes and packages used in our program:  
-1 "db.connection" package: contains everything related to the database  
 • "funiturestoremanagentsystem.SQL" file: the database of the store in SQL file  
 • "FunitureStoreManagentSystem.py": a Python module that deals with  
the database. It has 3 classes:  
{ class Bill With the bill class, it contruct the component and the properties of each component like:productname, price, date, quantity;  
{ class Storage with Stock class, it helps the user to import a new product  
into the storeage. Also it helps users to know what products are in storage  
and their data.;  
{ class Connect: connects the database to the interface. By:  
connectObj =db.connect("FurnitureStoreManagement.db")  
cur = connectObj.cursor()

-2. "tkinter" package:it helps us to get the user interface as above.

-3. "tkcalendar": a Python module that provides information on transaction time as  
well as order entry on the user interface.

-4. "messagebox": This is a type of dialog used to display messages to the user and  
sometimes even to make selection requests to the user.

-5. "main.py": another Python module that is able to run the program  
  
5 UI structure 5.1 Bill:In those blanks, it helps staff manage bills. When you enter information in the  
corresponding boxes and press the bill button, the system will show that customer’s invoice  
in the lower left corner table. When you click the viewallsselling button, the system will  
show the sales history.  
 + Quantity: Users only need to enter the purchase quantity of that customer in the blank  
box corresponding to the product name next to it.

+ Bill: It shows the quantity, product name, and price of that product. What the customer  
bought along with the total amount to be paid and the time it took for the transaction  
to take place.  
 + ViewAllSelling: The system will give the store’s transaction history along with the transaction date.  
  
 5.2 StorageIt is a user interface structure that helps users manage inventory, importand export goods.• Add : the user enters the information of the new product in each of the same blank  
boxes.  
• View Stock: The system will show information of the products that the user has  
entered.  
  
6 Advantages and disadvantages 6.1 AdvantagesIf your store only sells a fixed number of products, you need an easy-to-use, low-complexity  
management software, then you can consider using our program.With advantages:  
+ This program can run without error.  
+ It’s pretty simple with clear layouts.  
+ It is suitable for small stores with a small amount of information.  
+ It can closely monitor the store with the display of transaction.  
+ Information right on the user screen as well as the history that is difficult to delete.  
 6.2 DisadvantagesBut our program is not really ready for large enterprises with a large number of  
transactions, goods and customers because the operation also has limitations that are:  
+ It can only manage few products.  
+ It cannot manage the information of customers who have purchased the product.  
+ It cannot calculate the store’s profit for the day and month.  
+ About the price part of each product, it’s already defaulted in the code.

7 ConclusionAbove is our report on "Furniture Store Management System". Our program has  
many shortcomings. Looking forward to your help to complete and learn more about this  
course. Especially the addition of products and information of products in stock.