Explanation of the solution:

1. Create a system that records the detail of the item, the system then stores that information in a database. This will ensure that no records will be lost because it is safe in the database, there is no longer any book that can be lost or damaged. This will also make it easier for David to look up an item he simply needs to enter a keyword, like the items name, and the system will search for the item and display the details. David could also search by the collection category or the sub-category.
2. The system keeps track of how long the item is on display in the store when the owner of the item does not want to display the item anymore or the item is sold, David simply searches for the item in the system and it will show the rent due, that way David can contact the owner and get his rent. The owner can also choose to display the item for a month or a year this is then recorded on the system along with the item’s details and the system will let David know that rent on the item is due when a month or year has passed and the item is still not sold, if however the owner chooses to display the item for a month or year and the item is sold before the end of the month or year the system will calculate the rent due according to the amount of days that it was on display.
3. When an item is sold David enters the keyword for that specific item and the system will display it, David can then mark the item as sold, and the system stores it in the sold category. The system then calculates the commission David made on each item; the system also displays the total commission from all the items sold in a day. David can also see reports from sales in the past. At the end of the day David would only have to go to the sold category to see the details of the items sold and the original owner’s details. The system could also be programmed to automatically sent an email to the original owner of the item that the item was sold along with the rent due on the item and the total amount the owner will get after David’s commission is subtracted.

How the system will work:

When David receives an item, the owner wants displayed in his store David adds this item on the system by entering the details of the items, namely the category, sub-category, name of the item, etc. the system saves this detail to the systems database under the appropriate category. Along with the detail of the item David also enters the owner’s details along with the period the owner wants the item displayed for. The system then creates a unique code for that item, this can then be cut on the item as a barcode.

When a customer is looking for an item David can search under the category or sub-category for the item or simply type in the name of the item, the system will then display if the item is available or if it is sold. When an item is sold David enters the unique code and mark the item as sold this will store the information allocated to the item in the sold category of the system. When an item is marked as sold the system will calculate the rent due based on the number of days the item was on display and will also calculate the 25% commission David gets for selling the item. The system will then send an email to the original owner of the item that his item has been sold along with an invoice of the rent due which he can then pay into Davids’s bank account.