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PROJECT PROPOSAL TITLE:

Library Membership Control System

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**1. INTRODUCTION**

**1.1 Library’s background**

Knowledge Planet Library is a library of “Knowledge Planet Academy”, a private learning center founded in the year 2004 and is located in Yangon, Myanmar. The library was officially opened in the year 2005 for the purpose of getting more references, knowledge and information for the students of this school. The library was rather a small one when it was founded. Now, over the past 9 years, the size of the library is getting bigger because the library’s officials have been buying many new kinds of books to become a better library and the students’ knowledge center point. And the increasing number of members makes the staffs difficult to handle the records manually.

**1.2 Current system**

Since the library was founded, the staffs have been doing all the works manually. That is, the librarians have to record everyday transactions manually on the paper- based system. He or she has to write down every detail in the books daily. It’s really a time consuming task and data inconsistency is also very high. Below are the problems that current system is facing with.

**1.3 Problems background**

**Slow Retrieval of Data** - The information is stored in different parts of the site and it may take a long time to retrieve or update the data. Sometimes, it can take up to 20 or 30 minutes finding the relevant information.

**Paper Wastage** - Much paper is waste due to the number of records daily and number of library members. Duplication of data can be occurred by repeating the same thing over and over.

**Unproductive use of storage space** - Paper takes up a massive amount of room in the site.

**Poor Customer Service** - Sometimes, the information needed may be unavailable.

**No reliable database system** - The records on paper can be lost or damaged at any time. Since there is no backup for the data, the lost or damaged documents cannot be regained at all.

**No security system** – Writing on paper is totally lack of security system. Any unauthorized person may view, update or even the data can be stolen.

These are the weak points that the current system is facing with.

**1.3 Objectives**

The main purpose of the new system is to handle all the problems that the old system is currently facing with. With the newly implemented system, the records can be easily created. There will be no duplication of data records because all the data records are controlled by a record key called ID. There is also an error checking method to detect the data type error (e.g. the record cannot be stored if the user types the alphabet character where a numeric value must be typed in). For retrieval of the records, it is much faster and easier than the previous system. Editing and deleting also can be easily and quickly performed. The records are to be stored in the security enabled database system which can store many lines of data records. There will be no store room at all to store the documents and no paper wastage at all. So, all the current problems will be solved with this single “Library Membership Control System”. The staff will only need to sit at the workstation just to perform all these tasks.

These are the advantages of the new “Library Membership Control System”.

**1.5 Record Database**

**Library Membership Control System**

**Main Menu**

1. Add New Member Record
2. Display Member Record
3. Search Member Record
4. Update Member Record
5. Delete Member Record
6. Exit
7. **Add New Member Record**
   * Enter Member ID
   * Enter Name
   * Enter IC No.
   * Enter Gender
   * Enter Phone
   * Enter Address
   * Enter Registration Date
   * Enter Expiry Date
8. **Display Member Record**
   * Display Member ID
   * Display Name
   * Display IC No.
   * Display Gender
   * Display Phone
   * Display Address
   * Display Registration Date
   * Display Expiry Date
9. **Search Member Record**
   * Search record using Member ID
10. **Update Member Record**
    * Update Name
    * Update IC No.
    * Update Gender
    * Update Phone
    * Update Address
    * Update Registration Date
    * Update Expiry Date
11. **Delete Member Record**
    * Delete record using Member ID
12. **Exit**
    * Exit from the program

**2. PROGRAM DESIGN**

**2.1 Flowcharts**

No

Start

End

Choice=0

Search Member

Display Menu

Choice=1

Add Member

Choice=2

Display Member

Choice=3

Choice=4

Update Member

Choice=5

Delete Member

Choice=6

Invalid Choice

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Choice=6

No

No

No

No

No

No

Accept Choice

Choice!=6

Add Member

Get details

Save details

Return

Open file

Close file

No

Display Member

Read file

Display record

Return

Open file

Not EOF

Yes

Update Member

Get temp-id

Open file

Search Member

Get temp-id

Open file

No

Return

Close file

Save record

Get new details

Yes

Yes

No

temp-id =mem-id

Read record

Not EOF

No

Display record

Read record

Yes

temp-id =mem-id

Yes

No

Return

Not EOF

Read record

No

Error

Yes

Delete Member

Open existing file

Display Error Message

Error

Yes

No

Yes

No

Return

Close all files

Rename files

Read existing file

Save to temp file

check=1

temp-id =mem-id

Not EOF

Read existing file

Display Error Message

Error

Yes

No

Open temp file

Get temp-id

No

Yes

**2.2 Input Screen Design**

**1. Add**

Member ID: 9999

Name: XXXXXXX

IC No: X9999999X

Gender: X

Phone: XXXXXXXX

Address: XXXXXXX

Registration Date: 99/99/9999

Expiry Date: 99/99/9999

**Menu**

1. Add
2. Display
3. Search
4. Update
5. Delete
6. Exit

**3. Search**

Search by Member ID: 9999

**Search**

Member ID: 9999

Name: XXXXXXX

IC No: X9999999X

Gender: X

Phone: XXXXXXXX

Address: XXXXXXX

Registration Date: 99/99/9999

Expiry Date: 99/99/9999

**2. Display**

Member ID: 9999

Name: XXXXXXX

IC No: X9999999X

Gender: X

Phone: XXXXXXXX

Address: XXXXXXX

Registration Date: 99/99/9999

Expiry Date: 99/99/9999

**4. Update**

Update by Member ID: 9999

**Update**

Member ID: 9999

Name: XXXXXXX

IC No: X9999999X

Gender: X

Phone: XXXXXXXX

Address: XXXXXXX

Registration Date: 99/99/9999

Expiry Date: 99/99/9999

**6. Exit**

End Program

**Delete**

Record is successfully deleted!

**5. Delete**

Search by Member ID: 9999

**Login**

User name: XXXXXXXX

Password: XXXXXXXX

**3. CONCLUSION**

Finally, the main purpose of the new system is to solve all the difficulties that the current manual system is facing with. And to let the library staffs to be more productive and be able to do all the daily tasks more effectively. Ensuring the new system can enhance the staffs' work skills and can overcome all the current problems.

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