



GROUP ASSIGNMENT

TECHNOLOGY PARK MALAYSIA

AAPP008-4-2-VBDN

VISUAL BASIC .NET

UCDF1405ICT(SE)

HAND OUT DATE: 7 SEPTEMBER 2015

HAND IN DATE: 06 NOVEMBER 2015

WEIGHTAGE: 70%

INSTRUCTIONS TO CANDIDATES:

- 1 Students are advised to underpin their answers with the use of references (cited using the Harvard Name System of Referencing).**
- 2 Late submission will be awarded zero (0) unless Extenuating Circumstances (EC) are upheld.**
- 3 Cases of plagiarism will be penalised.**
- 4 The assignment should be bound in an appropriate style (comb bound or stapled).**

Where the assignment should be submitted in both hardcopy and softcopy, the softcopy of the written assignment and source code (where appropriate) should be on a CD in an envelope / CD cover and attached to the hardcopy.



VISUAL BASIC .NET

AAPP008-4-2-VBDN

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1. Introduction

Imperial Golf Club Malaysia has always been one of the most exclusive clubs in Kuala Lumpur. We provide the best experience to each and every one of our customers when they play golf here. The club has an outstanding environment for golfers to enjoy their stay here, the experience can only improve as we progress over the time.

As our golf club members increase, we are required to develop a system to manage and keep track of everyone's details. The system would enable us to add, remove, update and search for member's profile. All of the members' information would be saved inside a database. Each member's type of membership could also be seen. Their payment entries and transactions will be recorded as well. Reports will be created regularly by the system for reference.

The new system will be capable of handling a large amount of customer's personal information, providing a simpler experience for the employees to manage our valued customers' personal info at the end of the day.

2. Input Screen Design

2.1 Login Page

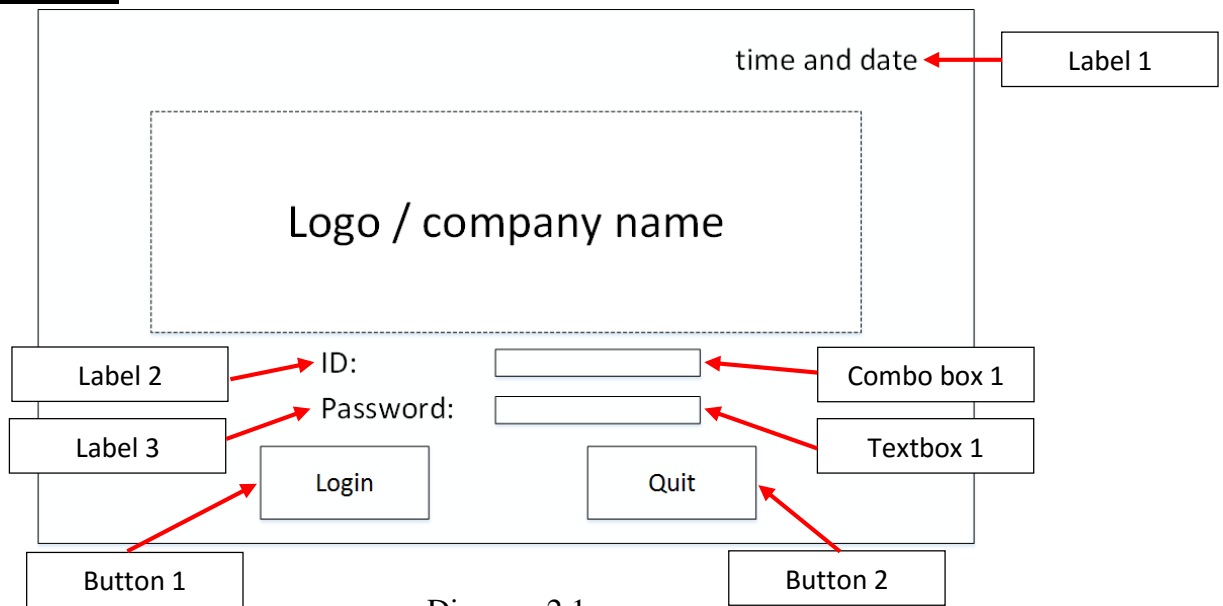


Diagram 2.1

- Label 1 - Show time and date
- Label 2 - Golf Club Membership Management System user
- Label 3 - Golf Club Membership Management System user's password
- Button 1 - Confirm user and password then login to system
- Button 2 - Close system
- Combo box 1 - Select user
- Textbox 1 - Key-in user's password

2.2 Main Page

Diagram 2.2 shows the Main Page interface with the following components and callouts:

- Labels:** 1 (User), 2 (Role), 13 (Role for charge), 19 (Time and date), 25 (Time and date).
- Textboxes:** 4 (Member ID), 5 (First Name), 6 (Last Name), 7 (Membership ID), 8 (Search for MemberID), 10 (ContactNumber), 11 (E-mail Address), 12 (Status).
- Combo boxes:** 7 (Membership ID), 12 (Status).
- Buttons:** 3 (logout), 9 (Search), 14 (Save/ update), 15 (Cancel), 16 (Add New Member), 17 (<<), 18 (<), 19 (*/*), 20 (>), 21 (>>), 22 (Edit Member's Profile), 23 (Payment Info), 24 (Report), 25 (Remove Member).

Diagram 2.2

- | | | | |
|----|--|----|--------------------------------------|
| 1 | - Show user's name | 13 | - Show User's name who in charge |
| 2 | - Show user's role | 14 | - Save or update |
| 3 | - Logout to login page | 15 | - Cancel |
| 4 | - Member's ID | 16 | - Add member |
| 5 | - Member's first name | 17 | - Show first member's information |
| 6 | - Member's last name | 18 | - Show pervious member's information |
| 7 | - Membership ID | 19 | - Show current member / total member |
| 8 | - Key-in member's ID for search | 20 | - Show next member's information |
| 9 | - Press after key-in textbox 8 then search | 21 | - Show last member's information |
| 10 | - Member's contact number | 22 | - Edit current member's detail |
| 11 | - Member's E-mail address | 23 | - Show payment form |
| 12 | - Member's status | 24 | - Show report form |
| | | 25 | - Show time and date |

2.3 Payment

Diagram 2.3 shows a payment form with the following fields and controls:

- 1: Time and date (Label)
- 2: Payment ID: PM (Textbox)
- 3: Member ID: GCM (Textbox)
- 4: Membership ID: (Textbox)
- 5: Date of Entry: (Textbox)
- 6: Logged By: (Label)
- 7: Role (Label)
- 8: Description: (Textbox)
- 9: Amount Due: (Textbox)
- 10: Amount Paid: (Textbox)
- 11: Payment Date: (Textbox)
- 12: ** (Label)
- 13: *Inclusive GST (Label)
- 14: << (Button)
- 15: < (Button)
- 16: > (Button)
- 17: >> (Button)
- 18: Cancel (Button)
- 19: Edit (Button)
- 20: Add (Button)
- 21: Delete (Button)
- 22: Save (Button)

Legend:

- Label = 1, 6, 10, 20
- Textbox = 2, 3, 5, 8, 9, 21
- Combo box = 4, 7
- Button = 11, 12, 13, 14, 15, 16, 17, 18, 19

Diagram 2.3

- | | | | |
|----|--------------------------------|----|--------------------------------------|
| 1 | - Show time and date | 11 | - Cancel payment |
| 2 | - Show payment ID | 12 | - Save or update |
| 3 | - Show member's ID | 13 | - Delete current payment record |
| 4 | - Show membership ID | 14 | - Add new payment record |
| 5 | - Show date of entry | 15 | - Edit current payment record |
| 6 | - Show user's role | 16 | - First payment of that member |
| 7 | - Show what kind of payment | 17 | - First payment of that member |
| 8 | - Show amount due | 18 | - First payment of that member |
| 9 | - Show amount paid | 19 | - First payment of that member |
| 10 | - Notice payment inclusive GST | 20 | - Show current member / total member |
| | | 21 | - Show payment date |

2.4 Member report and payment report



Diagram 2.4

Button 1 - to search which member detail want to show

3. Output Design

3.1 Login Page

Golf Club Membership Management System

06-11-2015 11:59:27 AM

Imperial Golf Club Malaysia

ID:

Password:

Login Quit

Diagram 3.1

3.2 Main Page

Golf Club Membership Management System

ID: choongfoo Role: Administrator

Logout

Search for MemberID

05-11-2015 6:23:46 PM

Member ID: GCM 1000 Contact Number: +60 161234567

First Name: lee E-mail Address: jason@hotmail.com

Last Name: guang zhong Status: Activated

Membership ID: DLX In charge by: Administrator

1 / 3

Save Add New Member Edit Member's Profile Payment Info

Cancel Remove Member Report

Diagram 3.2

3.3 Payment

05-11-2015 11:17:28 AM

Payment ID: PM 1001

Member ID: GCM 1000

Membership ID: DLX

Date of Entry: 03-11-2015

Logged By: choongfoo

Description: Registration

Amount Due: 500

Amount Paid: 500

Payment Date: 03-11-2016

1 / 1 *Inclusive GST

<< < > >> Cancel

Edit Add Delete Save

Diagram 3.3

3.4 Member report and payment report

MemberReport

Member ID	First Name	Last Name	Membership ID	Contact Number	Email Address	Status	In Charge By
1001	Jason	chong	DLX	165824921	koafoo516@hotmail.com	Activated	Supervisor
1002	jackie	chang	NDLX	125053390	kafoo516@hotmail.com	Activated	Supervisor
1000	lee	guang zhong	DLX	161234567	jason@hotmail.com	Activated	Administrator

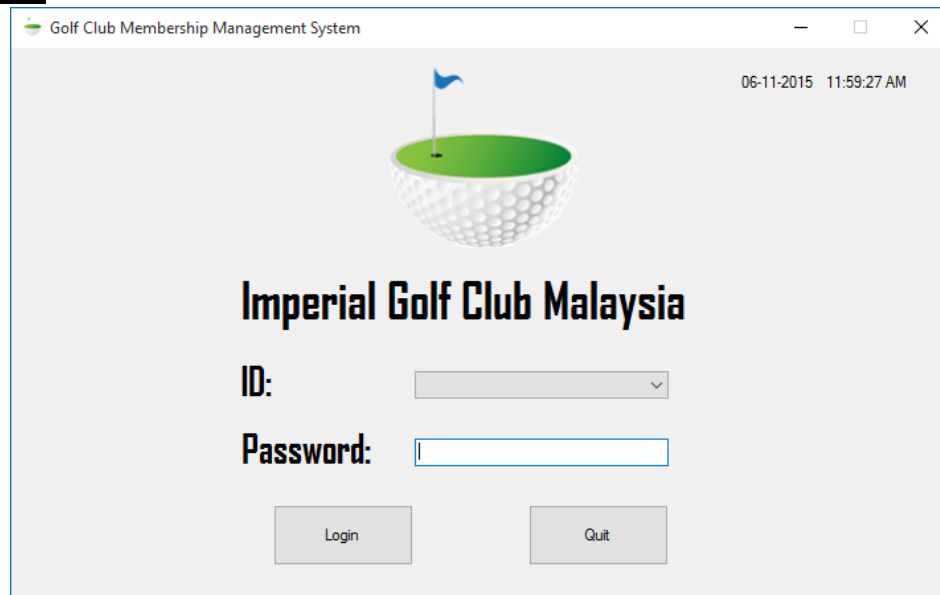
PaymentReport

Payment ID	Member ID	Membership ID	Date Of Entry	Logged By	Description	Amount Due	Amount Paid
1001	1000	DLX	03-11-2015	choongfoo	Registration	500	500

Diagram 3.4

4. User manual

4.1 Login Page

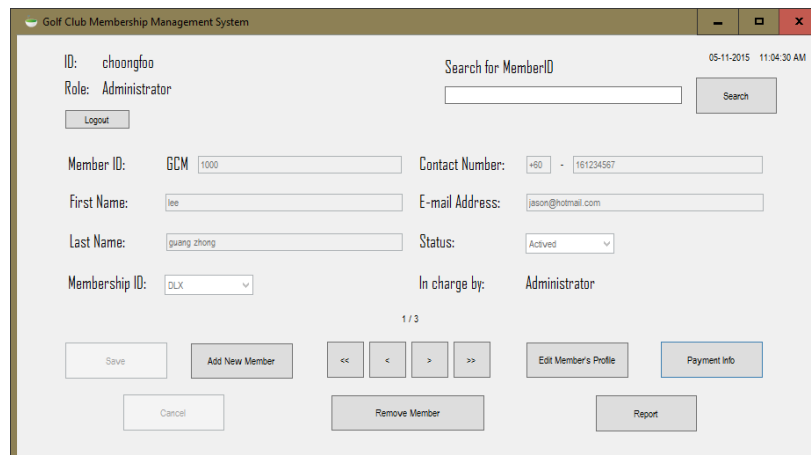


The screenshot shows a web browser window titled "Golf Club Membership Management System". The page features a header with a golf ball and flag icon, the date "06-11-2015", and the time "11:59:27 AM". The main heading is "Imperial Golf Club Malaysia". Below this, there are input fields for "ID:" and "Password:". At the bottom, there are two buttons: "Login" and "Quit".

Diagram 4.1

After user's ID and Password have been entered, press "Login" button to login. The credentials will be verified before the next form is opened. The user will not gain access to the next form if the credentials are incorrectly entered.

4.2 Main Page



The screenshot shows a web browser window titled "Golf Club Membership Management System". The page displays user information: "ID: choongfoo" and "Role: Administrator". There is a "Search for MemberID" field with a "Search" button. Below this, there are several input fields for member details: "Member ID: GCM 1000", "Contact Number: +60 161234567", "First Name: lee", "E-mail Address: jason@hotmail.com", "Last Name: guang zhong", "Status: Activated", and "Membership ID: DLX". There is also a field for "In charge by: Administrator". At the bottom, there are several buttons: "Save", "Add New Member", "Cancel", "Remove Member", "Report", "Edit Member's Profile", and "Payment Info".

Diagram 4.2

4.2.1 Add, remove and edit member's profile

1. All the above information will not be modified in any means by default. Press “Add New Member” button in order to add a new member’s profile record into the database. Information entered to create the new profile can only be saved through clicking on the “Save” button. As a result, the message “New member detail is added!” will be shown to inform the user the information has been saved as seen in Diagram (4.2.1). Only click on “Edit Member’s Profile” button to make any changes to the current profile displayed, shown in Diagram (4.2.2). In order to save the changes done to the current profile, just click on the “Update” button shown in Diagram (4.2.2). While editing, the user may wish to cancel it by clicking on the “Cancel” button to undo any changes made.

The screenshot displays the 'Golf Club Membership Management System' window. At the top, it shows the user's ID as 'choongfoo' and Role as 'Administrator'. A 'Logout' button is located below the role. On the right, there is a 'Search for MemberID' field with a 'Search' button. The date and time '05-11-2015 11:06:55 AM' are also displayed. The main form area contains fields for 'Member ID' (with a dropdown showing 'GCM' and a text input '1003'), 'Contact Number' (with a dropdown showing '+60' and a text input), 'First Name', 'Last Name', 'E-mail Address', 'Status' (with a dropdown), and 'Membership ID' (with a dropdown). Below these fields, it says 'In charge by: Administrator'. At the bottom, there are several buttons: 'Save', 'Add New Member', 'Cancel', 'Remove Member', 'Edit Member's Profile', and 'Payment Info'. A 'Report' button is also present. A pagination indicator '1 / 3' is visible above the bottom buttons.

Diagram 4.2.1

The screenshot displays the 'Golf Club Membership Management System' window. At the top, it shows the user's ID as 'choongfoo' and role as 'Administrator'. A search bar for 'MemberID' is present with a 'Search' button. The main area contains several input fields: 'Member ID' (GCM 1000), 'Contact Number' (+60 161234567), 'First Name' (lee), 'E-mail Address' (jason@hotmail.com), 'Last Name' (guang zhong), 'Status' (Activated), and 'Membership ID' (DLX). A 'Logout' button is located near the top left. At the bottom, there are buttons for 'Update', 'Add New Member', 'Edit Member's Profile', 'Payment Info', 'Cancel', 'Remove Member', and 'Report'. A pagination indicator '1 / 4' is centered below the main form area.

Diagram 4.2.2

2. The user will not be able to create, edit and save any profile if there is any blank information found in the text boxes. The user will be prompted to fill in the boxes correctly with an error message shown in Diagram (4.2.3) before progressing any further.

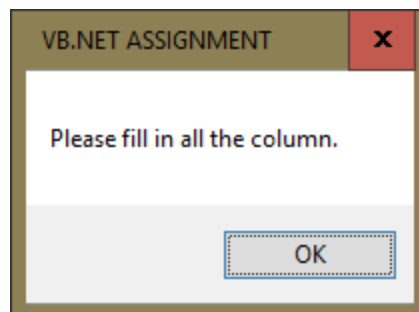


Diagram 4.2.3

3. The user may select and view on any particular member's record he or she wanted, using the navigation buttons below. Click on "Remove Member" button to remove the member's profile record from the database. The user will then be asked to confirm if the following deletion is actually wanted, shown in Diagram (4.2.4).

The screenshot shows a web application window titled "Golf Club Membership Management System". The interface includes a user profile section with "ID: choongfoo" and "Role: Administrator", a "Logout" button, and a "Search for MemberID" field with a "Search" button. The date and time "04-11-2015 3:20:24 PM" are displayed in the top right. The main form contains fields for "Member ID" (GCM 1000), "Contact Number" (+60 161234567), "First Name" (lee), "E-mail Address" (jason@hotmail.com), "Last Name" (guang zhong), "Status" (Activated), and "Membership ID" (DLX). The "In charge by" field is set to "Administrator". At the bottom, there are buttons for "Save", "Add New Member", "Cancel", and "Remove Member". A "1 / 4" indicator is present. A red-bordered dialog box titled "VB.NET ASSIGNMENT" is overlaid on the "Remove Member" button, asking "Confirm deletion" with "Yes" and "No" options.

Diagram 4.2.4

4.2.2 Navigation buttons, search and report

1. There are 4 buttons located at the bottom middle section of the form labelled as "<<", "<", ">" and ">>". Clicking on "<<" and ">>" will let the user to skip to the first and last record of the database in the form "<" and ">" are for the user to view or select the next and previous record of the database in the form. Refer to Diagram (4.2.5) below.

This diagram is a close-up of the navigation controls. It shows a "1 / 3" indicator at the top. Below it are four buttons: "<<", "<", ">", and ">>".

Diagram 4.2.5

2. User may be able to enter any member's ID number to search for on the top right corner of the form, as seen in Diagram (4.2.6). Just click on the "Search" button by the side.

Search for MemberID

04-11-2015 3:03:26 PM

Search

Diagram 4.2.6

3. As an overview, the user may click on "Report" button in the main form to take a look on the list of members and payments report. Example is shown in Diagram (4.2.7).

MemberReport

Search

1 of 1

Member ID	First Name	Last Name	Membershi p ID	Contact Number	Email Address	Status	In Charge By
1001	Jason	chong	DLX	165824921	koafoo516@hotmail.com	Activated	Supervisor
1002	jackie	chang	NDLX	125053390	koafoo516@hotmail.com	Activated	Supervisor
1000	lee	guang zhong	DLX	161234567	jason@hotmail.com	Activated	Administrator

PaymentReport

Search

1 of 1

Payment ID	Member ID	Membershi p ID	Date Of Entry	Logged By	Description	Amount Due	Amount Paid
1001	1000	DLX	03-11-2015	choongfoo	Registration	500	500

Diagram 4.2.7

4.3 Payment information

1. If the user wishes to check on the payment information of a member, just click on “Payment Info” button in the main form as seen on Diagram (4.2). The payment info form will then appear as seen in Diagram (4.2.8) below. The payment info shown only belongs to the current member selected on the main form. If the current member has made more than one payment, the payments will each be recorded in the payment info database shown in the form and ready to be browsed through the same set of navigation buttons. Edit, add and delete buttons are also present as well, refer to Diagram (4.2.8) below.

The screenshot shows a software window titled "Golf Club Membershi...". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area displays the following information:

- Payment ID: PM 1001
- Member ID: GCM 1000
- Membership ID: DLX (dropdown menu)
- Date of Entry: 03-11-2015
- Logged By: choongfoo
- Description: Registration (dropdown menu)
- Amount Due: 500
- Amount Paid: 500
- Payment Date: 03-11-2016

At the bottom of the form, there is a status bar showing "1 / 1" and "*Inclusive GST". Below this are navigation buttons: "<<", "<", ">", ">>", and "Cancel". At the very bottom are action buttons: "Edit", "Add", "Delete", and "Save".

Diagram 4.2.8

5. Critical Assessment

There are a few of strengths and weaknesses found in the new system too. The new system has brought a better security to safeguard customer's personal information. These information are only available to employees who have been granted access to the system. They must login to the system to view or make any changes to the information. The employees will know where to look for when they need certain information, which means all of the information is properly organised. The user interface is also very well presented. It is easy to understand where certain information should and should not go, every single detail is located at each of their respective locations.

The weaknesses we have found are as follow. There are no ways to recover deleted profiles or information, if they are accidentally removed. These information cannot be access from off-site locations, which may cause inconvenience. They are not synced across the internet, which also means changes can only be made locally. Information authenticity may also be a problem, as there are no means to verify if the information given to us by the customers are actually true.

Here are the solutions that we have prepared to be implemented in the future to address the aforementioned weaknesses. We would add the ability to let users undo deletion of records to avoid accidental removal and recover records or information immediately. We would then setup a server later on to provide cloud syncing to enable off-site access to the application and database. The last solution would require customers to provide their I/C number in the future, in order to let us verify if they are who they claimed to be. The database would be updated to let employees add customers' I/C number later on.

6. Bibliography

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