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**HCMC UNIVERSITY OF TECHNOLOGY AND EDUCATION**

**FACULTY FOR HIGH QUALITY TRAINING**

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**REPORT**

**“Create program to manage all readable document on computer”**

**(Subject: Windows Programming)**

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| --- | --- |
| **Student’s Name** | **Student’s ID** |
| **Phạm Quang Danh** | **18110004** |
| **Huỳnh Văn Hạnh** | **18110012** |

**SEMESTER 2 – YEAR: 2019-2020**

**LECTUNER: TS. Huỳnh Xuân Phụng**

**Ho Chi Minh City – 6/2020**

**SCORE**

|  |  |  |  |
| --- | --- | --- | --- |
| CRITERIA | CONTENT | PRESENT | TOTAL |
| SCORE |  |  |  |

ASSESSMENT OF THE TEACHERS:

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***Actknowledgement***

*We would like to sincerely thank the High Quality Training Department, Ho Chi Minh City University of Technical Education for creating favorable conditions for us to study and complete this project.*

*We would like to express our deep gratitude to Lectuner (Dr) Huynh Xuan Phung for giving us wholehearted guidance and guidance during the implementation process.*

*We would like to thank the attention and help of friends during the implementation.*

*Although I have tried to complete the project within the scope and ability to allow but certainly inevitable shortcomings.*

*We hope to receive the sympathy, suggestions and devoted guidance of teachers and friends.*

TP.HCM, ngày 23 tháng 06 năm 2020

Nhóm sinh viên thực hiện

Phạm Quang Danh-18110004

Huỳnh Văn Hạnh -18110012

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## **Chapter 1 : Program Overview**

1. *Genneral Introduction*

Request: Manage readable document (like Kinlde)

* Manage readable document : include all of document that can read like : word(.doc), pdf (.pdf),…

Analysis : Creat database to save information and use control datagridview on winform to show data for user, use Richtextbox and Itext Sharp to read word and pdf file…

1. *Software Specfication*

* Program help open and read document. In addition, user can manage document through a collection with some features : add, edit, delete, note,..
* Input : File Document (link, ID user, name ,..)
* Output : List of information about documents which is opened by user.
* Requested by the proposed project.
* Adopt object Oriented programming and new software technologies.
* Lightweight software, stable running.
* Tool and Technology used:

Entity framework

Visual studio 2019 (.NET framework)

Microsoft SQL server management studio 18

Chapter 2 : Plan

1. *Subdivision at work*

|  |  |  |  |
| --- | --- | --- | --- |
| ID | Student name | Desciption work | % Contribute |
| 18110004 | Phạm Quang Danh | -Design Program  -Write code  -Design 3 layer model  -Design and connect to database | 60% |
| 18110012 | Huỳnh Văn Hạnh | -Design user interface,form  -Design database  -Make report | 40% |

Chapter 3 : Software Design

**How to do :**

Need to solve 2 importance problem :

*First* : How to show a document on form

Solution : use Open File Dialog to open document and get link, use richtextbox to show the content of that file.

*Second* : Save and change information from form to database and upload data to form.

Solution : use SQL server 2019 to save information of user and document, use entityframework query to load data rom database to form and use datagridview to show data.

**Design :**

|  |  |  |  |
| --- | --- | --- | --- |
| **STT** | **Name** | **Code** | **Function** |
| **1** | **Controllers** | | |
|  |  | class Controller  {  sqlexpressEntities2 DE = new sqlexpressEntities2();  public void addDoc(string filename, string link)  {  Document dcm = new Document() { Ten = filename, Link = link, LinkImage = "D:/Window/Manage Document/Manage Document/bin/Debug/0.jpg", IsRead = 0 };  DE.Documents.Add(dcm);  DE.SaveChanges();  }  public void Edit(int i, string s1, string s2, int s3)  {  Document dcm = DE.Documents.Find(i);  dcm.Ten = s1;  dcm.LinkImage = s2;  dcm.IsRead = s3;  DE.SaveChanges();  }  public void delete(int ID1)  {  Document dcm = DE.Documents.Where(b => b.ID == ID1).FirstOrDefault();  DE.Documents.Remove(dcm);  DE.SaveChanges();  }  public List<Document> LoadFile(int i)  {  var result = from c in DE.Documents where c.ID == i select c;  return result.ToList();  }  public SqlConnection kn = new SqlConnection();  public void kn\_csdl()  {  string chuoikn = @"Data Source=localhost;Initial Catalog=sqlexpress;Integrated Security=True";  kn.ConnectionString = chuoikn;  kn.Open();  }  public void dongketnoi()  {  if (kn.State == ConnectionState.Open)  kn.Close();  }  public DataTable bangdulieu = new DataTable();  public DataTable laybang(string caulenh)  {  try  {  kn\_csdl();  SqlDataAdapter Adapter = new SqlDataAdapter(caulenh, kn);  DataSet ds = new DataSet();  Adapter.Fill(bangdulieu);  }  catch (System.Exception)  {  bangdulieu = null;  }  finally  {  dongketnoi();  }  return bangdulieu;  }  } | Make changes while in use, update to the Database and then bring data are changed back to Datagridview. |
| **2** | **Models** | | |
|  | Documents | namespace Manage\_Document  {  using System;  using System.Collections.Generic;    public partial class Document  {  public int ID { get; set; }  public string Ten { get; set; }  public string LinkImage { get; set; }  public string Link { get; set; }  public Nullable<int> IsRead { get; set; }  }  } | Basic information of a document |
| 3 | **Views** | | |
|  | frmHomePage | A screenshot of a cell phone  Description automatically generated |  |
| 1 | btnBrowse | private void button1\_Click(object sender, EventArgs e)  {  using (OpenFileDialog ofd = new OpenFileDialog() { ValidateNames = true, Multiselect = false, Filter = "Word 97 - 2003 | \*doc |Word Document | \*.docx" })  {  Controller cl = new Controller();  if (ofd.ShowDialog() == DialogResult.OK)  {  dataLib.Rows.Add();  index++;  string l = ofd.FileName;  string[] a = ofd.FileName.Split('\\');  string fname = a[a.Length - 1];  //int index = dataLib.Rows.Add();  filename = fname;  link = l;  cl.addDoc(fname,l);  dataLib.Rows[index].Cells[0].Value = fname;  dataLib.Rows[index].Cells[1].Value = l;    dataLib.Rows[index].Cells[3].Value = "D:/Window/Manage Document/Manage Document/bin/Debug/0.jpg";  dataLib.Rows[index].Cells[4].Value = 0;  //dataLib.DataSource = filename.ToList();  object readOnly = false;  object visible = true;  object save = false;  object fileName = ofd.FileName;  object newTemplate = false;  object docType = 0;  object missing = Type.Missing;  if (dataLib.Rows.Count > 1)  {  dataLib.Rows.Clear();  index = -1;  }  var result = from c in DE.Documents select new { Name = c.Ten, link = c.Link, ID = c.ID, lImage = c.LinkImage, isread = c.IsRead };  var data = result.ToList();  for (int i = 0; i < data.Count; i++)  {  dataLib.Rows.Add();  index++;  dataLib.Rows[i].Cells[0].Value = data[i].Name;  dataLib.Rows[i].Cells[1].Value = data[i].link;  dataLib.Rows[i].Cells[2].Value = data[i].ID;  dataLib.Rows[index].Cells[3].Value = data[i].lImage;  dataLib.Rows[index].Cells[4].Value = data[i].isread;  }  }  }  } | Choose the file can read on your computer.When you click OK this button will save it to your library of this app after that save filename and link of this document to database. |
| 2 | BtnRefresh | if(dataLib.Rows.Count > 1)  {  dataLib.Rows.Clear();  index = -1;  }  var result = from c in DE.Documents select new { Name = c.Ten, link = c.Link, ID = c.ID , lImage = c.LinkImage, isread = c.IsRead };  var data = result.ToList();  for (int i = 0; i < data.Count; i++)  {  dataLib.Rows.Add();  index++;  dataLib.Rows[i].Cells[0].Value = data[i].Name;  dataLib.Rows[i].Cells[1].Value = data[i].link;  dataLib.Rows[i].Cells[2].Value = data[i].ID;  dataLib.Rows[index].Cells[3].Value = data[i].lImage;  dataLib.Rows[index].Cells[4].Value = data[i].isread;  } | When you click on Refresh, this button will load all data from database and upload to datagridview of your library |
| 3 | btnLoad | private void btnLoad\_Click(object sender, EventArgs e)  {  var rs = from c in DE.Documents where c.IsRead == 1 select c;  dataRead.DataSource = rs.ToList();  } | This button will load all file you have read before |
| 4 | btnSearch | private void btSearch\_Click(object sender, EventArgs e)  {  LoadGridByWord();  } | Search in Library and show on Search view |
|  | frmDetails | A screenshot of a cell phone  Description automatically generated | This form will show all properties of your file |
| 1 | btnOpenFile | private void btnOpen\_Click(object sender, EventArgs e)  {  string path = txtboxLink.Text;  object readOnly = false;  object visible = true;  object save = false;  object fileName = path;  object newTemplate = false;  object docType = 0;  object missing = Type.Missing;  Controller cl = new Controller();  Microsoft.Office.Interop.Word.\_Application application = new Microsoft.Office.Interop.Word.Application();  {  Visible = true;  }  application.Documents.Open(ref fileName, ref missing, ref readOnly, ref missing, ref missing, ref missing, ref missing,  ref missing, ref missing, ref missing, ref missing,  ref visible, ref missing, ref missing, ref missing, ref missing);  home = new frmHome();  int id1 = Convert.ToInt32(ID);  cl.Edit(id1, txtboxName.Text, LinkImage, 1); | This button will open the document through link which get from datagridview |
| 2 | btnDelete | private void btnDelete\_Click(object sender, EventArgs e)  {  Controller cl = new Controller();  DialogResult result = MessageBox.Show("Do you want to delete this file?", "", MessageBoxButtons.YesNo, MessageBoxIcon.Exclamation);  switch (result)  {  case DialogResult.Yes:  int ID1 = Convert.ToInt32(ID);  cl.delete(ID1);  MessageBox.Show("Đã xóa Thành công!");  this.Close();  break;  case DialogResult.No:  break;  }  } | This button will delete the row selected on datagridview |
| 3 | btnUpdate | private void btnSave\_Click(object sender, EventArgs e)  {  Controller cl = new Controller();  if (!LinkImage.Contains("0.jpg"))  {  string s = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/{0}.jpg", ID);  string s2 = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/{0}(1).jpg", ID);  if (File.Exists(s))  {  if (File.Exists(s2))  {  File.Delete(s2);  bitmapNote.Save(string.Format("{0}(1).jpg", ID));  bitmapNote.Dispose();  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  else  {  bitmapNote.Save(string.Format("{0}(1).jpg", ID));  bitmapNote.Dispose();  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  }  else  {  bitmapNote.Save(string.Format("{0}.jpg", ID));  bitmapNote.Dispose();  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  using (FileStream fst = new FileStream(s2, FileMode.Open))  {  bmNew = (Bitmap)System.Drawing.Image.FromStream(fst);  fst.Close();  }  using (FileStream fst2 = new FileStream(s, FileMode.Open))  {  bmOld = (Bitmap)System.Drawing.Image.FromStream(fst2);  fst2.Close();  }  Graphics g = Graphics.FromImage(bmOld);  g.DrawImage(bmNew, 0, 0, bmOld.Size.Width, bmOld.Size.Height);  g.Dispose();  if (File.Exists(s))  {  File.Delete(s);  bmOld.Save(string.Format("{0}.jpg", ID));  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  }  else  {  string s = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/0.jpg", ID);  string s2 = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/{0}.jpg", ID);  if (File.Exists(s))  {  if (File.Exists(s2))  {  File.Delete(s2);  bitmapNote.Save(string.Format("{0}.jpg", ID));  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  bitmapNote.Dispose();  }  else  {  bitmapNote.Save(string.Format("{0}.jpg", ID));  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  bitmapNote.Dispose();  }  }  else  {  bitmapNote.Save(string.Format("{0}.jpg", ID));  bitmapNote.Dispose();  }  using (FileStream fst = new FileStream(s2, FileMode.Open))  {  bmNew = (Bitmap)System.Drawing.Image.FromStream(fst);  fst.Close();  }  using (FileStream fst2 = new FileStream(s, FileMode.Open))  {  bmOld = (Bitmap)System.Drawing.Image.FromStream(fst2);  fst2.Close();  }  Graphics g = Graphics.FromImage(bmOld);  g.DrawImage(bmNew, 0, 0, bmOld.Size.Width, bmOld.Size.Height);  g.Dispose();  if (File.Exists(s2))  {  File.Delete(s2);  bmNew.Save(string.Format("{0}.jpg", ID));  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  }  string s3 = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/{0}.jpg", ID);  cl.Edit(Convert.ToInt32(ID), txtboxName.Text, s3, isRead);  MessageBox.Show("Đã Update Thành công!");  } | This button will update all change about this file include : name and pictureNote |
| 4 | btnClearNote | private void btnClear\_Click(object sender, EventArgs e)  {  this.picNote.CreateGraphics().Clear(Color.White);  Controller cl = new Controller();  string s3 = string.Format("D:/Window/Manage Document/Manage Document/bin/Debug/{0}.jpg", ID);  if (File.Exists(s3))  {  File.Delete(s3);  bitmapNote.Save(string.Format("{0}.jpg", ID));  bitmapNote.Dispose();  cl.Edit(Convert.ToInt32(ID), txtboxName.Text, s3, isRead);  MessageBox.Show("Clear note thanh cong ");  bitmapNote = new Bitmap(this.picNote.ClientSize.Width, this.picNote.ClientSize.Height, this.picNote.CreateGraphics());  }  } | This button will delete the old bitmapNote and show while note |
|  |  |  |  |

**Method:**

|  |  |  |  |
| --- | --- | --- | --- |
| STT | Name | Code | Function |
| 1 | AddDoc | public void addDoc(string filename, string link)  {  Document dcm = new Document() { Ten = filename, Link = link, LinkImage = "D:/Window/Manage Document/Manage Document/bin/Debug/0.jpg", IsRead = 0 };  DE.Documents.Add(dcm);  DE.SaveChanges();  } | This method used to add new document to Document table in database |
| 2 | Edit | public void Edit(int i, string s1, string s2, int s3)  {  Document dcm = DE.Documents.Find(i);  dcm.Ten = s1;  dcm.LinkImage = s2;  dcm.IsRead = s3;  DE.SaveChanges();  } | Method used to edit properties of this file in datebase |
| 3 | Delete | public void delete(int ID1)  {  Document dcm = DE.Documents.Where(b => b.ID == ID1).FirstOrDefault();  DE.Documents.Remove(dcm);  DE.SaveChanges();  } | Method to delete data in both of database and datasource of listview |
| 4 | laybang | public DataTable laybang(string caulenh)  {  try  {  kn\_csdl();  SqlDataAdapter Adapter = new SqlDataAdapter(caulenh, kn);  DataSet ds = new DataSet();  Adapter.Fill(bangdulieu);  }  catch (System.Exception)  {  bangdulieu = null;  }  finally  {  dongketnoi();  }  return bangdulieu;  } | This method used to search data from database and show it |

**Design Database:**

**A screenshot of a cell phone

Description automatically generated**

|  |  |  |
| --- | --- | --- |
| **TT** | **Name of Table** | **Purpose** |
| 1 | Document | Save information of file which is opened by user |

|  |  |  |  |
| --- | --- | --- | --- |
| **TT** | **Field** | **Type** | **Purpose** |
| 1 | ID | Int | Save ID |
| 2 | Ten | Nvarchar(100) | Save name of document |
| 3 | LinkImage | Nvarchar(100) | Save link of bitmapnote in picture box |
| 4 | Link | Nvarchar(100) | Save link of document |
| 5 | IsRead | Int | Check :Are user read this file or not? |

Document table :

**Design Interface:**

Form for contact with user

A screenshot of a cell phone

Description automatically generated

User can add file from their computer and save on this app. They can search what they save and know what they read.

A screenshot of a cell phone

Description automatically generated

Form to show all detail of one file like : Name , Link , ID , Note

User can Open file to read and change Name and Note of this file or delete file.

Chapter 4 : Test

Form main of this program

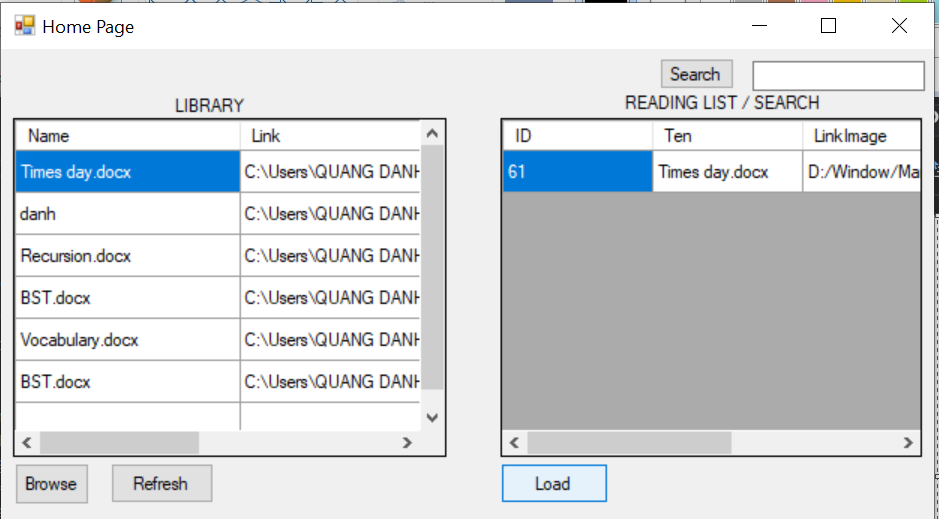
Left side is all document user have added to their library

Right side is all file what user open to read or list of user search

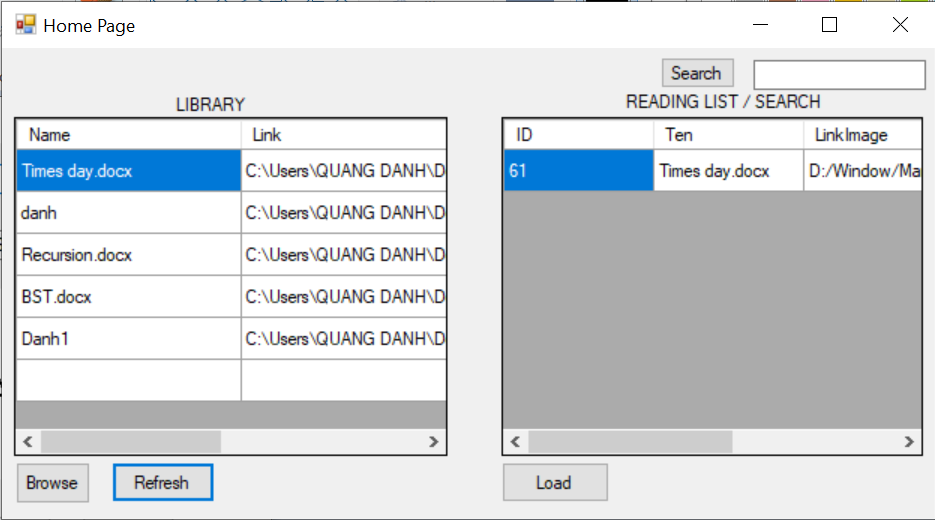
A screenshot of a social media post

Description automatically generated

### 1.Test Function add : we have 2 new document are added



### 2.Test Function Delete : We can see Document Vocabulary.docx is deleted



### 3.Test Function Update : Name of document BST are changed to Danh1 and this file have some Note

A screenshot of a social media post

Description automatically generated

### 5.Test Function Search : We can see when user search letter “s” in Search textbox, all document have letter “s” are displayed.

A screenshot of a cell phone

Description automatically generated

Chapter 5 : Development

* Improve the interface.
* Can add user and save document of each user.
* Can open many type of document: .pdf , .txt, …..
* Can edit the content of document.
* Develop the program similar to the Kindle of Amazon

Reference Material

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