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6 March 2017  
C# for WPF - Final Project  
Contact Management System

## **Contact Manager Pro - Contact Management System**

### **OVERVIEW**

*The Contact Manager Pro was developed as a WPF application using an N-Tier application architecture. A Business Logic Layer, Entities Layer, and Data Context Layer have been developed as dependencies within the application.*

### **INCLUDED FILES**

1. README.pdf
2. ContactManagementSystem (Project Directory including Visual Studio Solution files)
  - a. CHECKSUM
    - i. CRC-32 (For Data): F015A1DC
    - ii. CRC-32 (For Data and Names): C145889B
    - iii. Size: 36MB
3. ContactManagementSystemDB.bak
  - a. CHECKSUM
    - i. CRC-32: 1AB50A34
    - ii. SHA-1: 8CCC7DB4B30D60AADD462B1304A4537DA5F34A60
    - iii. Size: 2MB
4. ContactManagementSystem\_SQL\_Queries.sql
  - a. CHECKSUM
    - i. CRC-32: 1F9878D0
    - ii. SHA-1: 40567041A252A3A21EC5B8E70CC13D42EF242171
    - iii. Size: 3984 bytes

### **FEATURES**

*The Contact Manager Pro includes the following features:*

1. Front Page
  - a. Add Contact Button and Label
  - b. View All Contacts Button and Label
  - c. Label and Logo
2. Menu "Ribbon"
  - a. File
    - i. View All Contacts
      1. Opens "View All Contacts" window
    - ii. Add Contact
      1. Opens "Add Contact" window
  - b. About

- i. Opens an About Box integrated through Windows Forms inheritances
- 3. Add Contact Window
  - a. Add contacts via assembled form
  - b. Double Click argument passed from XAML to set TextBox strings to empty
  - c. Save Button Method
    - i. Conditional properties to do a light check for default TextBox properties and null values -- not perfect as it fails the E-Mail.Text = String.Empty test
    - ii. Passes TextBox properties into a Contact object
    - iii. Calls Reset method to reset data to default "Masked" properties
    - iv. Calls saveDataMessageBox() that appears when the Save Button is clicked
      - 1. Shows a Windows Forms(inherits WAF instead of WPF) MessageBox
        - a. MessageBox is assigned the type of DialogResult with saveDataMessageBoxResult as variable
        - b. DialogResult is checked in a conditional
        - c. Conditional is checked against saveDataMessageBoxResult and a DialogResult value ("Yes" or "No")
        - d. DialogResult Yes value instantiates variable of the type ViewAllContactsWindow and displays View All Contacts Window
        - e. DialogResult No value calls this.show() where "this" is the Add Contact Window
- 4. View All Contacts Window
  - a. Similar UI elements as the rest of the application
  - b. DataGrid present in the View All Contacts Window is bound to the ContactManagementSystemDB data

## DEPENDENCIES

*The Contact Manager Pro was developed against several N-Tier Application libraries:*

- 1. Dependencies/References:
  - a. ContactManagementSystemBL

*This layer contains Business Logic for the application. In this layer, the Contact object is passed to the database for processing. The grid that is bound to the data is also updated accordingly (i.e. save events).*

    - i. Depends on:
      - 1. ContactManagementSystemDL
      - 2. ContactManagementSystemEntities
  - b. ContactManagementSystemEntities

*This layer defines get and set properties as well as base Contact properties for the application.*

    - i. No N-Tier architecture related Dependencies/References

- c. ContactManagementSystemDL  
*This layer contains the DatabaseContext files for the application. In this layer, Lists are casted as contacts in order to bind data to the grid and the appropriate database context objects are accessed and turned into implementations.*
  - i. Depends on:
    - 1. ContactManagementSystemEntities
- d. ContactManagementSystem  
*This layer contains the XAML and CS code behind files. This is the startup project for the Contact Management System.*
  - i. Depends on:
    - 1. ContactManagementSystemBL
    - 2. ContactManagementSystemEntities
  - ii. Contains:
    - 1. ContactManagementSystem.Entities
      - a. The Entities folder houses UI based files such as images

### SQL Queries

*A collection of SQLServer queries that include: Database Creation, Table Creation, Procedure Creation for both Insert and Get Contact database objects, Insert of auto-generated data for testing purposes, and the deletion of application test data (ContactID Auto Increment numbering has been affected by the removal of the test data).*

```
CREATE DATABASE ContactManagementSystemDB;
```

```
USE ContactManagementSystemDB;
```

```
CREATE TABLE Contacts
```

```
(
```

```
    ContactID int PRIMARY KEY IDENTITY(1,1),  
    FirstName varchar(20) NOT NULL,  
    LastName varchar(30) NOT NULL,  
    Title varchar(30) NULL,  
    Company varchar(50) NULL,  
    Email varchar(50) NOT NULL,  
    Telephone varchar(20) NULL  
);
```

```
CREATE PROCEDURE [dbo].[InsertContact]
```

```
    @FirstName VARCHAR(20),  
    @LastName VARCHAR(30),  
    @Title VARCHAR(30),  
    @Company VARCHAR(50),  
    @Email VARCHAR(50),
```

```
        @Telephone VARCHAR(20)
AS
    INSERT INTO Contacts (FirstName,LastName,Title,Company,Email,Telephone)
    VALUES (@FirstName,@LastName,@Title,@Company,@Email,@Telephone)*

CREATE PROCEDURE [dbo].[GetContacts]
AS
BEGIN
    SELECT
        ContactID,
        FirstName,
        LastName,
        Title,
        Company,
        Email,
        Telephone
        FROM Contacts
END
GO
```

```
DELETE FROM Contacts WHERE FirstName = 'Test';
```

```
SELECT * FROM Contacts;
```

```
DELETE FROM Contacts WHERE FirstName = 'Enter First Name';
```

```
//Mockaroo Data
```

```
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Kathy',
'Ferguson', 'Civil Engineer', 'Sauer, Huel and Haley', 'kferguson0@hostgator.com',
'33-(472)338-9235');
```

```
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Harold',
'Day', 'Quality Engineer', 'Feeney, Mraz and Keeling', 'hday1@mapquest.com',
'351-(481)766-3966');
```

```
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Earl',
'Wallace', 'Design Engineer', 'Will-Toy', 'ewallace2@prweb.com', '62-(486)241-4133');
```

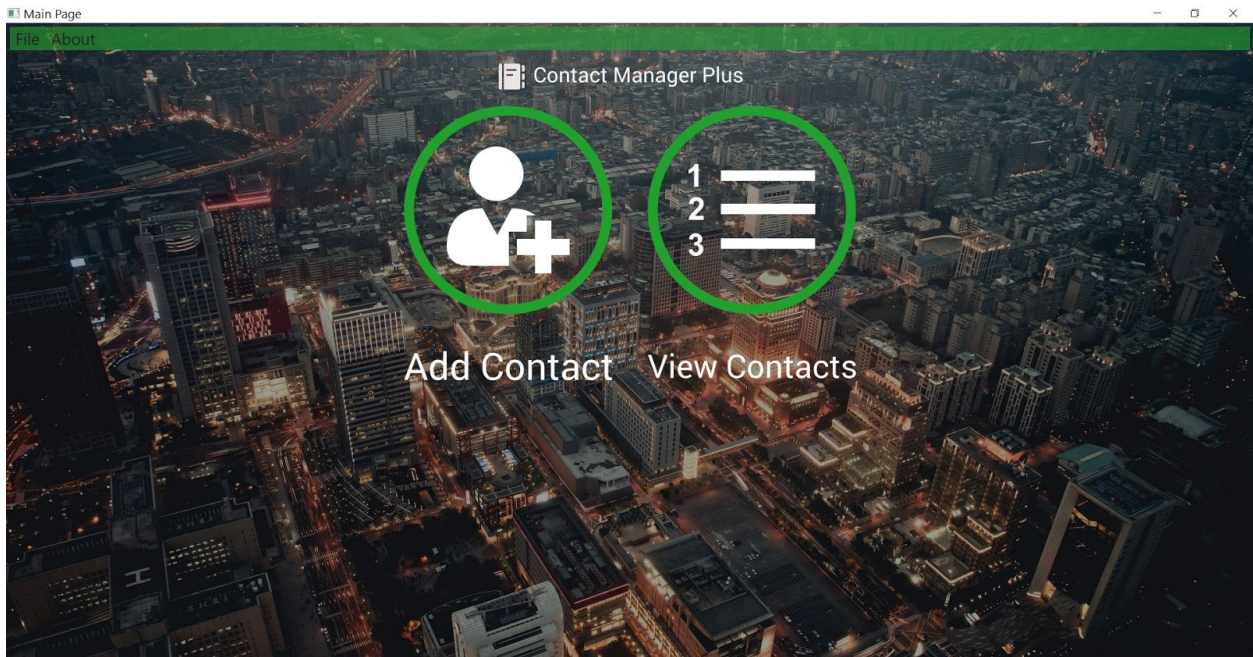
```
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Rose',
'Gibson', 'Compensation Analyst', 'Toy, Gorczany and Cummerata', 'rgibson3@desdev.cn',
'976-(811)840-4295');
```

```
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values
('Matthew', 'Morales', 'Help Desk Technician', 'Armstrong-Schultz', 'mmorales4@phpbb.com',
'48-(985)604-2765');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values
('Theresa', 'Mitchell', 'Accounting Assistant II', 'Emard and Sons',
'tmitchell5@constantcontact.com', '62-(187)265-7080');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values
('Catherine', 'Graham', 'Chief Design Engineer', 'Gleason-Trantow', 'cgraham6@ucoz.ru',
'86-(729)229-2108');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Cheryl',
'Hawkins', 'Accounting Assistant IV', 'Moore, Bogan and Anderson', 'chawkins7@digg.com',
'52-(175)931-4717');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Billy',
'Phillips', 'Research Associate', 'Bartoletti LLC', 'bphillips8@unblog.fr', '976-(553)952-2778');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Arthur',
'Phillips', 'Electrical Engineer', 'Upton, Pfannerstill and Brown', 'aphillips9@domainmarket.com',
'33-(331)147-3016');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Russell',
'Nichols', 'Dental Hygienist', 'Schuster-Ward', 'rnicholsa@ustream.tv', '55-(148)332-1880');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Maria',
'Bowman', 'Clinical Specialist', 'Durgan-Stiedemann', 'mbowmanb@phoca.cz',
'86-(481)199-0446');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Jerry',
'Hart', 'Staff Accountant III', 'Heidenreich-Rath', 'jhartc@google.cn', '993-(448)222-3293');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Carl',
'Schmidt', 'Associate Professor', 'Ruecker and Sons', 'cschmidt@goo.gl', '62-(640)277-2033');
insert into Contacts (FirstName, LastName, Title, Company, Email, Telephone) values ('Janet',
'Moore', 'Systems Administrator I', 'Trantow, Wunsch and Kling', 'jmooree@sohu.com',
'58-(215)579-8043');
```

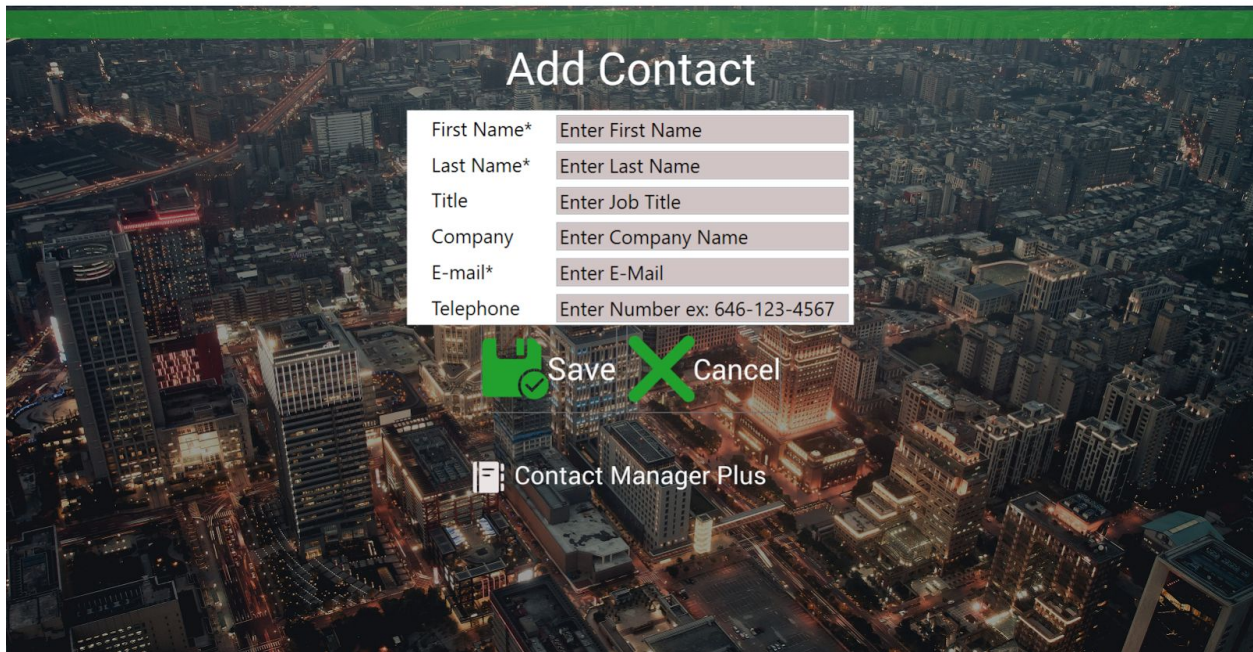


IMAGES

Main Window

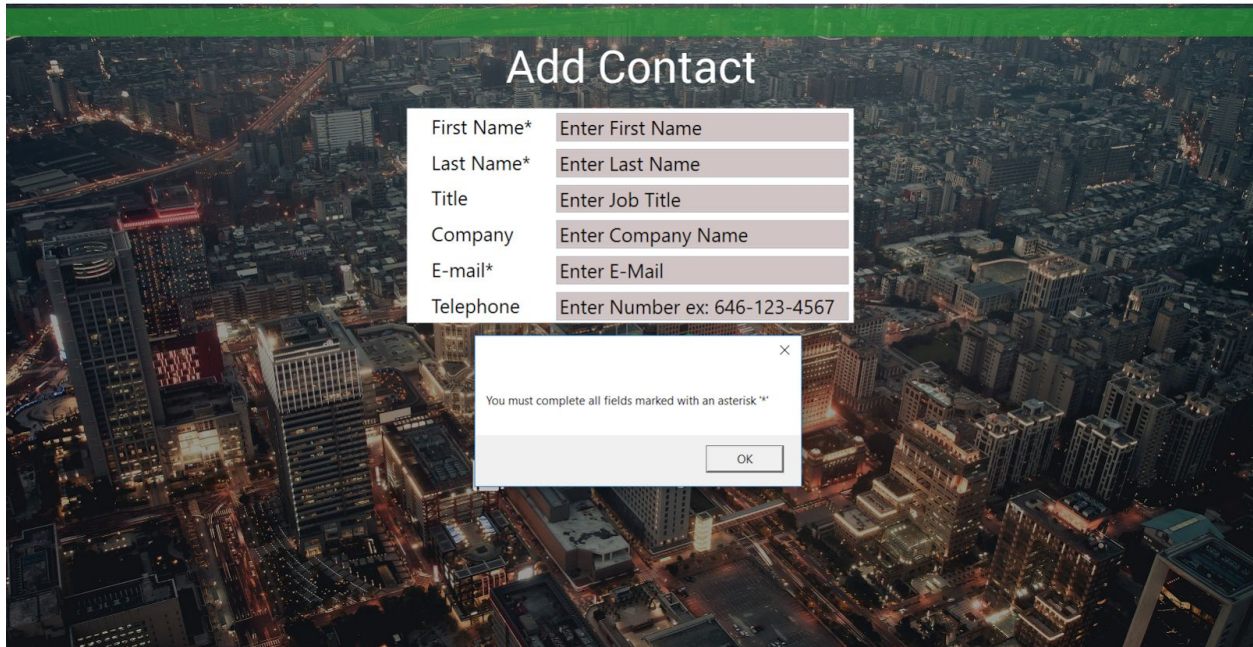


Add Contact Window





## Add Contact Form Control Message Box



## View All Contacts Window

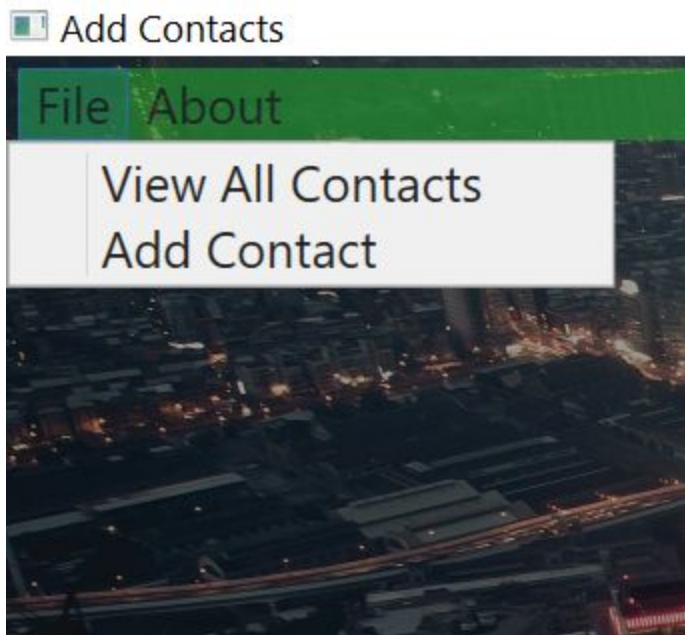
View All Contacts

File About

### View Contacts

Contact ID	First Name	Last Name	Title	Company	E-Mail Address	Telephone
1	Sherlock	Holmes	Detective	The Holmes Company	s.holmes@holmes.detective	123456789
3	Tom	McGuire	VP of Advertisement	AikoSaoirse Corp	tom.mcguire@aiko.saoirse	6468889999
8	James	Bond	Secret Spy Agent	MI6	james.bond@MI6.spy	+448896547896454
9	Kathy	Ferguson	Civil Engineer	Sauer, Huel and Haley	kferguson0@hostgator.com	33-(472)338-9235
10	Harold	Day	Quality Engineer	Feeney, Mraz and Keeling	hday1@mapquest.com	351-(481)766-3966
11	Earl	Wallace	Design Engineer	Will-Toy	ewallace2@prweb.com	62-(486)241-4133
12	Rose	Gibson	Compensation Analyst	Toy, Gorczany and Cummerata	rgibson3@desdev.cn	976-(811)840-4295
13	Matthew	Morales	Help Desk Technician	Armstrong-Schultz	mmorales4@phpbb.com	48-(985)604-2765
14	Theresa	Mitchell	Accounting Assistant II	Emard and Sons	tmtchell5@constantcontact.com	62-(187)265-7080
15	Catherine	Graham	Chief Design Engineer	Gleason-Trantow	cgraham6@ucoz.ru	86-(729)229-2108
16	Cheryl	Hawkins	Accounting Assistant IV	Moore, Bogan and Anderson	chawkins7@digg.com	52-(175)931-4717
17	Billy	Phillips	Research Associate	Bartoletti LLC	bphillips8@unblog.fr	976-(553)952-2778
18	Arthur	Phillips	Electrical Engineer	Upton, Pfannerstill and Brown	aphillips9@domainmarket.com	33-(331)147-3016
19	Russell	Nichols	Dental Hygienist	Schuster-Ward	rnicholsa@ustream.tv	55-(148)332-1880
20	Maria	Bowman	Clinical Specialist	Durgan-Stiedemann	mbowmanb@phoca.cz	86-(481)199-0446
21	Jerry	Hart	Staff Accountant III	Heidenreich-Rath	jhartc@google.cn	993-(448)222-3293
22	Carl	Schmidt	Associate Professor	Ruecker and Sons	cschmidt@goo.gl	62-(640)277-2033
23	Janet	Moore	Systems Administrator	Trantow, Wunsch and Kling	jmooree@sohu.com	58-(215)579-8043

Menu Control



About Box

