*Online Digital Photo Printing*

**Project Semester III Report**



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| --- | --- |
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Contents

[I. Problem Definition 5](#_Toc372091228)

[III. Architecture and Design of the Project 7](#_Toc372091229)

ACKNOWLEDGEMENT

I would like to acknowledge all those who have given moral support and helped me make the project a success.

I wish to express my gratitude to the eProjects Team at Head Office, who guided and helped me. I would also like to express my gratitude to all the staff members of my center for not only providing me with opportunity to work with them on this project, but also for their support and encouragement throughout the process.

And finally, I would like to offer many thanks to all my colleagues for their valuable suggestions and constructive feedback.

Synopsis

The web application is to be developed for Web platform using .Net Framework 3.5, Visual Studio 2010, and SQL Server 2008 as the back-end.

Online Digital Photo Printing (ODPP) allow user to orders for printing digital photo after upload photos

The application should perform the following functions:

* Store information for managing the processing of printing photos
* Visitor
  + Allow register an account
  + Send contact
* User
  + Allow login to upload photos, order
  + Send contact
  + Update User information
  + Allow logout
* Admin
  + Allow login/logout for management
  + Add new Customer
  + Search Customer information
  + View Customer information
  + Update Customer information

# Problem Definition

This is an online site were the user can upload his or her photographs and can order them for printing. A customer can have a set of digital photographs in his desktop which he/she wants to print. He/she can provide the application the path to the folder where the photographs are stored and can choose the photos that he/she wants to print and choose the size of the prints. The application will calculate the price after downloading the price information from the database for the different print sizes and show it to the user. The user will enter his/her credit card/other payment option (or choose any other mode of payment) and shipping information if he/she wants to go ahead with the order. If the credit card information is found correct, the photos are uploaded to the server and a purchase order is created in the database.

1. Customer Requirement Specification

**Following is a list of functionalities of the system**.

* 1. The users have to register himself with the site before using the functionality. After registrations user id and password will be provided to the user. Through which he can login.
  2. The price information for the different print sizes will be stored in the database.
  3. The user will upload JPEG files from his desktop, which he wants to print.
  4. The application will show all the jpeg files in the folder to the user. The user can then choose the size(s) and the number of prints that he/she wants to print for each size for each photograph.
  5. The application will calculate the total price for the order.
  6. If the user decides to buy the prints, he/she will be asked to enter the mode of payment (credit card/direct payment in the nearest branch office) and the shipping address. If credit card option is chosen, the credit card information will be encrypted and sent to the server for verification.
  7. The server will decrypt the credit card information and verify it. If found correct, payment will be completed.
  8. A purchase request will be created in the database. The purchase order number will be provided to the user
  9. An administrator user then can see the purchase request and can execute the same.
  10. Once the photos are printed and shipped, the directory containing these photographs will be deleted from the server
  11. The admin will decide the price and other things. Proper validation should be applied.

**Inputs provided by the Admin/User:**

* Inputs for the application
* Outputs from the application
* Process Involved in the application

**Hardware and OS Requirements:**

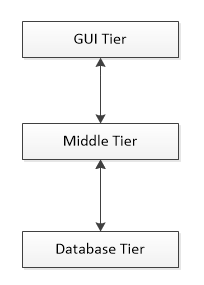
* Pentium IV CPU 3.0 GHz
* 1 GB of RAM or higher
* Hard disk requirement: Minimum 2 GB
* Windows XP, Windows Vista or Windows 7

**Software Requirements:**

* Visual Studio 2008 or higher
* .Net framework 3.5 or higher
* Firefox 4.0 or higher
* SQL Server 2008

# Architecture and Design of the Project

The application will be of a Windows-based distributed three-tier architecture to support multiple user using at the same time.



SQL Server 2008

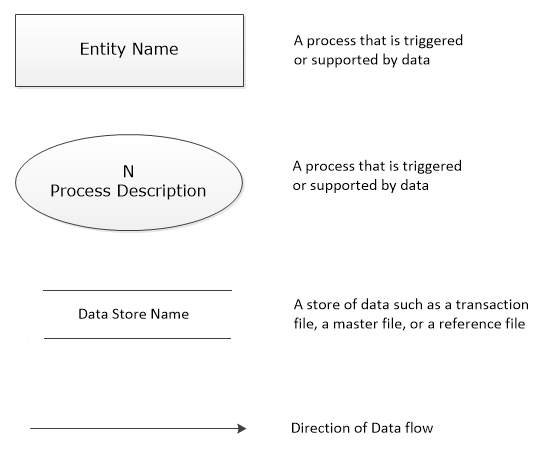
Business Logic

Display Graphic User Interface for User

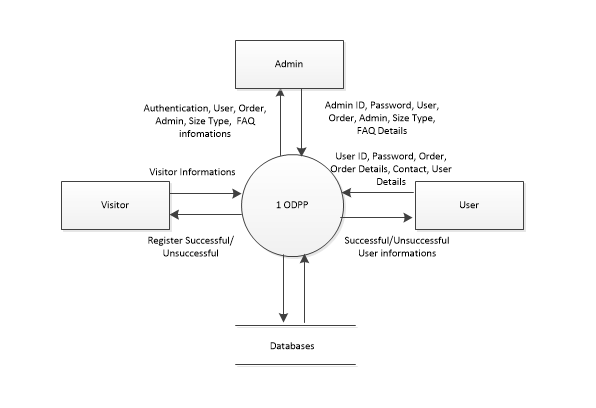
1. Data Flow Diagram (DFD)

The flow of data in the application is shown by the various data flow diagrams. The most basic data flow diagram is the Context diagram. It shows the basic flow of data in and out of the system.

**Explain symbols used in DFDs:**

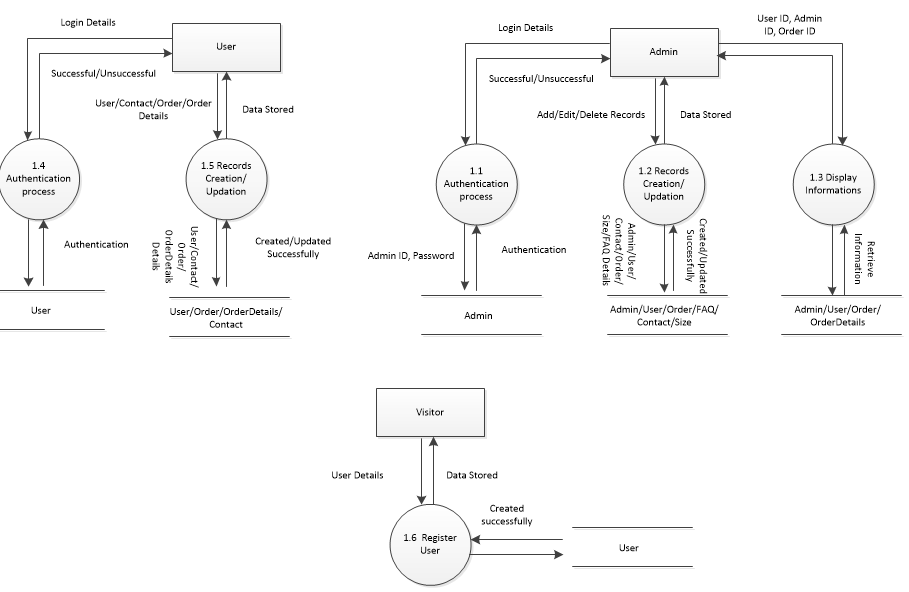


The flow of data in the application is shown by the various data flow diagrams. The most basic data flow diagram is the Context diagram. It shows the basic flow of data in and out of the system.

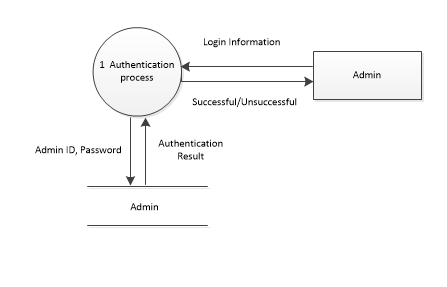


*Context Diagram – Order Online Photo Printing*

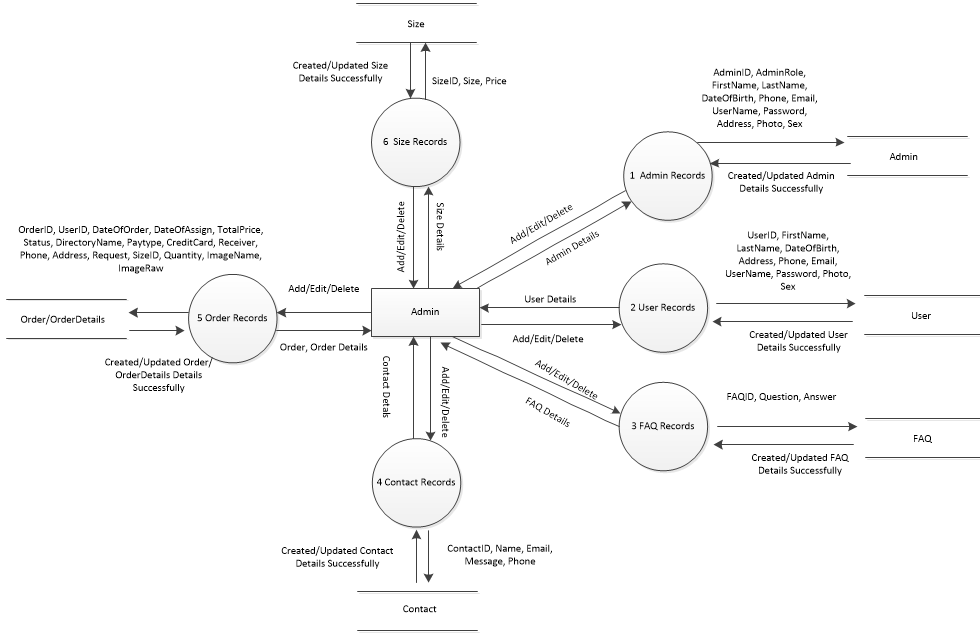
DFD Level 1 – Main Processes



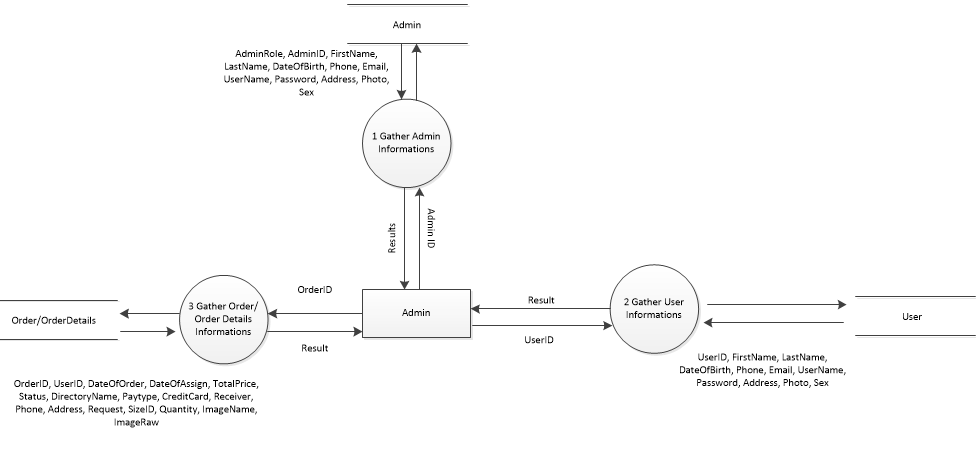
DFD Level 1.1.1 – Admin Authentication Process



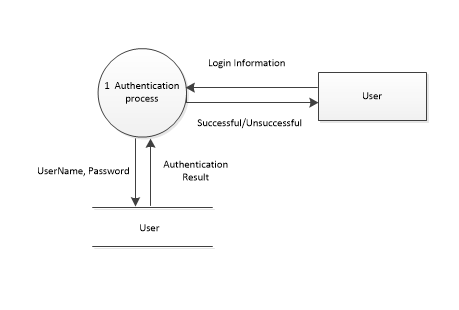
DFD Level 1.2.1 - Records Creation/Updation Process



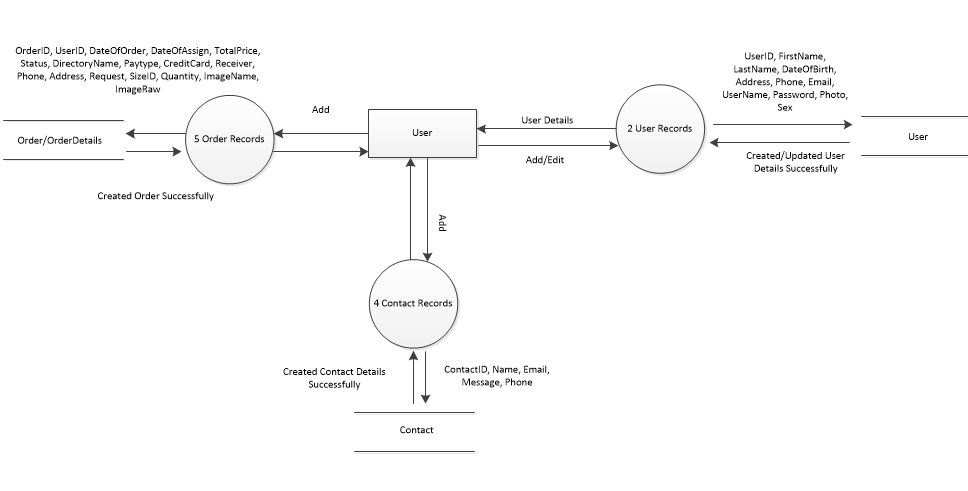
DFD Level 1.3.1 - Display Information Process



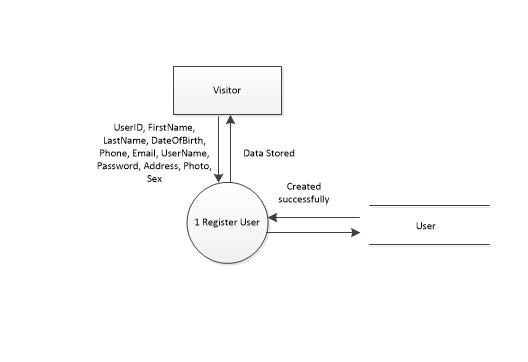
DFD Level 1.4.1 - User Authentication Process



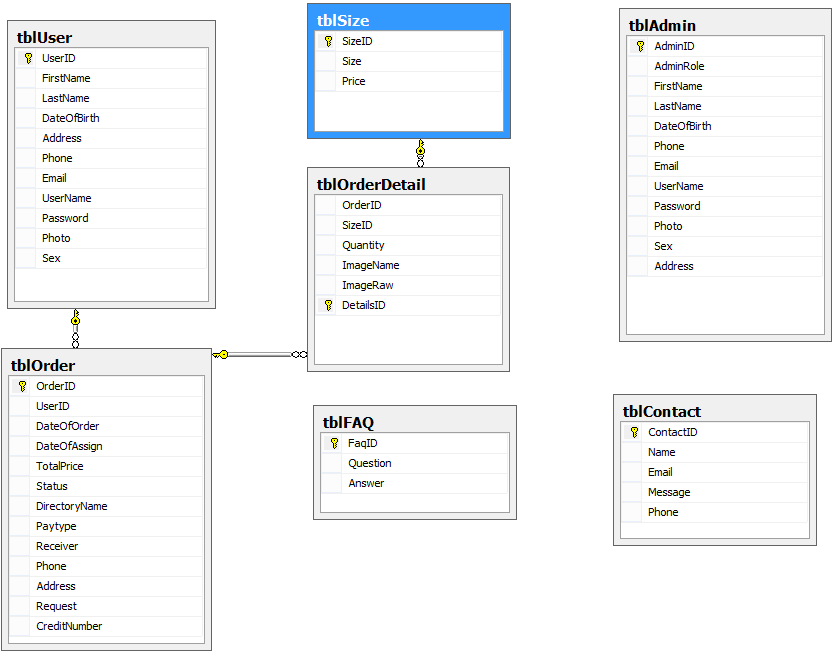
DFD Level 1.5.1 - Records Creation/Updation Process



DFD Level 1.6.1 - Register User Process



1. Entity Relationship (ER) Diagram



1. Database Design & Structure

Table Design

* User (Store information about User)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| UserID | Int | No | PK | ID of User |
| FirstName | NVarchar(20) | No |  | User’s firstname |
| LastName | NVarchar(30) | No |  | User’s last name |
| Sex | Bit | No |  | Sex |
| DateOfBirth | Date | No |  | Birthday of User |
| Address | Nvarchar(100) | No |  | Customer’s address |
| Phone | Varchar(20) | No |  | Customer’s phone number |
| Email | Varchar(30) | No |  | Email of User |
| UserName | Varchar(20) |  |  | UserName for login |
| Password | Varchar(20) | No |  | Password for login |
| Photo | Varbinary(max) | No |  | Avatar |

* Admin (Store information about Admin)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| AdminID | Int | No | PK | ID of Admin |
| FirstName | NVarchar(20) | No |  | Admin’s firstname |
| LastName | NVarchar(30) | No |  | Admin’s last name |
| Sex | Bit | No |  | Sex |
| DateOfBirth | Date | No |  | Birthday of Admin |
| Address | Nvarchar(100) | No |  | Admin’s address |
| Phone | Varchar(20) | No |  | Admin’s phone number |
| Email | Varchar(30) | No |  | Email of Admin |
| UserName | Varchar(20) |  |  | UserName for login |
| Password | Varchar(20) | No |  | Password for login |
| Photo | Varbinary(max) | No |  | Avatar |
| AdminRole | Nvarchar(20) | No |  | Role for management |

* Size (Store information about Size and Price)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| SizeID | Int | No | PK | ID of size |
| Size | Nvarchar(10) | No |  | Size of image |
| Price | Float | No |  | Price for size |

* OrderDetails (Store information about Order Details)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| DetailsID | Int |  | PK | ID Of Order Details |
| OrderID | Int | No | FK | ID of Order |
| SizeID | Int | No | FK | ID of Size |
| Quantity | Int | No |  | Quantity of image |
| ImageName | Nvarchar(20) | No |  | Name of image |
| ImageRaw | Varbinary(max) | No |  | Image |

* Order (Store information about Order Informations)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| OrderID | Int | No | PK | Id of Order |
| UserID | Int | No | FK | ID of User |
| DateOfOrder | Date | No |  | Date of Order |
| DateOfAssign | Date | No |  | Date of Assign |
| TotalPrice | Float | No |  | Total price of Order |
| Status | Bit | No |  | Status of order (Assigned/Not Assigned) |
| DirectoryName | Nvarchar(20) | No |  | Directory, which contains images uploaded |
| Paytype | Nvarchar(20) | No |  | Paytype (Money/Credit) |
| CreditCard | Char(16) | No |  | Creadit card number |
| Receiver | Nvarchar(50) | No |  | Name of receiver |
| Phone | Nvarchar(20) | No |  | Phone to contact |
| Address | Nvarchar(100) | No |  | Address to assign |
| Request | Nvarchar(100) | Yes |  | Request from user |

* Contact (Store information about Contact)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| ContactId | Int | No | PK | ID of contact |
| Name | Nvarchar(30) | No |  | Name of sender |
| Email | Nvarchar(30) | No |  | Email to contact |
| Message | Nvarchar(100) | No |  | Content of contact |
| Phone | Nvarchar(20) | No |  | Phone to contact |

* FAQ (Store information about FAQ)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field Name** | **Data Type** | **Null** | **Key** | **Description** |
| FaqID | Int | No | PK | ID of FAQ |
| Question | Nvarchar(200) | No |  | Question |
| Answer | Nvarchar(200) | No |  | Answer |

1. Task Sheet

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Ref. No.:** | | **Project Title:** | **Activity Plan Prepared By:** | **Date of Preparation of Activity Plan:** | | | |
| **Sr.No.** | **Task** | **Actual Start Date** | **Actual Days** | **Team Member Names** | **Status** |
| 1 | Acknowledgement | ODPP |  | 10/10/2013 | 2 | All member | Completed |
| 2 | Project Definition | ODPP |  | 10/12/2013 | 2 | All member | Completed |
| 3 | Employee Requirement Specification | ODPP |  | 10/14/2013 | 1 | All member | Completed |
| 4 | Architecture & Design of the Project | ODPP |  | 10/15/2013 | 1 | All member | Completed |
| 5 | Data Flow Diagram | ODPP |  | 10/16/2013 | 2 | All member | Completed |
| 6 | Entity Relationship (ER) Diagram | ODPP |  | 10/18/2013 | 1 | All member | Completed |
| 7 | Database Design/Structure | ODPP |  | 10/19/2013 | 1 | All member | Completed |

1. Checklist of Validations

|  |  |
| --- | --- |
| **Option** | **Validated** |
| Can a new user, who gets registered, enter the application after loggin in? | Yes |
| Do all the options present in the application display the correct result? | Yes |
| Does the application’s functionality resolve the user problem, and satisfy their need? | Yes |
| Has the hardware and software been correctly chosen? | Yes |

1. Submission Checklist

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr.No** | **Particulars** | **Yes** | **No** | **NA** | **Comments** |
| 1. | Are the users able to login to the application after validation is performed on the client name and Password? | Yes |  |  |  |
| 2. | Are the users able to modify the client details after getting registered? | Yes |  |  |  |
| 3. | Are all the screen contents devoid of spelling mistakes? | Yes |  |  |  |
| 4. | Is the application user-friendly? | Yes |  |  |  |