

WebWed

By

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Submitted to the Faculty of the Information Engineering Technology Program in Partial
Fulfillment of the Requirements for the Degree of Bachelor of Science in Information
Engineering Technology

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Abstract

WebWed is an online wedding album and print ordering system. It is contained in a single Web site that is accessible by the bride and groom, their friends and family members, and employees of the photography studio. This Web site allows brides and grooms to lay out their wedding album, order prints, and view requests from friends and family members. From the Web site they are able to print a detailed invoice complete with thumbnail images of the prints they have ordered. They can use this invoice to give to the photography studio to place the order. Once the order is received the invoice makes it very easy to match the prints to their recipients as well as keep track of how much money is owed by each recipient. Friends and family members can use the Web site to place requests for prints, and view the completed wedding album. Photography studio employees use the same Web site to specify prices, print sizes, and album options. WebWed uses ASP.NET technology with C# code, and has a Microsoft SQL Server 2000 database backend.

1. Statement of the Problem

In September of 2003 I hired a friend of mine, Tom Baker, to photograph my wedding. After the wedding in September of 2004 I received my proof book, complete with order forms. The pictures were beautiful. The order forms, on the other hand, were atrocious. After filling them out, even I could not figure out what I had ordered. Not to mention that there was no order form for the album. If Mr. Baker was not a friend of mine, I would most likely have called him to complain. Instead, I turned to my technical expertise. I used Microsoft Visio to create a template design of my album and Microsoft Excel to keep track of what friends and family owed me for their prints. I took my proofs, album template, and order form to Baker Photography to place my order. Mr. Baker was very impressed with the album template and asked if he could buy the same software. I suggested that a Web site that allowed a bride and groom to lay out their album and print an order form would be an even better solution. He agreed, and so the idea of WebWed was born.

Of course, just because two people think something is a good idea does not make it true. A fair amount of research was necessary to determine the feasibility of WebWed. As with any technology solution, a number of questions must be answered before the project is undertaken. Some of the questions that were answered for WebWed are as follows. Is there a real need for the application? Is the scope of the project within my ability? Can I complete the project in the given amount of time? How much will it cost to complete this project? The remainder of this section is dedicated to answering these questions.

Is there really a need for an application like WebWed? Using my experience and Baker Photography as a case study, it is obvious that a problem exists. The problem is an unorganized, outdated way of doing business. According to Tom Baker, this problem is common among photography studios. Although photography has entered the digital age, many photographers are not willing to follow suite. There are a number of problems inherent to an ordering system such as the one that Baker Photography uses. WebWed addresses and solves nearly all of these issues. An application such as WebWed allows photography studios to offer their customers better service, keep better records of their orders, and increase repeat orders.

Using Baker Photography as an example, WebWed helps a company to offer better customer service by offering a better form and method for ordering prints. Baker's current ordering system is a collection of paper forms that are incomplete, complicated, and not duplicated. The forms are placed in the proof book, one form for each page in the book. The form does not contain a column for wallet prints. So, if a customer wants a wallet, she must add a column for it. Should a customer want to order a print in both the album and a loose print, she has to write this information in herself. Having to add so much information makes the order forms very messy and complicated. Also, the order forms are secured in the book, but the proofs are not. If a person takes out two proofs and unwittingly puts them back in the incorrect place, the next person to look at the proof book may accidentally order the wrong proof.

Once the order forms are filled out, the ordering process becomes even more complicated. There is no place on the order form to keep track of who is paying for what. It is customary for the bride and groom to buy prints for family, and friends. It is also

common for these same friends and family members to order their own prints. It becomes necessary to use another method to keep track of this information. In addition, some of the prints are part of the album, which requires an additional charge per album page. So, it must be determined how many pages the album will use. To top it all off, the proof book must be handed in with the order. So, when the pictures do come in, the bride and groom do not have a copy of their order, nor do they have a proof book to make sure that proof number 123 is indeed the picture that grandma ordered. WebWed increases the level of customer service by allowing the bride and groom to order their album prints separate from their loose prints, allowing the studio to add print sizes to the order forms, and produce multiple easy-to-read copies of the order complete with a thumbnail image of the print and a breakdown of who owes what amount of money.

WebWed makes it easier for photography studios to keep better records of their orders. Under the current ordering system, Baker Photography keeps one hard copy of all orders. Should this copy be lost or destroyed there would be no way to replace it. WebWed contains a copy of each order in its database. This database is backed up on a regular basis.

The ease of use of WebWed makes it more convenient to place orders. Under the current system if a bride and groom want to order more pictures after their original order they must go back to the studio to look at the proof book again. This can discourage couples from ordering more pictures because of the inconvenience. In addition, if other family members want to order pictures Baker does not allow the proof book to be taken after the original order is placed, so they would have to come to the studio as well. This

can be especially troublesome for out of town relatives. WebWed makes ordering reprints as easy as logging on to the Web site.

The most important reason that there is a need for an application like WebWed is that there is currently nothing like it. A Google search for “photo ordering software” only returns about 20 results. Performing any other search for an application like WebWed produces only a few similar applications, none of which allow a bride and groom to lay out their album. When I asked Mr. Baker if he knew of anything like WebWed he said, “I’ve been to a lot of photography conventions, and haven’t seen anything like it” (1). So, at the very least there is a need for an application like WebWed that people know about.

2. Description of the Solution

WebWed is an online application that will complement a photography studio’s current Web site. It is not intended to be a replacement for an existing Web site, nor is it a complete studio management system. WebWed allows a photography studio to offer a bride and groom a better way of ordering their wedding prints and album. WebWed includes the following features.

- Main login page
- User specific home pages with instructions for use
- Bride and Groom Section
 - Thumbnail images of all proofs with the option to enlarge
 - Album layout section
 - Ability to control size and placement of pictures in album
 - Ability to control background color, embossing color, and embossing text
 - Print ordering section with the ability to choose size and quantity
 - Ability to view requests placed by family and friends
 - Order history section with invoices broken down by recipient and payer
- Friends and Family Section
 - Thumbnail images of all proofs with the option to enlarge

- Print request section with the ability to choose size and quantity
- Album viewing section to view the bride and groom's album
- Studio Administrators Section
 - Ability to add, update, and lookup customer information
 - Ability to set prices and sizes for prints
 - Ability to set maximum print size, background color, and embossing color for albums

WebWed has three primary types of users; the bride and groom, friends and family, and studio employees. The interface for each user varies slightly, but still has a consistent look. The interfaces are the same in their font types, colors, and page layouts. The root home page is a login page that uses a username and password to determine the type of user or deny access to the site. The home page for the bride and groom users contains a brief set of instructions on how to use each of the links that are located at the top of the page. From the home page the bride and groom can go to the “My Album”, “Order Prints”, “My Request”, or the “View Orders” pages. The home page for the friends and family users is similar, but contains links to the “View Album” and “Request Prints” pages. The studio administrator's page allows users to edit studio specific information. This information includes print prices, print sizes, album colors, embossing colors, and customer information.

2.1 User Profiles

The three types of users have different characteristics, and possess different levels of skills. While most users will have the characteristics specific to their user type, variations do exist. WebWed has been designed with this in mind. The application is structured so that a person of any skill level should be able to use the application effectively with minimal instruction. The three user types are defined below.

2.1.1 Studio Administrators

Studio administrators are responsible for updating pricing, print, and customer information. Studio administrators may or may not be familiar with the Internet and web applications. They range in age from high school students to retirees. Their computer backgrounds range from novice to expert. All studio administrators are at least familiar with how keyboards, mice, and links on a web page function.

2.1.2 Bride and Groom

The bride and groom users are most likely in their 20's to early 30's, but other age groups do exist. Since the use of the WebWed system is optional, they are most likely comfortable using the Internet. However, they may not have experience using an application similar to WebWed.

2.1.3 Friends and Family

The friends and family users are most similar to the studio administrator users. They may or may not be familiar with computers or the Internet. Their age and computer experience ranges dramatically.

2.2 Design Protocols

The profile of the bride and groom user was used to determine the overall design of WebWed. Since the brides and grooms are the ones who will be using the Web site the most, it makes sense to design it around their needs and preferences. Therefore, traditional wedding themed colors of light beiges and pastels were used throughout the site. However, each user type is unique and must perform different tasks. The user specific interfaces are outlined below.

2.2.1 Administrator User Interface

The admin user interface allows the photography studio employees to update information about their pricing, print sizes, and customer information. The interface is very simple and easy to use. The admin users can view the available print sizes one at a time. By using the previous and next buttons, they can browse the entire list of available prints. By changing the information and clicking the update button, they can then update the price and determine whether it comes in a sheet or individually, how many prints are on a sheet, and whether it is available or not. By clicking the new button, they will be able to add a new print size. They will not be able to delete a print size, but they can set its availability to false, so that no future orders can be made with that size.

The admin home page also allows studio administrators to update information regarding album and general pricing information. In the album information section of the page, they can view the current available album and embossing colors, add a color, or remove a color. They can also set the maximum print size that is available for the albums. This section also allows them to specify the price per page, and the album set up fee. In the general information section, they can change information such as the additional cost for black and white prints, and the current tax rate.

The customer pages all have a similar interface. They allow administrators to enter information about a bride and groom. The layout and information gathered is similar to most web forms that collect user information. Some of the fields include name, address, phone, and email.

The “Add New Customer” page allows the administrators to specify usernames and passwords for the bride and groom as well as friends and family. This form checks the selected usernames against the database to make sure that they are unique.

The “Retrieve Customer Username and Password” page has textboxes for a bride or groom’s last name and a phone number. Based on the information entered, the usernames and passwords are displayed on the page.

2.2.2 Bride and Groom Users Interface

The bride and groom users have the ability to layout their wedding albums, order prints, view requests from friends and family members, and view orders. Each one of these tasks has a separate page, with a different, but similar layout. The “My Album” page allows the bride and groom to add pictures to the pages of their album one page at a time. They are able to specify the size and location of each picture. The “My Album” page also allows the bride and groom to sort the pictures that they are viewing. In order to add a picture to the page, they select the size and location, and click on the image of the picture they want to add. The “My Album” page is laid out on the following page in. Once they are finished with all the pages, they click the “Complete Album” button. This will take them to a page where they can choose album color, embossing color, and embossing text. They are given a warning that by submitting this page, they will lock their album, and will no longer be able to make changes to it through the WebWed system.

The “Order Prints” page allows users to view all of their prints. They order a print by clicking on its image. The resulting window will allow them to add up to six different sizes of prints. They can use the drop down menus to choose the size and quantity, and click “Save” to add the print to their order.

The “View Requests” page lists any prints that friends and family members have requested to order. This page allows the bride and groom to accept the order, specify

who will be paying for the order, and contact the original requester. Each request is on a separate line on the page. It lists the requester, studio print ID, size, quantity, price, and the extended total. There are three options for each request: accept – bride and groom will pay, accept – requester will pay, or email requester. Once the bride and groom accept the request, it is automatically added to their current order, and the line will no longer appear on the page. The format for the request looks similar to the following.

The “View Orders” page lists each print order that the bride and groom have either placed, or are in the process of completing. Once the user clicks on the link, a report is displayed, sorted by purchaser. This report is a simple HTML web page. There will also be a link to print an invoice for their album, whether it is completed or not.

2.2.3 Friends and family Users Interface

The friends and family members can view the bride and groom’s album, and request prints. The “Request Prints” page is laid out the same way as the bride and groom’s “Order Prints” page. The “View Album” page displays each page of the album one at a time. The only options are previous and next buttons.

2.2.4 Studio Administrator’s Windows Application

The studio administrators will have access to a Windows application that they can use to modify the original prints for placement on the Web site. This application allows the user to specify the directory of the original images and the directory where the modified images will be saved. Most likely the original images will come from the CD that the studio is given after the prints are developed. The user will then specify who the pictures belong to by entering the bride or groom’s last name and the phone number. When the submit button is clicked each picture in the specified directory will be resized,

watermarked, and saved with a degraded quality to the output directory specified. In addition the information about each print, its orientation, studio print ID number, and filename is added to the WebWed database.

2.3 Database Structure

The database is organized as follows. The database is in third normal form. Almost all of the tables are related, and are centered around the studio and users tables. Figure one shows the complete database structure.

3. Deliverables

The deliverables for WebWed are the database, the WebWed Web site, and the Windows application to modify the original images. The database is a fully functional, third normal form, relational database created in Microsoft SQL Server 2000.

The WebWed Web site consists of multiple web pages that perform all the functions as stated in the design protocols section of this document. A list of all the pages follows:

- Home / Login page
- Bride and groom home page
 - My Album page
 - Complete album page
 - Thank you page
 - Order Prints page
 - Pop-up order page
 - Thank you page
 - My Requests page
 - View Orders page
 - Order report
 - Album report
- Friends and family home page
 - View Album page
 - Request Prints page
 - Thank you page
- Studio Administrators home page
 - Add new customer page
 - Update customer page
 - Retrieve username / password page

The final deliverable is the studio administrator's Windows application for modifying the original images for upload to the server. This item is a single executable file that works on any Windows system with Windows 95 or higher. This program allows the users to choose the location of the original pictures on their local system, and the desired location of the completed pictures on their local system. A user must also specify the bride and groom who the pictures belong to. Using the given information, the program will convert the original image into a smaller image with a watermark, and load the

information into the database. The studio administrators can then zip the files into a single .zip file. This file can then be uploaded to the Web site through the WebWed Web site. Once a file is uploaded the Web site administrator will be sent an email. Once the Web site administrator unzips the file to the appropriate folder on the server, the bride and groom will be able to see all of their prints on the WebWed Web site.

4. Design and Development

In order to create WebWed I used various Microsoft and Adobe products. For the database I used Microsoft SQL Sever 2000. I used Microsoft Visual Studio .NET with ASP.NET and C# to write the code. I used HTML to create the layout of the Web pages. The graphics used for the Web site were created with Adobe Photoshop.

4.1 Timeline

The timeline for this project spanned a total of four quarters. The chart below is a summary of my timeline. I have each major task broken down into many smaller tasks. In an effort to conserve space the subtasks are not listed here. I devoted eight to ten hours a week to working on this project.

Task	Start Date	End Date
Research	April 1, 2005	June 6, 2005
Write Proposal and presentation	May 17, 2005	June 6, 2005
Design Database	June 21, 2005	June 22, 2005
Fill Database with test data	June 23, 2005	June 23, 2005
Create collection of test images	June 28, 2006	July 6, 2005
Design layout of Web pages	July 6, 2005	July 14, 2005
Create HTML pages	July 18, 2005	September 8, 2005
Create C# code	September 13, 2005	November 22, 2005
Write Design Freeze and presentation	November 22, 2005	December 2005
Test and modify code	September 13, 2005	March 26, 2006
Write final paper and presentation	March 5, 2006	March 2006

4.2 Budget

The actual budget for this project was \$0.00. Because I am a student I had access to all the software and hardware that I needed to complete this project. However, since I do plan to sell WebWed after it is completely developed, I considered purchasing licenses for all the software that I used to create it. I also considered the cost of a server to host the Web sites on. I have broken down the actual cost, including what it would have cost for development, below. The programmer's pay in the following chart is based on a pay of \$25.00 per hour with a total of 360 hours of work.

Product	Cost
Microsoft Visual Studio .NET	\$550.00
Microsoft SQL Server 2000	1,000.00
Adobe Photoshop 7.0	650.00
Microsoft Windows Server 2003 Web Server	399.00
Programmer's Pay	2,000.00
Total	7,200.00
	\$11,799.00

5. Proof of Design

The completed WebWed Web site meets all of the deliverables as outlined in section three of this document. The next section explains in detail how the deliverables were met.

5.1 Single Login Page


In accordance with the deliverables mentioned in section three the first page of the Web site is a login page. The users can select their user type and enter their username and password to gain access. If at any time the user's session expires or he attempts to access a page that he does not have permission to access he is redirected to this page with an error message. The login page is shown in figure two.



Figure 2 – WebWed login page

5.2 Studio Administrator's Pages

The studio administrator's home page performs all of the functions that are outlined in detail in section two of this document. This page gives the studio administrator the power to update studio specific information as well as customer specific information. A screenshot of the home page is shown in figure three.



WebWed

Customer Information

[Add a New Customer](#)
[Update an Existing Customer](#)
[Retrieve Customer Username and Password](#)

Print Pricing

Print Size:
 Individual / Sheet:
 Number Per Sheet:
 Price:
 Available

Album Pricing

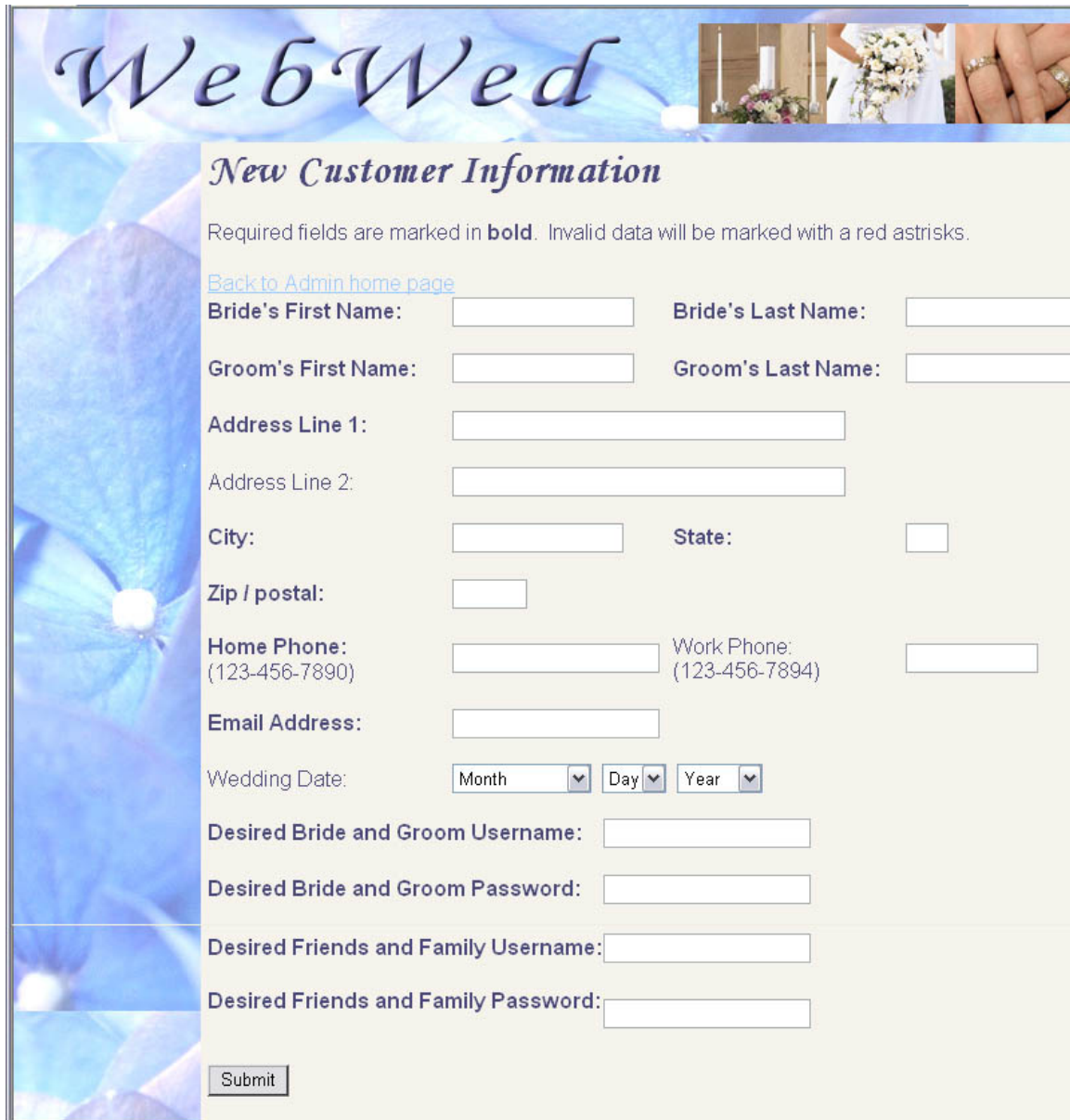
Album Colors:
 Embossing Colors:
 Max Print Size:
 Album Pages: Album Set up fee:
 Embossing Cost:

General Information

Tax Rate (percentage):
 Additional for Black and White:

Figure 3 – Studio administrator home page

The studio administrator's "Add New Customer" page allows the studio administrator to add a new user to the WebWed system. The interface for which is shown in figure four.



The screenshot shows a web form titled "New Customer Information" with a blue floral background. The form includes a header with the "WebWed" logo and a small image of a wedding scene. Below the title, a note states: "Required fields are marked in **bold**. Invalid data will be marked with a red astrisks." A link "Back to Admin home page" is provided. The form fields are: "Bride's First Name:" and "Bride's Last Name:" (both bold); "Groom's First Name:" and "Groom's Last Name:" (both bold); "Address Line 1:" and "Address Line 2:"; "City:" and "State:" (with a dropdown menu); "Zip / postal:"; "Home Phone: (123-456-7890)" and "Work Phone: (123-456-7894)" (both bold); "Email Address:"; "Wedding Date:" with "Month", "Day", and "Year" dropdown menus; "Desired Bride and Groom Username:"; "Desired Bride and Groom Password:"; "Desired Friends and Family Username:"; and "Desired Friends and Family Password:". A "Submit" button is at the bottom left.

Figure 4 – Studio administrator's add new customer page

The studio administrator also has the option to retrieve the username and password for a user. This page will display both the bride and groom and the friends and family usernames and passwords. The result of the query is displayed in figure five.

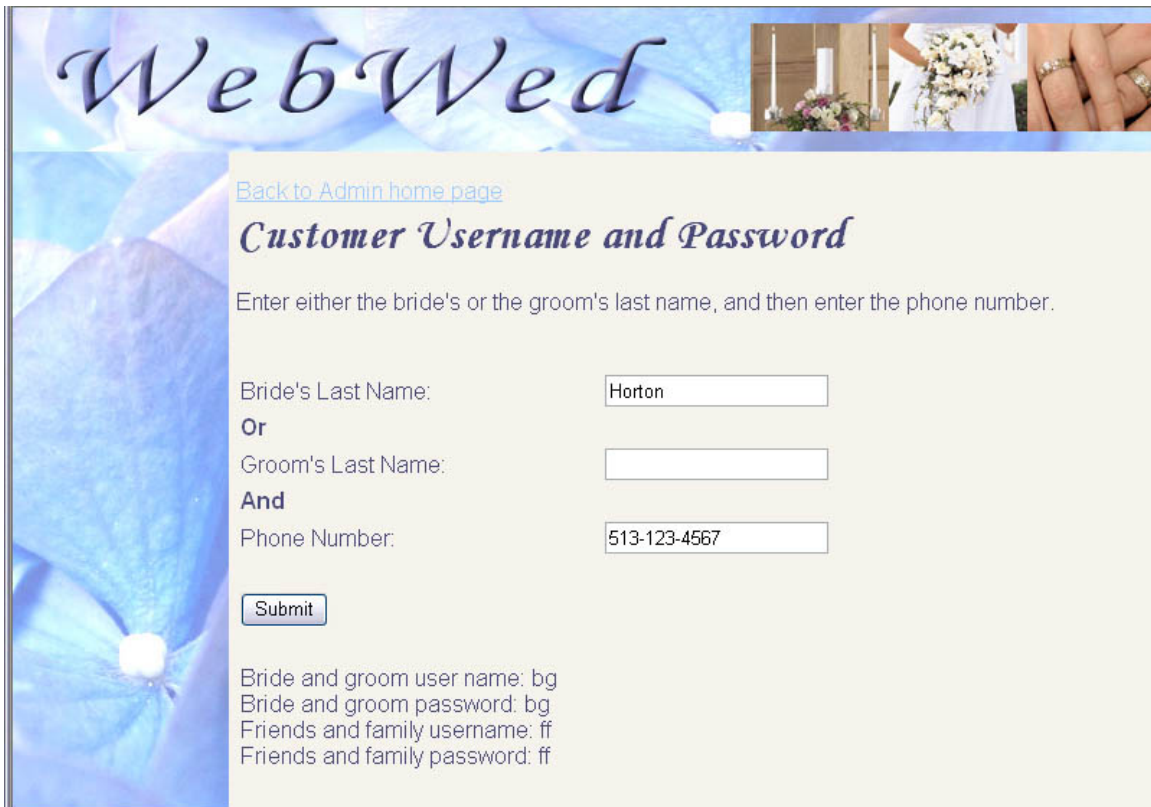


Figure 5 – Admin retrieve username and password

5.3 Studio Administrator's Windows Application

The details of how the studio administrator's windows application functions are outlined in section two of this document. The primary purpose of this application is to provide the studio administrators with a tool to modify the original pictures and get them into the WebWed system. The single form interface of the program is shown in figure six.

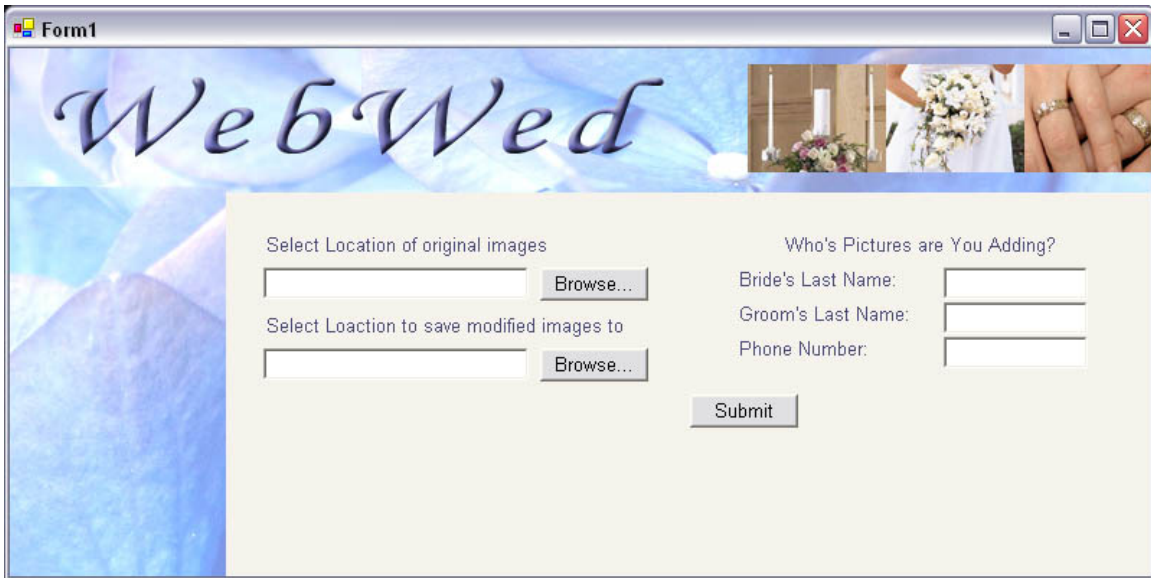


Figure 6 – Studio administrator's windows application

5.4 Bride and Groom Section of the Web Site

The bride and groom home page personally welcomes the users, and provide instructions on how to use the Web site. All areas that a bride and groom will want to visit are linked to at the top as well as through the section headings. Figure seven shows the bride and groom home page.

WebWed

[My Album](#) | [Order Prints](#) | [My Requests](#) | [View Orders](#)

Welcome Angela and James

You will find everything you need to personalize, layout, and order your wedding album on this site. You can access everything from the menu at the top of the page. It is easiest to go through each section in order, but you may go in any order you like. Below is a brief description of what you will find in each section.

My Album

In this section you will be able to layout the specifics of your wedding album. You will be able to choose things such as:

- Album color
- Embossing color
- Embossing message
- Size

Order Prints

In this section you will be able to view all of your prints, and choose which ones you would like. This is where you will order prints that are separate from your album. You will be able to specify the following for each print.

- Size
- Color or Black and White (if available)
- Quantity
- Recipient
- Who is paying for the print

At the top of the page you will see two menu boxes. This allows you to choose who is receiving the prints, and who is paying for them. Any prints that are ordered will be marked to go to that recipient and billed to the person listed in the bill to menu. To view a larger version of the print simply click on the print, and a new window will pop up. Once you have completed ordering for that recipient and payer, click the button "Submit and add to order". This will save your choices and allow you to choose another recipient and payer. When you are finished placing all of your orders, click the "Submit and end order" button. This will take you to the "view orders section" where you can verify that you have entered everything correctly. If you need to make any changes, you may return to the "Order prints" section by clicking on the link at the top of the page. Select the appropriate recipient and payer, and edit as needed. To remove a print from your order, check the box "remove" below the print you wish to remove. When you submit the page, it will be deleted from your order.

My Requests

This is where you will find a list of all the prints that your friends and family would like you to order for them. All of the information you need will be right here. Keep in mind that these prints have not been ordered. You must check one of the accept boxes for the print to be added to your order. To add the print to your bill check, "I'll buy". To add it to the recipients bill check "Recipient will buy". When you are finished click the submit button at the bottom of the page. If you have any questions to ask of your friends or family, you can click on their email address to send them a message.

View Orders

This is where you will find all of your orders. You can look up past orders for reference or look up your open order. You will be directed to this page everytime you submit an order for prints or for your album. Once you are satisfied with the current order click the "Submit order" button order. Once you click the "Submit order" button you will not be able to change the order through the WebWed system. If you wish to place additional orders a new order will be started. If you wish to delete prints or change your album layout you will have to contact the photography studio directly. Those changes will not be updated in the WebWed system.

Figure 7 – Bride and groom home page

The first page that the bride and groom will most likely visit is the “My Album” page. Here they can layout their album as they wish. The details of all the options are described in section two of this document. The layout showing a page that is laid out is shown in figure eight.

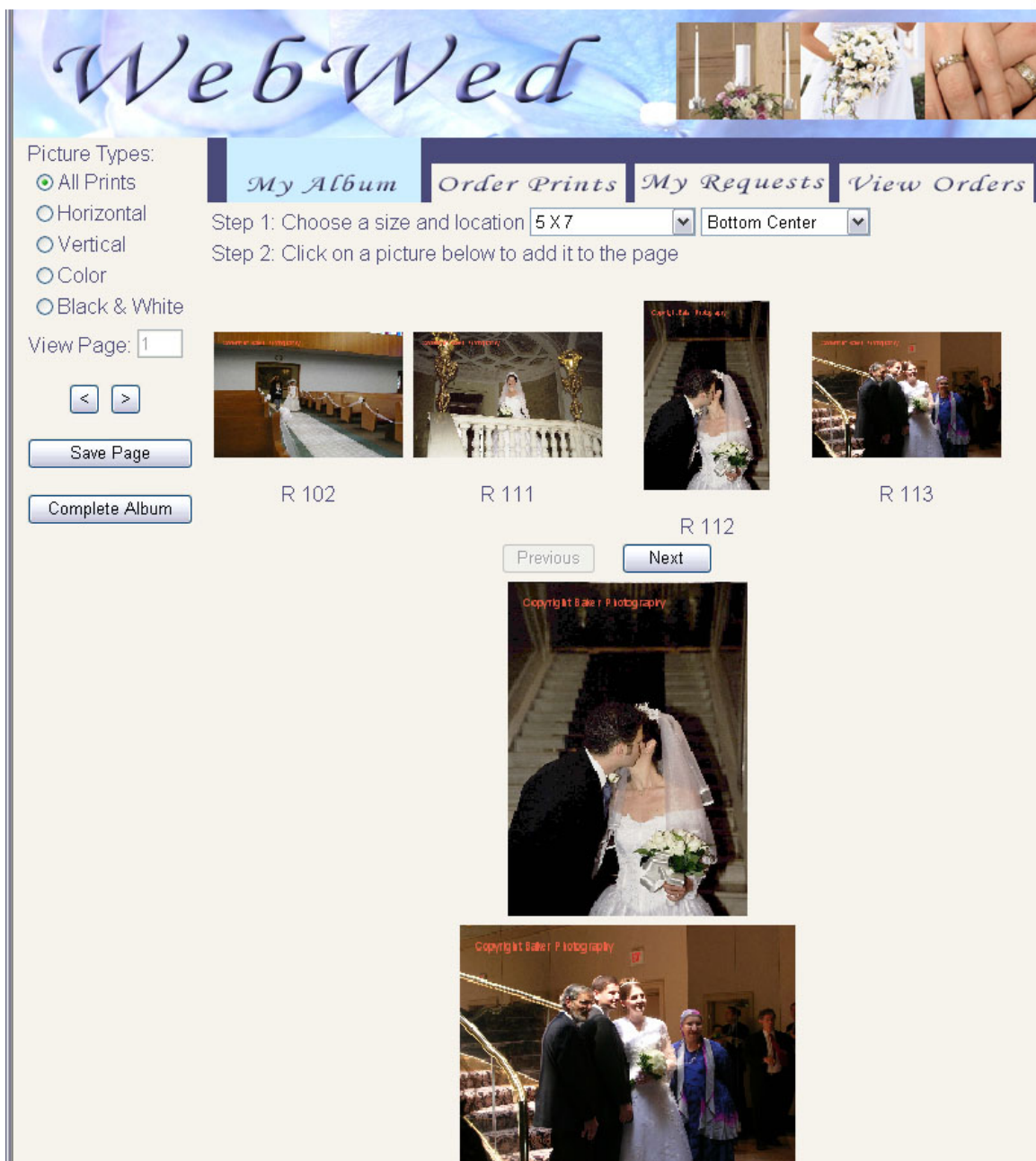


Figure 8 – Bride and groom my album page

Once the bride and groom are happy with their wedding album layout they can click the “Complete Album” button and specify the color, embossing, and viewing details of the album. The layout of the “Complete Album” page is shown in figure eight.

The screenshot shows the 'Complete Album' page on the WebWed website. The page has a blue header with the 'WebWed' logo in a cursive font. Below the header is a navigation bar with four links: 'My Album', 'Order Prints', 'My Requests', and 'View Orders'. The main content area is white and contains several form elements. On the left, there are three dropdown menus: 'Choose an album color:' with 'White' selected, 'Choose an embossing color:' with 'Silver' selected, and 'Choose an embossing text:' with 'Script' selected. Below these are two text input fields for 'First Line of album text:' and 'Second line of album text:'. To the right of these fields is a preview window showing a sample album cover with the word 'Sample' written on it. Below the preview window is a dropdown menu for 'Do you want friends and family to be able to view your photo album online?:' with 'Yes' selected. At the bottom of the form is a button labeled 'Complete Album'. The background of the page features a large, close-up image of a blue flower.

Figure 9 – Bride and groom complete album page

The second thing the bride and groom might want to do is order prints. The “Order Prints” section of the Web site allows the bride and groom to choose who is receiving and who is paying for each print. The details of this page are shown if figure ten.

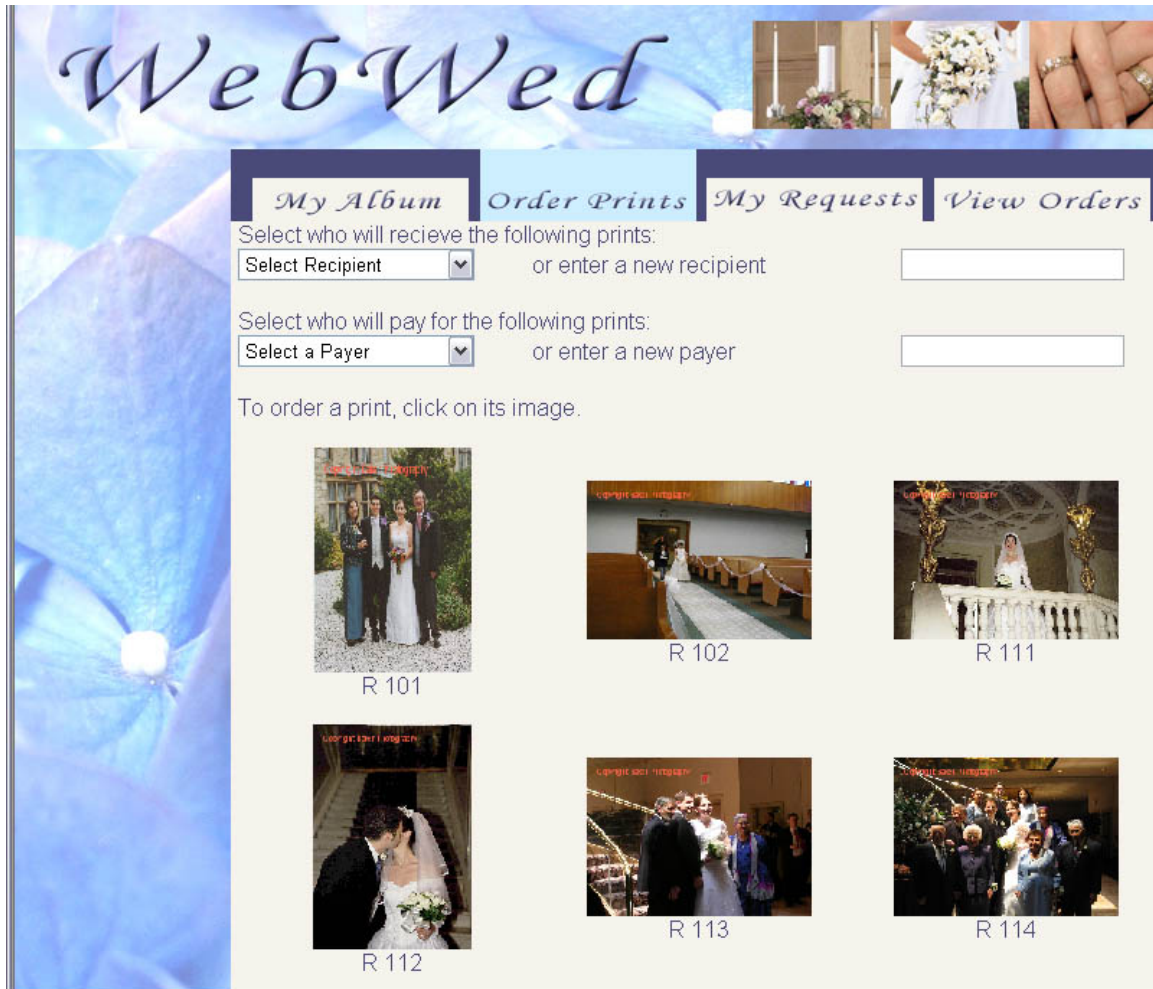


Figure 10 – Bride and groom order prints page

After a user selects the print she wished to order, a pop-up window is displayed with a larger version of the print, and the option to add up to five different sizes. This pop-up window is shown in figure 11.

Recipient: Bride and groom Payer: Bride and groom



4 X 5 (\$20.00) 1

Select a Size Select a quantity

Select a Size Select a quantity

Select a Size Select a quantity

Select a Size Select a quantity

Select a Size Select a quantity

Select a Size Select a quantity

Add to Order

Figure 11 – Order print pop-up window

Once the bride and groom have ordered all of their prints they can view requests that friends and family members have placed through the “My Requests” section. Here they can specify whether the print will be paid for by them or if the recipient will pay for it. The “My Requests” page is shown below in figure 12.




My Album *Order Prints* *My Requests* *View Orders*

Requester Name	Print ID	Size	Quantity	Cost			Email
beth	R 102	4 X 5	2	"C"	BG Pays	Requester Pays	me@you.com
beth	R 103	8 X 10	1	"C"	BG Pays	Requester Pays	me@you.com
Angela	R 108	5 X 7	2	"C"	BG Pays	Requester Pays	jsangel1981@yahoo.com

Figure 12 – Bride and groom my requests page

After the bride and groom are finished ordering all of their prints, and have accepted all of the requests that they want they can visit the “View Orders” page to print their invoice. If they need to make any changes to their current order they can do so on

this page. They can also visit this page after their order is placed to print more invoices for their own use. The “View Orders” page is shown in figure 13.



Figure 13 – Bride and groom view orders page


The print invoice is broken down by payer and lists the print id, size, and cost for each print. There is also a thumbnail image of each print for easy reference. Each payer’s subtotal and total with tax is listed. The album invoice shows which prints are on each page along with their location on the page. The print and album invoices are shown in figures 14 and 15 respectively.

Angela Horton and
James Pennington
1254 Main St.
Cincinnati, OH 45224
513-123-4567



Baker Photography
1924 Ross Hanover Rd.
Hamilton, OH 45014
513-889-2462

Angela

Picture	Studio ID	Size	Qty	Cost	Recipient	Ext. Total
	R 122	5 X 7	1	\$25.00	Angela	\$25.00
Sub Total: \$25.00						
Tax: \$1.75						
Grand Total: \$26.75						

Bride and groom

Picture	Studio ID	Size	Qty	Cost	Recipient	Ext. Total
	R 121	5 X 7	1	\$25.00	Angela	\$25.00
	R 112	5 X 7	2	\$25.00	Bride and groom	\$50.00

Figure 14 – Bride and groom prints invoice

Angela Horton and James
Pennington
1254 Main St.
Cincinnati, OH 45224
513-123-4567

logo

Baker Photography
1924 Ross Hanover Rd.
Hamilton, OH 45014
513-889-2462

Page: 1

Print ID	Size	Location
R 101	20 X 16	Center Center

Page: 2

Print ID	Size	Location
R 113	5 X 7	Top Center
R 113	5 X 7	Bottom Center

Figure 15 – Bride and groom album invoice

5.5 Friends and Family Section of the Web Site

The friends and family section of the Wed site allows people who the bride and groom have given permission to view the album and request prints. Friends and family members are welcomed with a page similar to the bride and groom home page. They are given instructions on how to use each section of the Web site, and can link to each section from the top navigation or the headers. The friends and family home page is shown in figure 16.



Figure 16 – Friends and family home page

The friends and family members can only view the wedding album after the bride and groom have completed it and agreed to allow friends and family users to view it. The friends and family members will have no ability to change the lay out in any way. The “View Album” page is shown in figure 17.

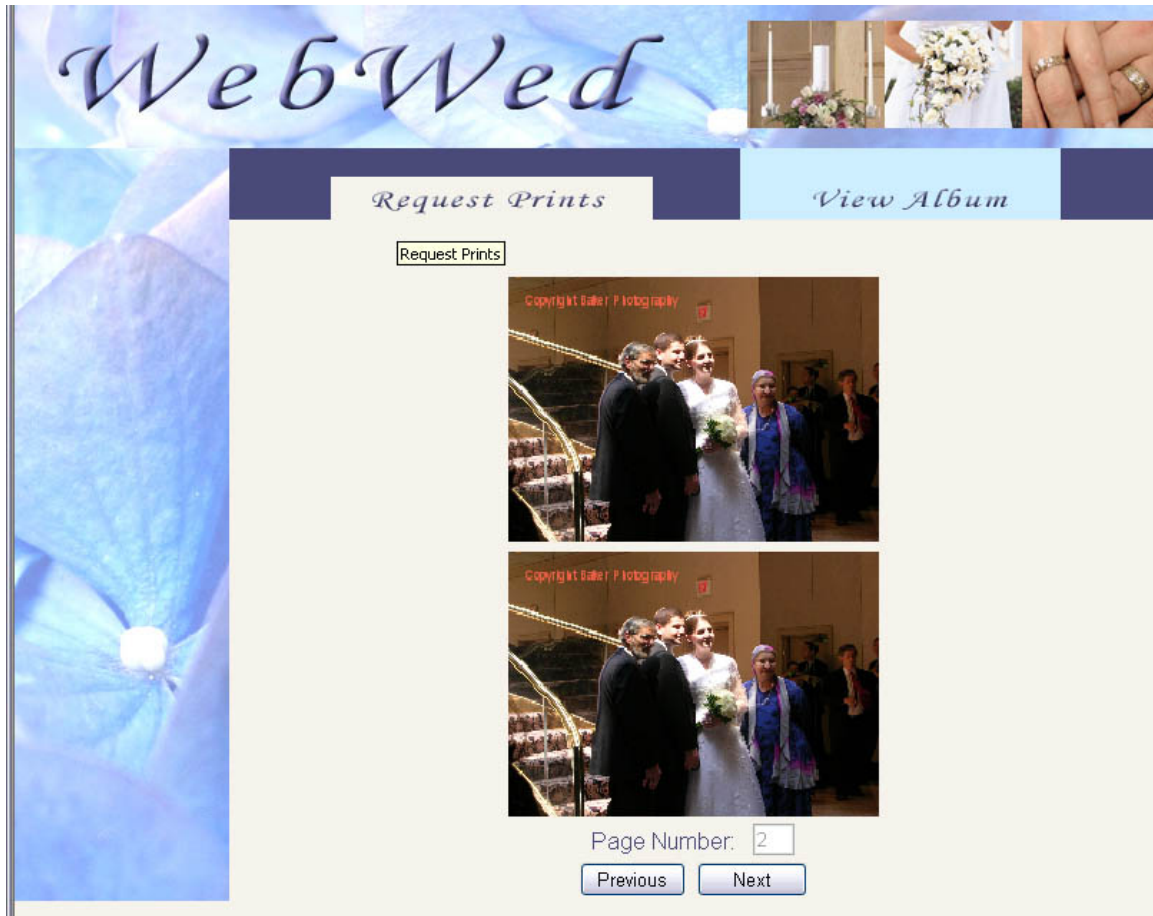
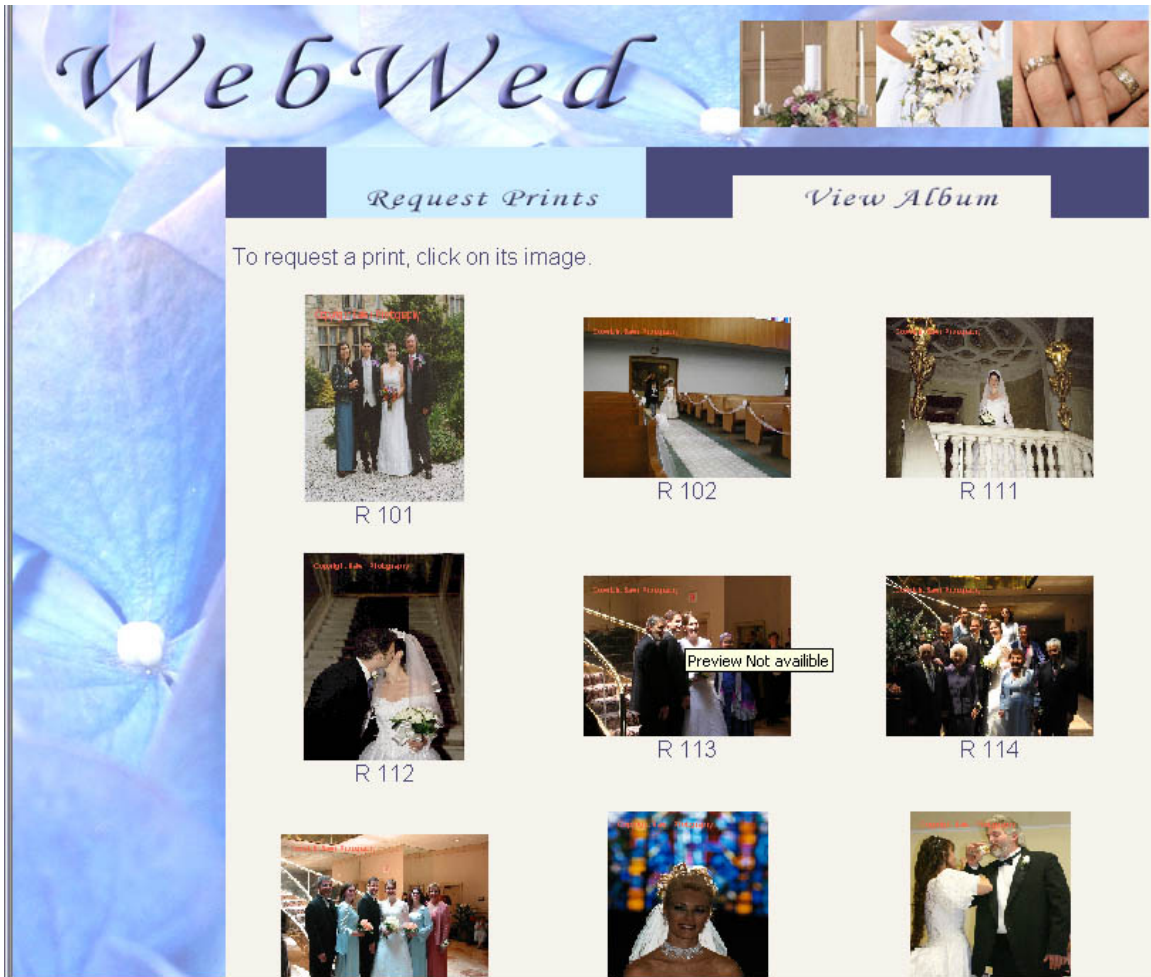


Figure 17 – Friends and family view album page

The friends and family members can also place requests for prints. The layout and functionality for this page is very similar to that of the bride and groom’s “Order Prints” page. The main difference is that the friends and family members do not select who is paying for the print. They simply enter their name and email address. The friends and family “Request Prints” page and its pop-up window are shown in figure 18.



Your Name: Your Email:


	Select a Size <input type="button" value="v"/> Select a Size <input type="button" value="v"/> Select a Size <input type="button" value="v"/> Select a Size <input type="button" value="v"/> Select a Size <input type="button" value="v"/> Select a Size <input type="button" value="v"/>	Select a quanti <input type="button" value="v"/> Select a quanti <input type="button" value="v"/> Select a quanti <input type="button" value="v"/> Select a quanti <input type="button" value="v"/> Select a quanti <input type="button" value="v"/> Select a quanti <input type="button" value="v"/>
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Figure 18 – Friends and family request prints pages

6. Conclusions and Recommendations

WebWed is a very effective tool for any photography studio that does wedding pictures. It makes the process of ordering prints and laying out a wedding album fun and

easy. Since WebWed is database driven, studios can update information, add and remove print sizes, and locate customer information in minutes. WebWed replaces the out of date paper system that most photography studios use, allowing for improved customer service and satisfaction.

6.1 Recommendations

In developing WebWed I came across a number of obstacles. Having no experience with developing a database driven Web site, I had to relay on my knowledge of database driven Windows applications and general Web site development. By combining my knowledge of the two I was able to complete the project. I was also fortunate that my co-op job at the time afforded me and opportunity to work with ASP .NET Web sites and thus grow my knowledge of ASP .NET. Some of the obstacles that I faced were pop-up windows, getting the modified files onto the server, and creating the invoices.

One thing that I did not realize when I first started to develop WebWed was that ASP .NET did not contain a MessageBox object nor did it inherently allow the results of a button click to open a new browser window. I had to do some research to find out how to incorporate JavaScript into my .NET application in order to show a pop-up window. This took about two weeks. Had I known the limitations of the programming language I was using at the beginning I could have designed my application differently. My recommendation on this is to always make sure you are aware of what your programming language is capable of before you beginning designing your application.

The second obstacle was a little larger. Again I was surprised to find out that it is not possible to traverse a directory on a client's computer with ASP .NET. This is on

some level possible with JavaScript, but it did not meet the needs of my application. Because I was going to be dealing with images whose original file sizes ranged from one to three megabytes each I could not upload hundreds of these to the server effectively. So, I turned to a Windows application to modify the files and upload only the modified files to the server. This was effective at modifying the files, but not at getting the files onto the server.

The problem with getting the files on to the server is that it required either inserting the images directly into the database or using an FTP service to upload each file. Inserting the images directly into the database was not an option for this application as the database would become full very quickly even if only modified files were uploaded. The only other option was to FTP the files. After doing a few weeks of research I found that FTP transfers are not highly supported nor highly recommended .NET for applications. I tried to work the FTP transfer into my application to no avail. My final option was to require an extra few steps from the user. The user must manually zip the files, and use the file upload tool on the “Update Customer” page of the Web site to upload the modified pictures. The processes of uploading a file will send an email to the Web site administrator letting them know the file has been uploaded to the uploads directory. At this point the Web site administrator can log on to the server and unzip the files to same directory as the filename. The filename will be the same as the user id. The recommendation to this is the same as the previous; know the limitations and capabilities of your programming language.

The final obstacle that I faced was creating the invoices. I was planning to use Crystal Reports to create the invoices. I realized that this was not going to be

possible because Crystal Reports does not have the ability to display dynamic images. Since not having a record of what a print looked like after I placed my order was one of my biggest complaints about the current system, I had to include the image in the WebWed invoice. My second option was to dynamically create an HTML page that listed the images along with all the other information. This took about three weeks longer than expected because dynamically generating the Web page was more difficult than setting up the Crystal Report would have been. My recommendation for this is to always leave extra time in your schedule in case you run into road blocks, and also always have an alternative.

Developing WebWed has been a huge learning experience for me. Not only have I increased my skills as a developer because of it, my confidence in my abilities has increased as well. After all the things that this project has taught me there are a number of things I would like to improve and change with WebWed. While they are not within the scope of this project I hope to accomplish them over the next year so that I can sell WebWed as a service to photography studios

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