Cincinnati Beads.com

By

Pamela Naber

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

University of Cincinnati
OMI College of Applied Science

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Lawrence G. Gilligan — Lawrence G. Gilligan, Department Head — 6-7-01 — Date

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I am very grateful to have had this experience. This Senior Design Project has given me many challenges. The concepts involved in making a project have helped me to gain valuable experience, from planning the project to overcoming some of the technical obstacles to having full functionality.

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Dedication

I would like to dedicate my project to my mother and my kids. They supported me and allowed me to turn their lives upside down during my 2-3 years in school. To my grandmother for always encouraging me to work hard and to do my best at everything I attempt. And finally I would like to dedicate my project to God for giving me the strength and courage to continue day after day.

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Abstract

This report covers the use of an Internet application with database functionality. In my studies for the Information Engineering Technology program, this is my area of interest. I have used my personal hobby, beadwork, as the material for the Web site. Ultimately, my goal is to turn my hobby into a profitable business. The purpose of this site is to demonstrate my technical ability in: (1) the design and use of an effective relational database and (2) the design and development of a Web site that has an attractive look and feel for a pleasant end user experience. It will also provide an easy and logical structure for navigation. The material covered in this report for the development of this site includes; database design using Microsoft SQL server, the use of Microsoft Visual InterDev as the development environment and the use of a digital camera and Paint Shop Pro 7.0 to create interesting graphics.

With e-commerce as an up-and-coming area for conducting business, the skills I have developed here will be in high demand. Furthermore, this project will help to expand the reach of my audience to market and sell my hobby goods. In many cases, it makes good business sense to utilize the web in marketing and selling of products to benefit business either directly or indirectly. It can expand the reach of one's target audience.

With this site, I am also promoting the formation of a local group of bead artists. Through the formation of a group we can share knowledge, share ideas and form a Society that can network with other bead societies in the USA and even the world.

CincinnatiBeads.com

1. Introduction

My project integrates the use of Internet technologies with database functionality. This is my area of interest. My goal for this project is to expand my experience and technical abilities so I can be better prepared to make realistic and practical decisions in the workplace. This project has also given me a way to take what I have learned in the classroom and see how to produce a working Web application.

I am using my hobby, beadwork, as the content for this interactive Web site. The combination of these two skills, effective Web development and my beading craft, can provide me the opportunity to expand my hobby into a business, which, I may one day pursue.

1.1 Purpose

The use of the World Wide Web as a place to conduct business has proven to be successful. It is expected to grow even more in the future. Jupiter Communications projects online spending will total $4.7 billion this year, more than double that of 1998. By 2003, it says that amount will grow to $11.5 billion ((13) Dotcom Deaths). With this predicted growth in mind, this site will demonstrate my technical competency in database design, Web design, and in client-server programming. I will also show proficiency in the use of graphics for a site that is simple, pleasant to the eye and easy to navigate.

The educational goal for my project is to obtain the technical skills and understanding of what is involved in developing a Web site from the conception to planning the project in its entirety, to the production of the final product. The project involved creating and hosting a Web site and database that allow the user to browse or

that gives the user the option to purchase items or to sign up for a local interest group. Design and development of the Web site and database are critical factors to the success of this Web project.

2. Review of the Literature

Many of the resources I have used are from the textbooks that were required in several of my classes. Another rich source of information has been the Web. There is an abundance of information available about computers generally and on very specific topics such as working examples of small projects with the code shown. Through tutorials, articles by experts, samples codes, and electronic discussions, I have gained much knowledge. One particular SQL online tutorial ((3) Getting Started with SQL) gave me a detailed review. I had taken Database II two quarters prior to actually using it for my Senior Design project. This tutorial helped me to figure out how I was to upgrade my Access Database to SQL. I used Access to design my database, since it was more user friendly with an extensive graphical user interface (GUI). Then with the direction from the tutorial I was able to upgrade my database.

3. Description of the solution

3.1 User profile

This Web site is directed at the average computer user who is experienced in browsing the Internet. I am specifically targeting people who are interested in the beading craft and who live in Cincinnati. I want users to be comfortable with a logically structured Web site that will be simple in design and easy to navigate. I do not want it to be overwhelming for the average computer user.

3.2 Design protocols

The Homepage is the starting point for this Web site. The Homepage has an image map with clearly marked hot spots to the other main pages of the site. The Homepage also includes the footer with pointers to information on copyright, privacy, security, and feedback links. At this point, the user can opt to sign the guest book or view the guest book before entering any of the main areas. The six main areas are "About Me", "Kits", "Finished Items", "Local Bead Group", "Calendar" and "My Favorite Links". After the user leaves the Homepage, he or she may choose to explore any other area. The next level of pages under the Homepage accesses these five main areas. They are equally accessible from any page through the site navigation links and any page can be entered as the user desires.

I have used a template to layout all the other pages in the site, other than the Homepage. It has a table with two rows and several columns. The top row of the template table has graphics of Cincinnati scenes and the company logo. The bottom row of the template table has the site navigation in the bottom left cell. I have put the relevant content in the bottom right cell. This template incorporates a background, links to the main style sheet, includes the footer, and has the site navigation.

The "About Me" page has short paragraphs about me. It includes links from this page to my resumé and to a gallery of pictures of my family and some friends.

The "Calendar" page has a listing of upcoming classes, special events and shows that I may be participating in. I highlight those events coming to the Cincinnati Area.

The "My Favorite Links" page has two buttons, one that generates a new page that displays my favorite Bead resource links and one that generates another page to

display my favorite Cincinnati links. They are viewed in the browser as click-enabled links.

The "Local Bead Club" page has a main page that has an introduction and that states a purpose for the Club's existence. It has short statement to encourage interested people to join our local bead group. From this page the user is offered links to view the calendar, view a members' gallery, get details about the Club, view current members, join the Club, or update a members' profile.

The "Finished Items" page has and introduction page with text that provides a links the user can select to see more specific information. This page shows a picture of an item, the name of the item, price and the option to add it to your shopping cart.

The "Kits" page is similar to the "Finished Items" page because the user is able to see a picture of the item, the item name, an item description, a materials list for the kits, and a price. The user has the option to add the item to the Shopping Cart or to view it.

If the user opts to proceed to checkout they have to fill out the customer form entering data on themselves, a password and a type of payment, Credit card number and expiration date for a first time purchase. Upon repeat purchases they can enter their last name and password and the order will be processed using their information that is already stored in the customer table. The shopping cart will give a merchandise subtotal and the final order page will have a merchandise subtotal with standard shipping charge added for a grand total that would be charged to their credit card. It will be recommended to print the order page as a receipt.

4. Objectives of the Project

My goal was to design a Web application that lets the user browse freely around the site, join a local interest group, view the members of the interest group, update their profile, sign and view the guest book, and also to purchase items I have made or kits to do it themselves. The site includes links that pertain to Cincinnati and bead resources.

Deliverables:

- I will produce an interactive Web site.
- It will be simple and easy to navigate.
- I will use Cincinnati as its theme.
- I will incorporate an effective database design.
- It will offer Local Bead Group Registration with ability to update personal information.
- The user will be able to view the members of the local interest group.
- The user will be able to sign a Guestbook.
- The user will be able to view the Guestbook.
- This site will have ordering on-line capability for the Kits and Finished Items.
- I have an e-mail link for feedback on the site and/or as a means to contact the owner of the site (me).

5. Designs and Development

5.1 Budget

Hardware Requirements	Cost
Web Server	$4000.00*
Database Server	$1399.00*
Client PC -500 Mhz processor or better With NT or 2000 workstation	$899.00 and up*
Digital Camera	$299.00
Software Requirements	**Cost**
Visual Studio Enterprise Edition 6.0	$1619.00*
MS SQL Server Enterprise 7.0 (5 users)	$1399.00*
Internet Information Server 4.0	Comes with Windows 2000
MS Office 2000	$504.99**
Windows NT Server	$809.00*
Internet Explorer 4.X or above	Free download from MSN
Paint Shop Pro 7.0	$109.00

**Price found at www.egghead.com
*Prices found at www.msn.com

5.2 Timeline

Figure 1. Shows the tasks and approximate dates they were accomplished (see figure1).

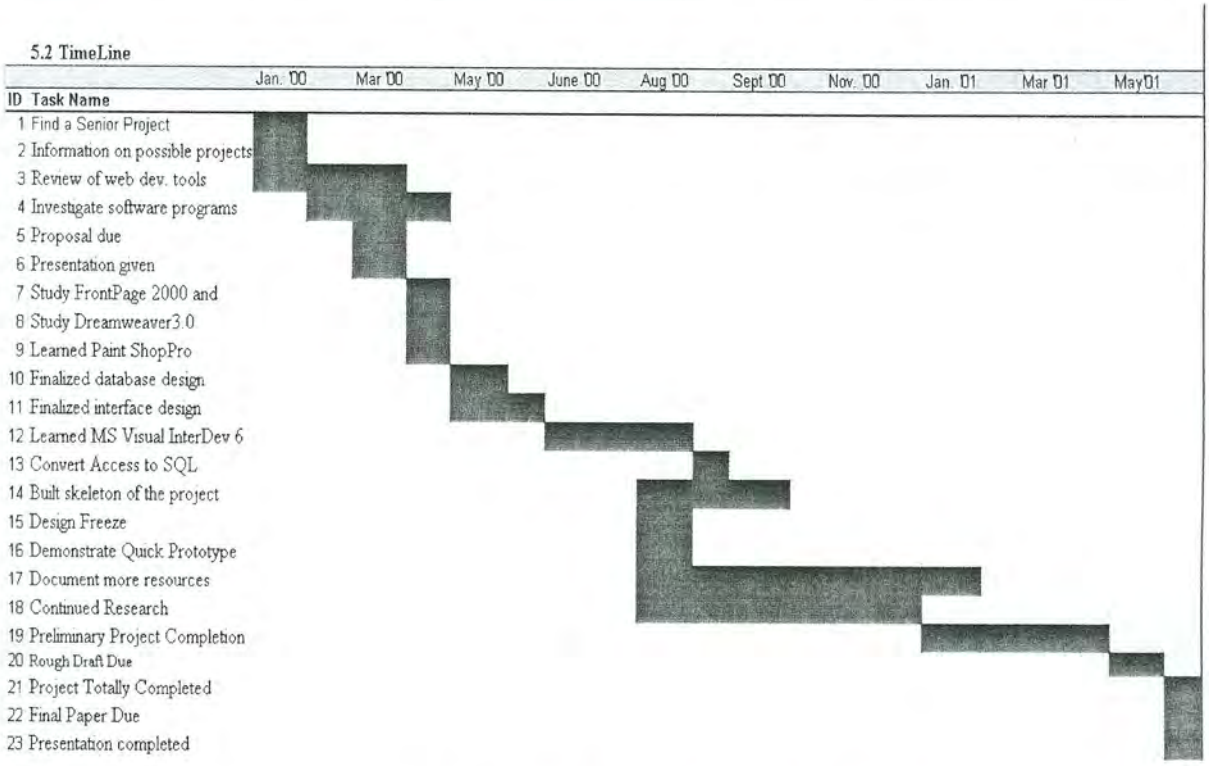

Figure 1. This shows the project timeline.

5.3 Software

After I had decided on my project topic, my next concern was how I was going to create it. I did look into other development tools in the beginning stages of the project before I ultimately decided on MS Visual InterDev 6 as the development environment.

I first considered MS Front Page 98 and Macromedia Dreamweaver 2. MS Front Page was my first choice because I had prior experience with this particular software. It has good HTML capability but could not provide the database connectivity. Dreamweaver 2 had excellent design and graphic capabilities but it had a steep learning curve and lacked database functionality also. MS Visual InterDev was offered as a special topics course in the summer of 2000. I took the class and learned that it is a fully

functional Rapid Application Development environment with database capability. This software package uses, HTML, Visual Basic scripting, JavaScript, SQL server and ASP. With this robust program I was able to generate Web content dynamically from the database.

5.4 Hardware

The hardware I used included the server and client PC's that are available to the students of the IET program in the fourth floor lab. The requirements included the use of the senior server, which has IIS, SQL Server and a dedicated Internet connection needed for this project.

6.0 Proof of Design

The starting point for this site is the Homepage or Default.asp (see Figure 2.) It has an image map with clearly marked hot spots the user can click to get to the other main areas of the site. The other main areas of the site are "About Me", "Local Bead Group", "Kits", "Finished Items", "Calendar" and "My Favorite Links". On the Homepage the user has the option to sign the Guestbook or view the Guestbook, in addition to selecting one of the hot spots.

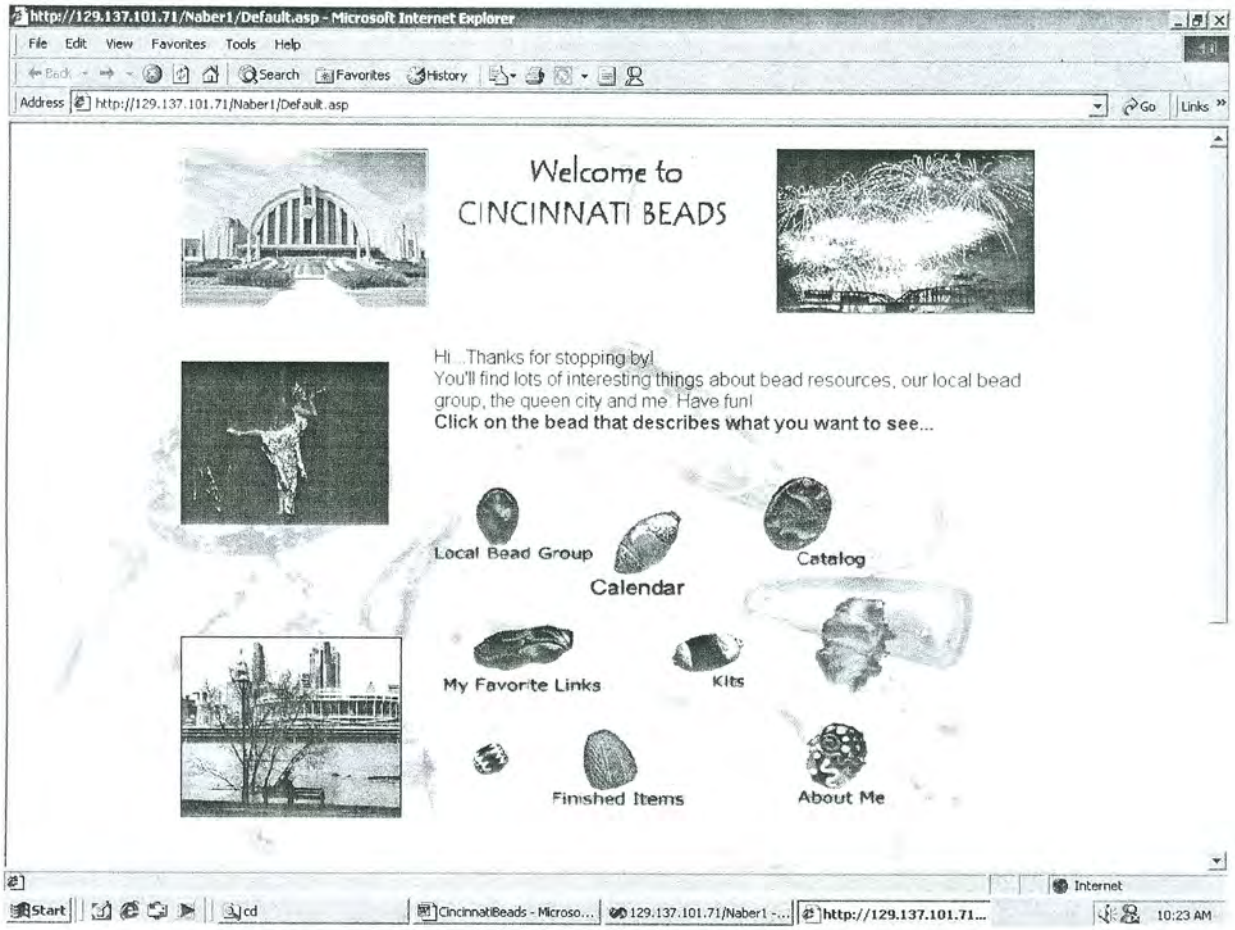

Figure 2. This shows the Homepage viewed in browser.

The Homepage includes the footer file (see Figure 2.) The footer.asp file contains the pointers to get more information on the copyright, privacy and security issues and provide a way to email me with feedback. It also states that it is a Microsoft friendly site that was created in MS Visual InterDev 6.0 and is best viewed using Internet Explorer 4.x and up.

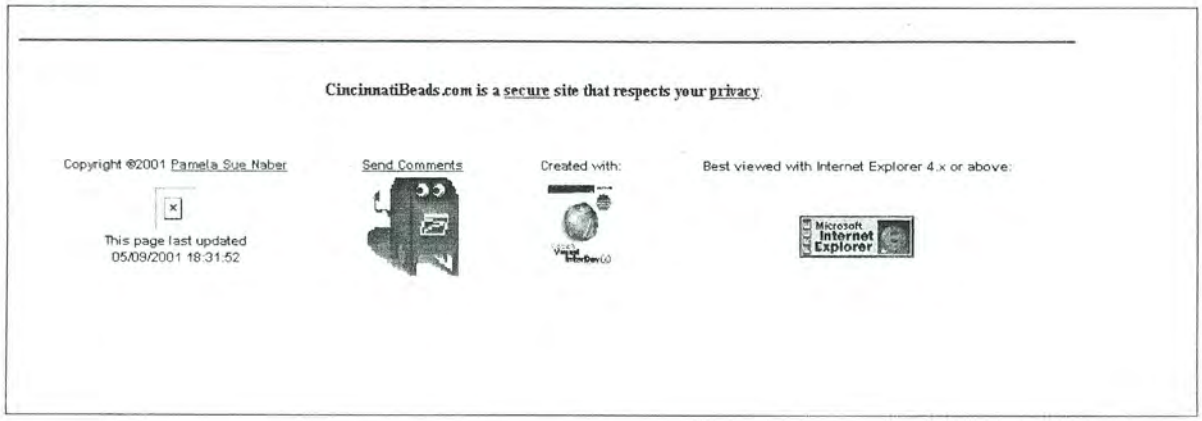

Figure 3. This shows the Footer file viewed in browser.

At the entry point of the site, the Homepage, the users can choose to go anywhere on the site by selecting from the image map hot links, or they can opt to sign and/or view the guest- book. The site diagram, as shown in Figure 4, shows the overall layout of the site. From this diagram, you can see the main pages that are linked from the Homepage.

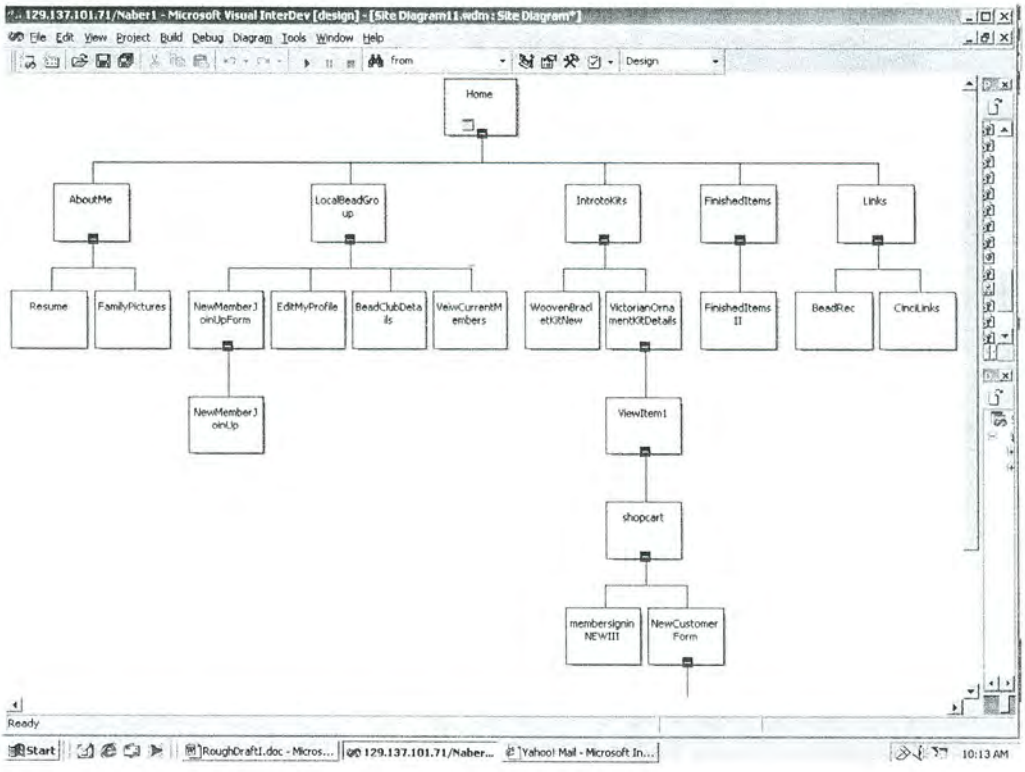

Figure 4. This shows the Homepage with the first level of pages.

I created and used a template to produce the many pages in the site (see Figure 5.) The template contains the background, link to the main style sheet, the navigation choices and the footer. *It is an ASP page, in order to utilize the include file capability.* The template also has a table that serves a placeholder. The table has two rows and several columns. It contains two Cincinnati graphics, since this is the theme of the site, and a company logo in the top row. This template has site navigation links down the left side of the table to serve as a means of getting to the other main areas of the site at any time. The bottom right portion of the table is reserved for relevant content.

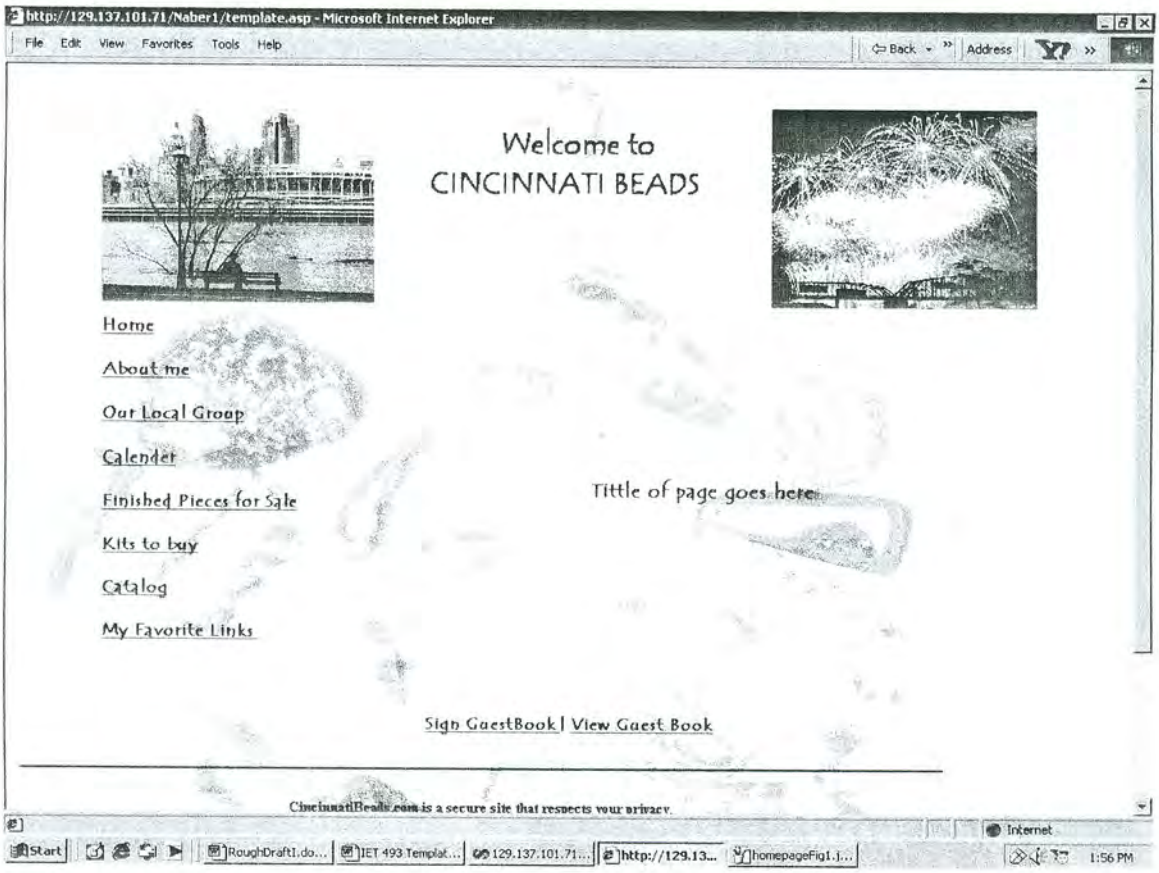

Figure 5. This shows the template viewed in the browser.

A template is used to standardize the layout in each page. This standard format gives a sense of consistency to the user. It lends to the experience of being in one particular site. Having a template allows the user to be comfortable in knowing the site links are in the same location on every page. It also saves time for the developer. The site navigation (see Figure 6.) is done with an "include" statement. This statement is embedded in the cell of the table that the display is to appear. The code is:

<td align="left"><!--#include file="navigation.asp"--></td>

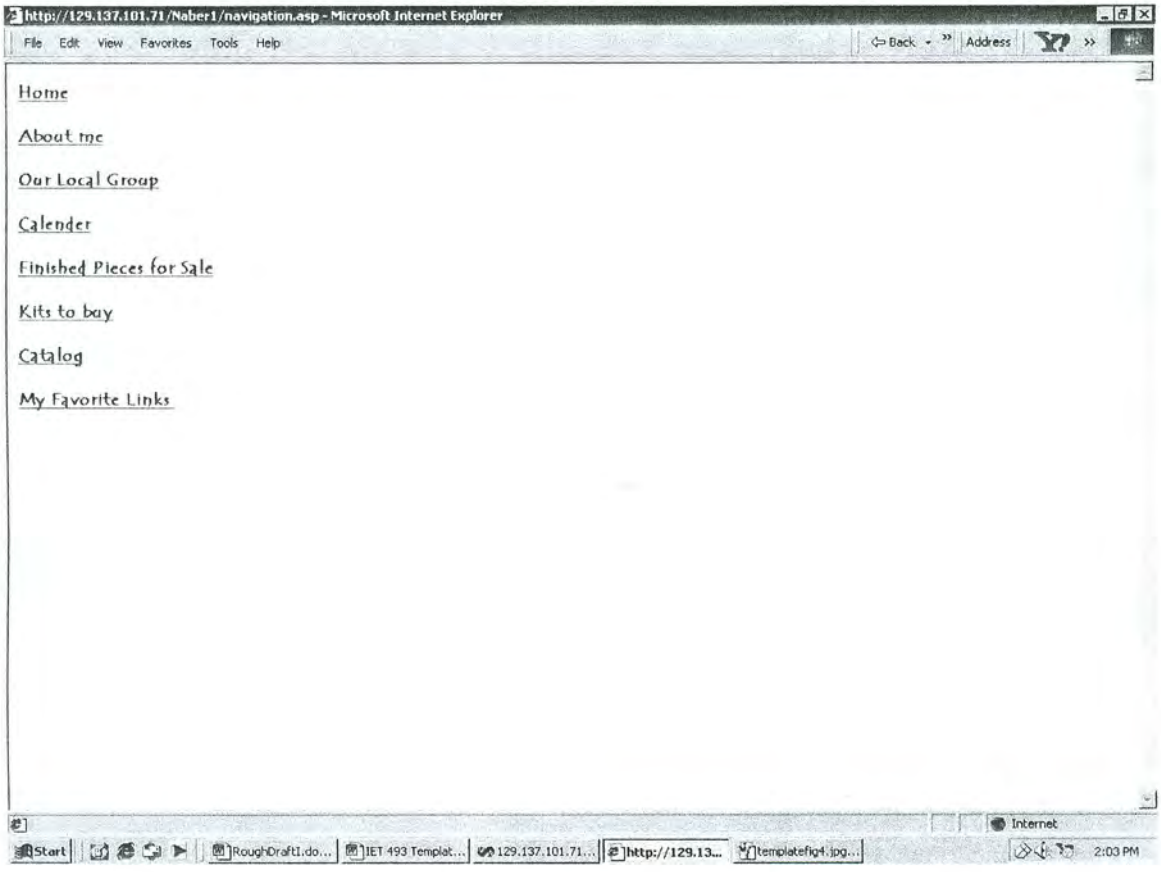

Figure 6. This shows the stand alone navigation file viewed in browser.

The footer is included in the template the same way as the navigation, through the include file.

The homepage differs slightly from the template and the rest of the pages in respect to the way of that the navigation is set up. The navigation is not included on the Homepage; instead the image map with hot links is used.

As you can see in the site diagram (Figure 3.), there are six first level pages that branch from the Homepage. The first one I will discuss is the "About Me" branch (see Figure 7.)

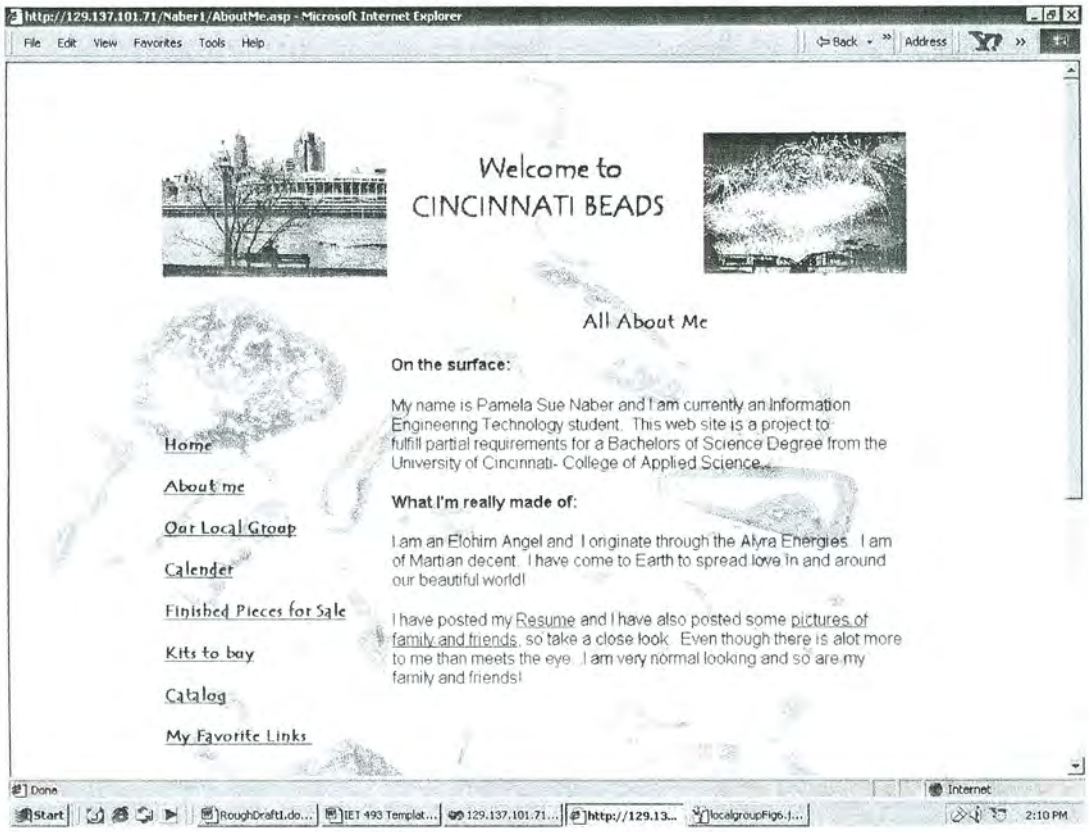

Figure 7. This shows the "About Me" page viewed in the browser.

This page has a couple short paragraphs about me. Inside the last paragraph, there are two additional links the user can select to get even more information on me: one link is to my resumé and the other link is to pictures of my family and friends.

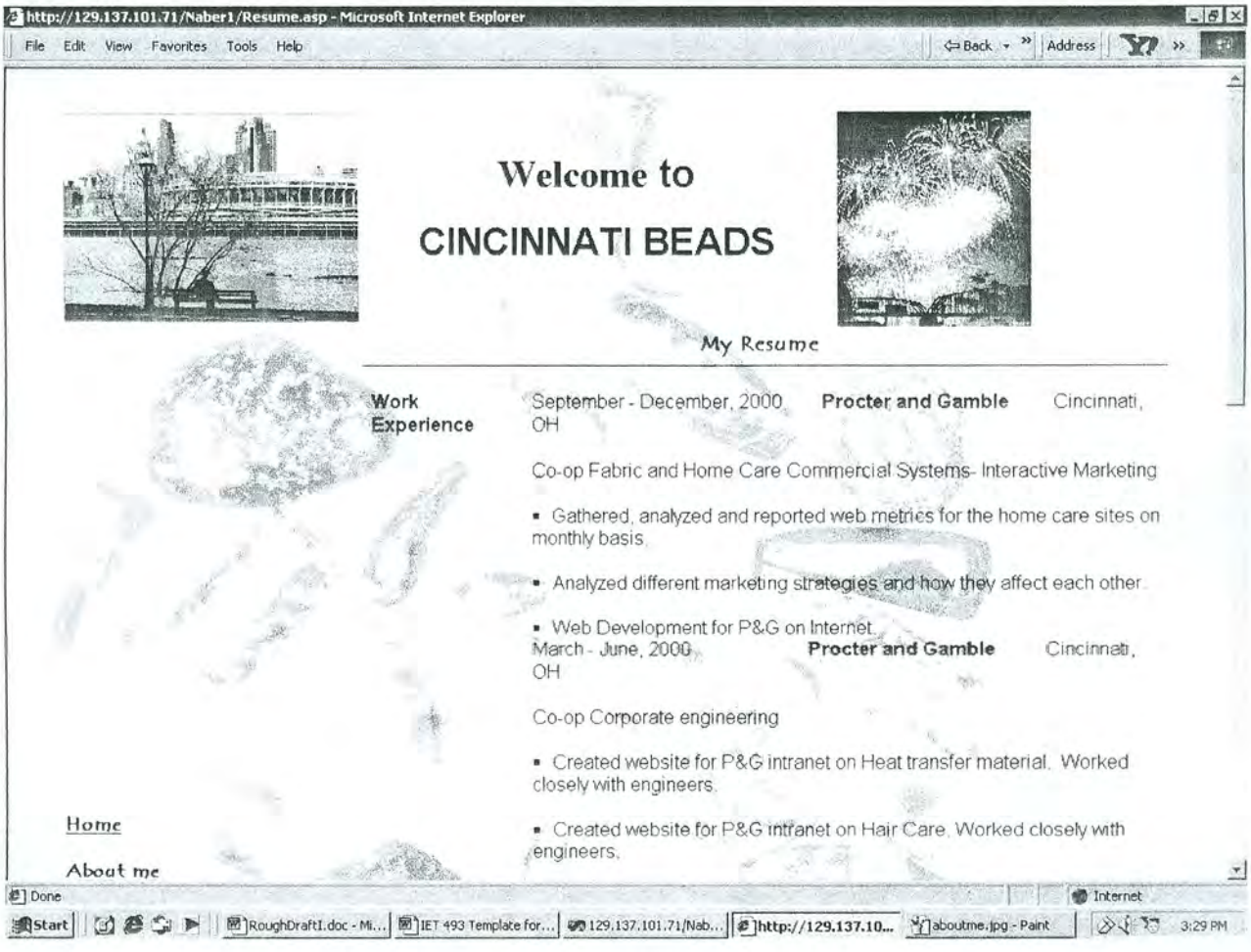

Figure 8. This shows the resume link viewed in the browser.

One good reason for the resumé link (see Figure 8.) is so that potential employers can see not only my resumé online but also view the site as an example of my work. I also created the family pictures page (see Figure 9.) because my family is important and that is a message I want to portray. This page gives a personal touch and was fun to put together.

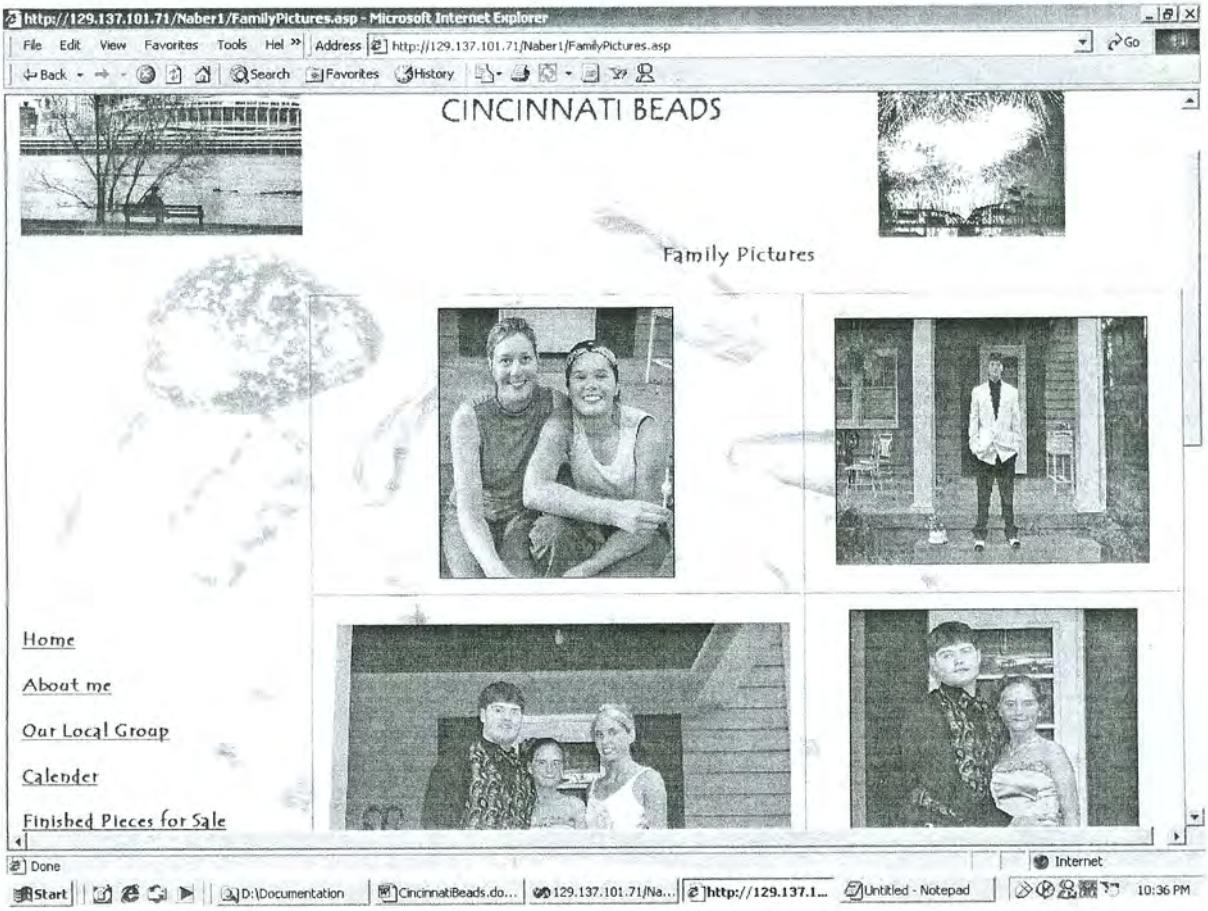

Figure 9. This shows the family pictures link viewed in the browser.

The next page on the site focuses on the Local Bead Club (see Figure 10.) This page gives an introduction to the club and purpose for its existence. On this page, there are several links the users can choose. They are "Calendar", "Members Gallery", "Bead Club Details", "View Current Members", "New Member Join Up", and "Edit My Profile". I even try to encourage people sign up for the local bead group here.

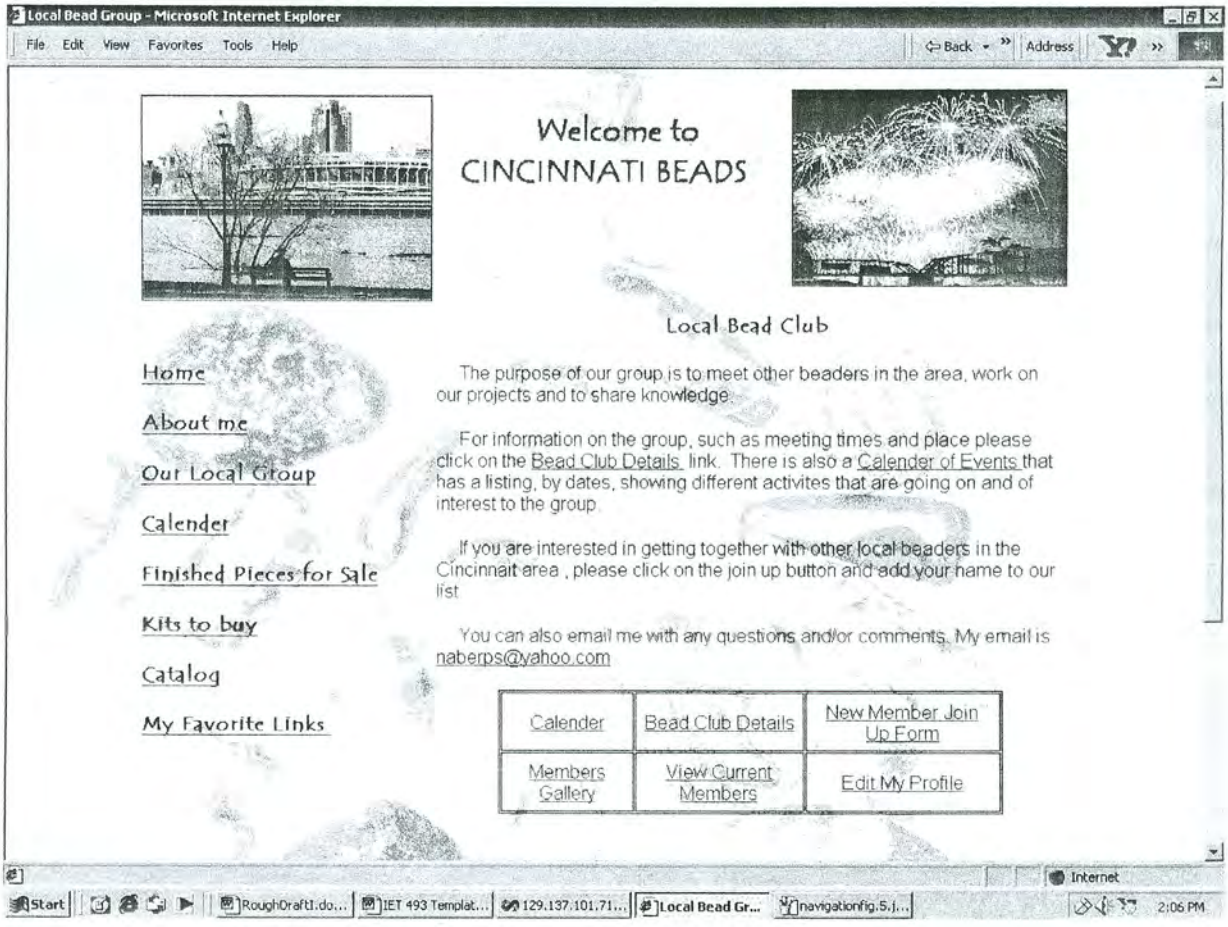

Figure 10. This shows the "Local Bead Club" page viewed in the browser.

The "Bead Club Details" page is provided so that a potential member can get more details on the beading group such as the meeting place and time (see Figure 11.) Or they can view the Calendar of Events.

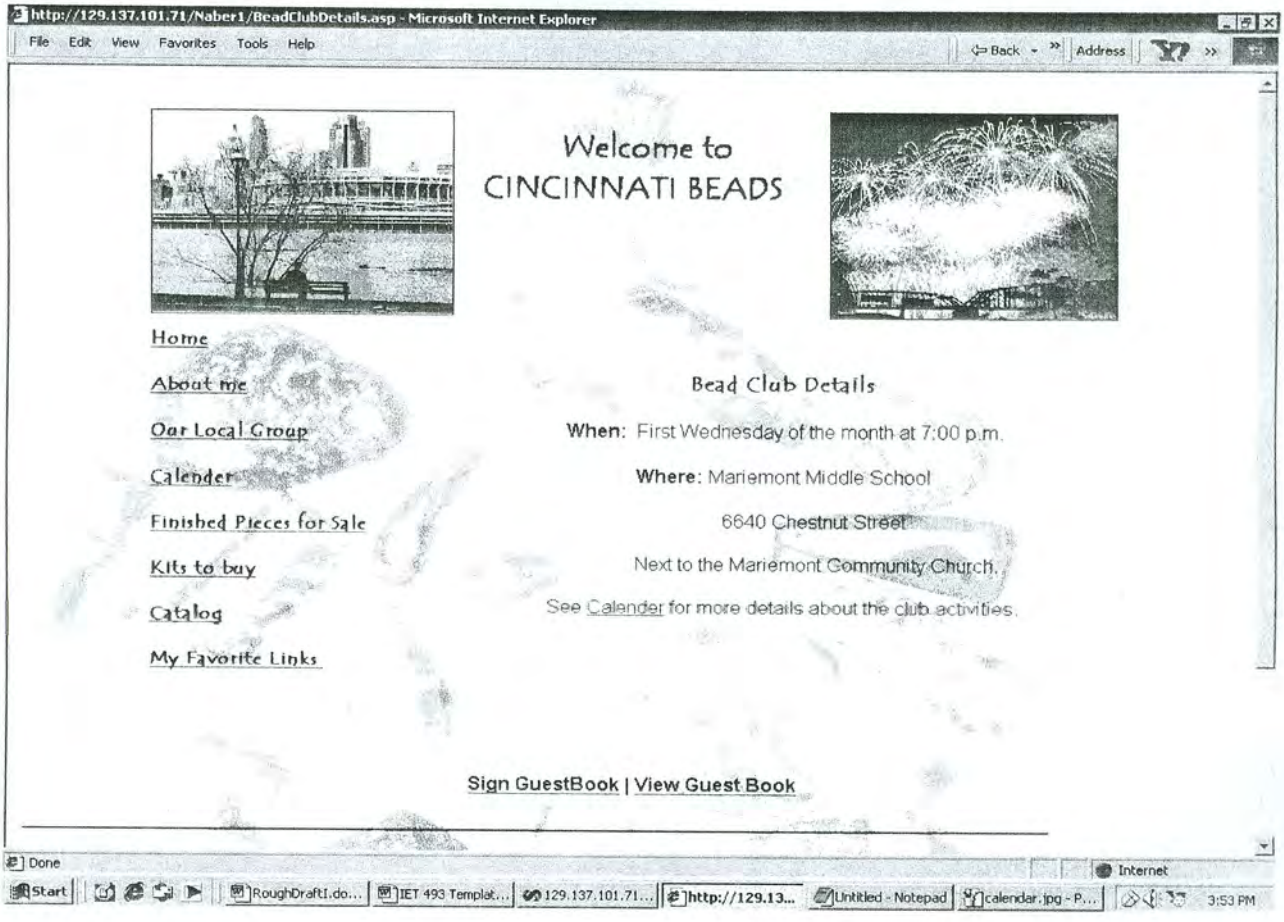

Figure 11. This shows the "Bead Club Details" page viewed in the browser.

For convenience to the bead club user, I have a "Calendar" link (see Figure 12.) located in several spots. It is available from the "Bead Club Details" page, and from the "Local Bead Club" page and the Homepage.

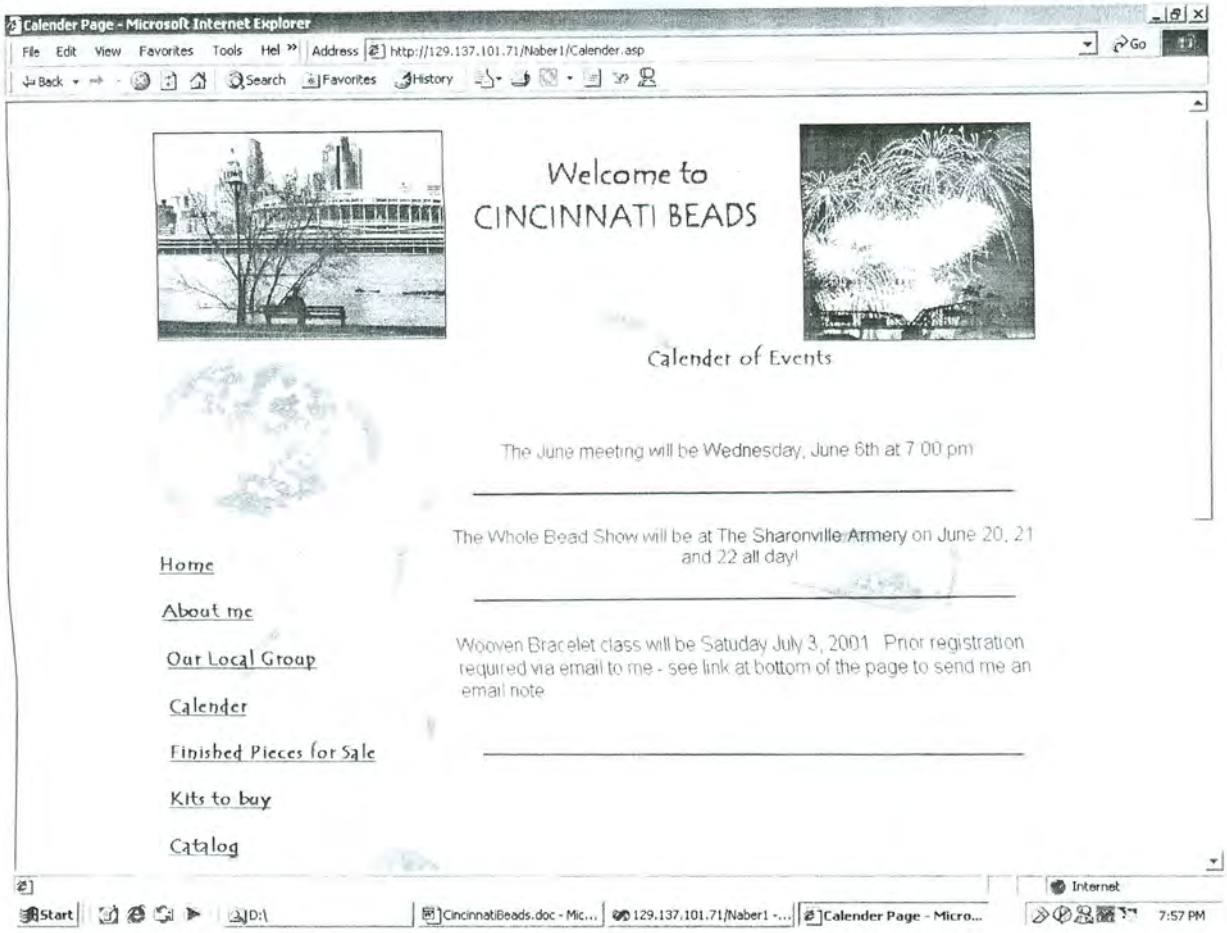

Figure 12. This shows the "Calendar" page viewed in the browser.

The "Members Gallery" page is an empty page at this point, but the idea is post pictures of things that people in the bead club have made.

This "Local Bead Club" page also has database functionality associated with it. The user can join the local group, view current members and edit their profile. These three pages all interact with the "LocalBeadClubMembers" table in the database.

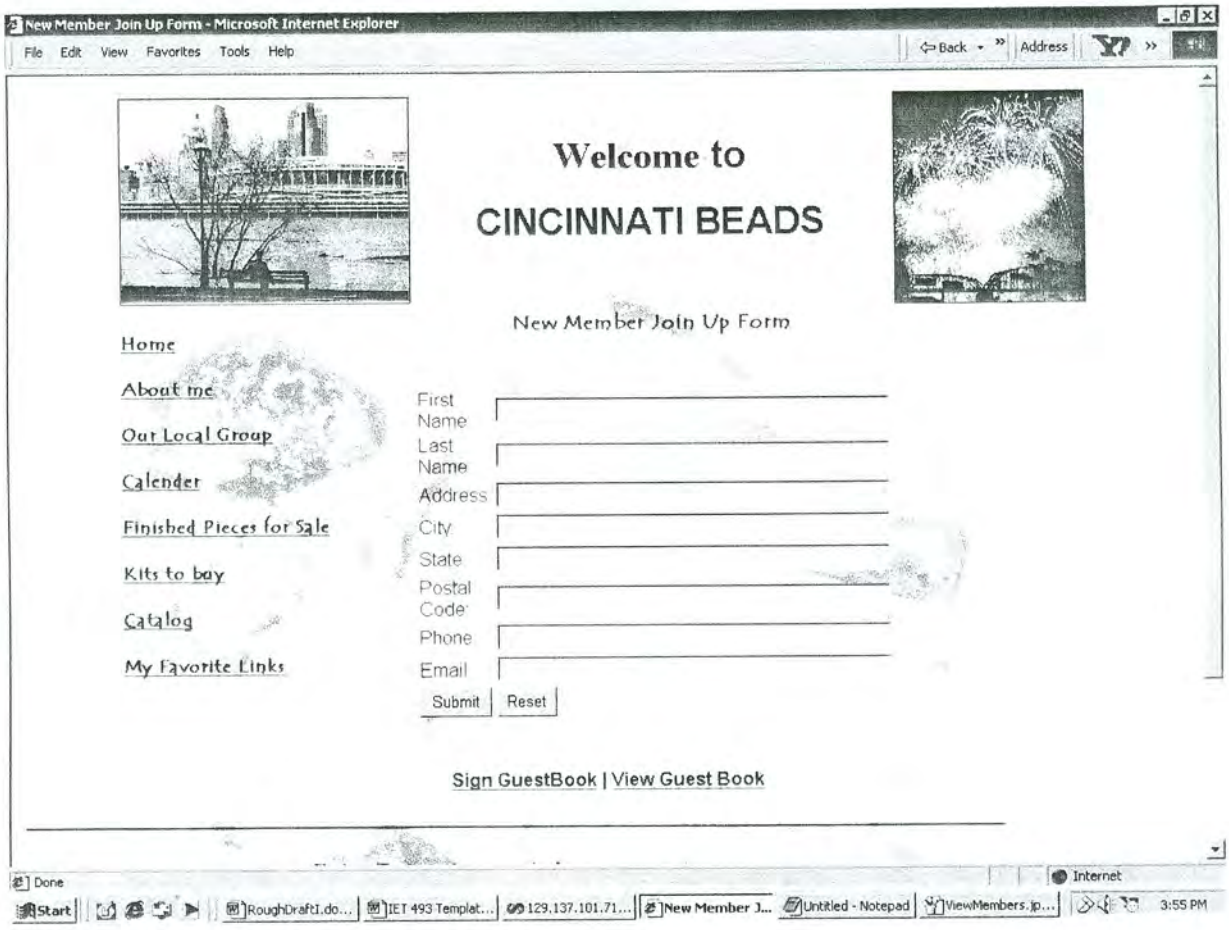

Figure 13. This shows the "New Member Join Up" form viewed in the browser.

On the new member join up page (see Figure 13.) an interested user can sign up to join the local bead group. After they enter their information it will add them to the "LocalBeadClubMembers" table. The primary piece of code to transfer information from the new member join up form to the NewMemberJoinUp1.asp is:

<form id=form1 name=form1 **action=NewMemberJoinUp1.asp** method=post>
<\form>

Then the NewMemberJoinUp1.asp has an SQL statement that transfers the information from the form to the database.

The code is:

```
<%
tempdate = Date
sSQL = "INSERT INTO tblLocalBeadGroupMembers (FName, LName, Address, City,
State, PostalCode, Phone, Email)"
sSQL = sSQL & "VALUES('" & Request.Form("txtFName") & "', '" &
Request.Form("txtLName") & "', '" & Request.form("txtAddress") & "', '" &
Request.Form("txtCity") & "', '" & Request.Form("txtState") & "', '" &
Request.Form("txtPostalCode") & "', '" & Request.Form("txtPhone") & "', '" &
Request.Form("txtEmail") & "')"


NaberConn.Execute sSQL
Response.Write "Thanks and your record was successfully inserted into the database."
%>
```

If an interested member or user and would like to see who is currently in the group, they can select the view members link (see Figure14.) and they can see selected fields from the members table such as first and last names with e-mail address.

Figure 14. This shows the "View Current Members" link viewed in the browser.

This action is achieved with the following code:

```
<%
sql = "SELECT * FROM [tblLocalBeadGroupMembers];"
Set rsGbk = NaberConn.Execute(sql)
%>


<table border="1" cellspacing="0" cellpadding="3" align="center">
 <h3>Local Bead Group Members</h3>
 'Create a table to display the information from the table
<%
Response.Write "<tr>"
Response.Write "<th>First Name</th>"
Response.Write "<th>Last Name</th>"
Response.Write "<th>Email</th>"
Response.Write "</tr>"

        iCounter=1
        While Not rsGbk.EOF
                If (iCounter Mod 2) = 0 Then
        Response.Write "<tr>"
        Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("FName") & "</td>"
        Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("LName") & "</td>"
        Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("Email") & "</td>"
        Response.Write "</tr>"
                Else
        Response.Write "<tr>"
        Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("FName") & "</td>"
        Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("LName") & "</td>"
        Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("Email") & "</td>"
        Response.Write "</tr>"
                End If
                rsGbk.MoveNext
                iCounter = iCounter+1
        Wend
        %>
 </table>
<%
rsGbk.Close
Set rsGbk = Nothing
NaberConn.Close
set NaberConn = nothing

%>
```

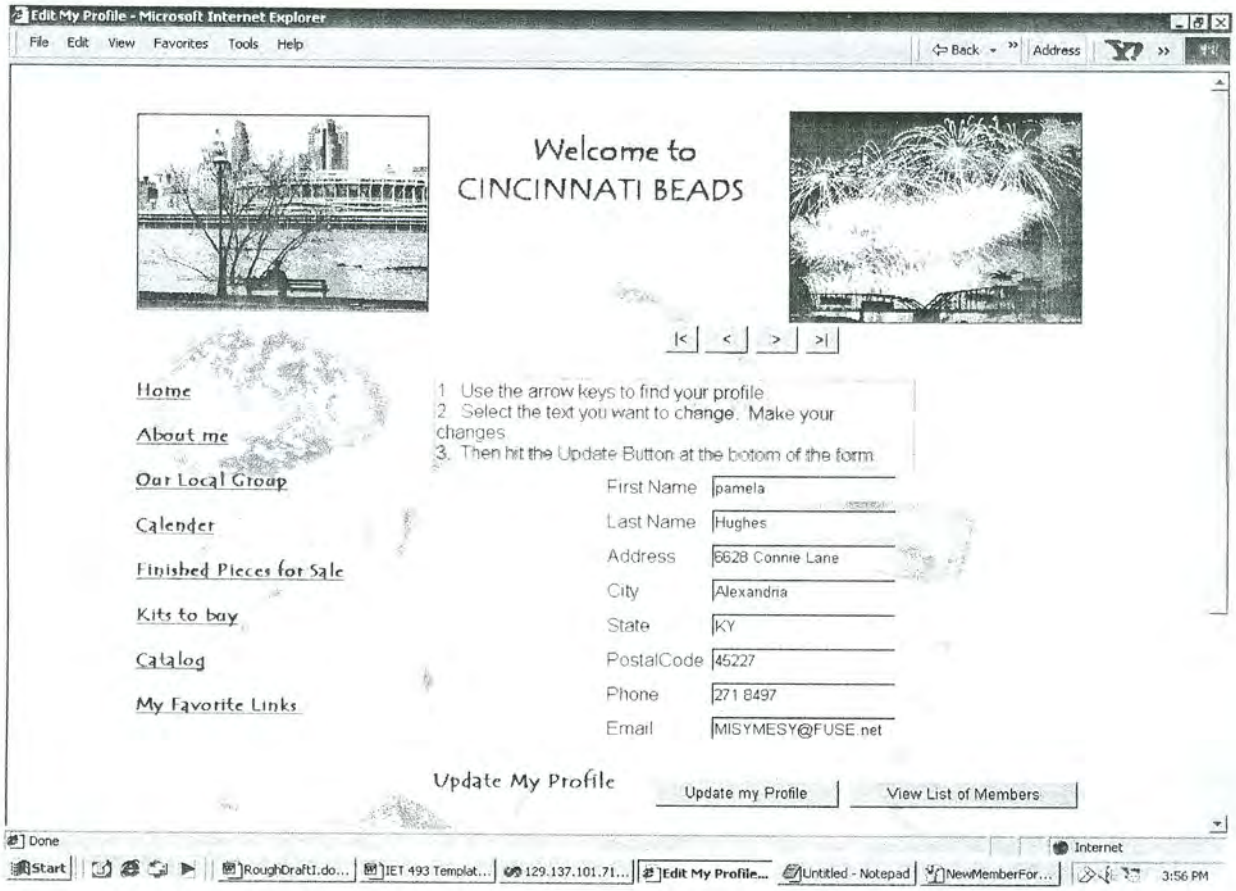

Figure 15. This shows the "Edit My Profile" link viewed in the browser.

When a member needs to update his/her personal information they can go to the "Edit My Profile" page (see Figure 15.), scroll through the group until he/she find his/her profile, select and update the information that needs to be changed, and press the "Update My Profile" button. His/her record is then revised.

This is done with a data bound Web form. This page was set up using the Design Time Controls or DTC's available in the MS InterDev Development Environment. The Scripting Model must be enabled on the page for these controls to work. Then I added the Recordset DTC (see Figure 16.) and set the properties for the DTC, specifically, the Connection, the database object and the object name.

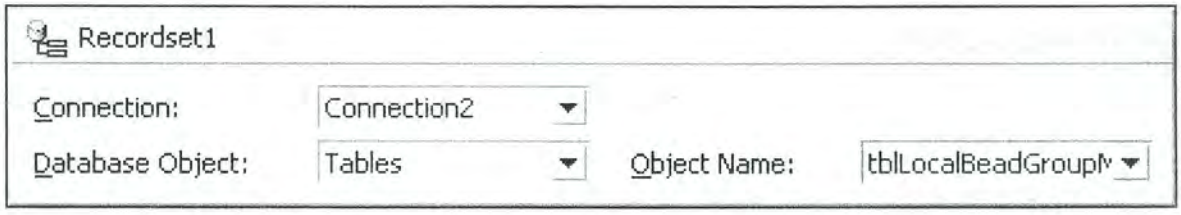

Figure 16. This shows the Recordset Design Time Control.

I also used the RecordsetNavbar DTC (see Figure 17.) and set the properties to connect it to the recordset. It enables the user to scroll through the records in the LocalBeadGroupMembers table.

Figure 17. This shows the RecordsetNavbar Design Time Control.

I also added HTML textboxes and bound them to the Recordset. I have added two command buttons at the bottom of the form to "Update My Profile" and to "View Current members". This is the code routine for the buttons:

```
<script ID="serverEventHandlersVBS" LANGUAGE="vbscript" RUNAT="Server">
        Sub btnList_onclick()
                Response.Redirect "VeiwCurrentMembers.asp"
        End Sub

        Sub btnUpdate_onclick()
                Recordset1.updateRecord
                SetInputMode="Edit"
                Response.write "Thank you-your record has successfully been updated"
        End Sub
This routine also must be included on the page for the text boxes to be edited.
        Sub window_onload
                SetInputMode="EDIT"
        End Sub
</script>
```

The next two branches are the "Finished Items" and "Kits" Branch. Both of these areas have an introduction page where the user can select links to get to more details for the item they are interested in purchasing.

The first step to view the finished Items is an Introduction page (see Figure18.)

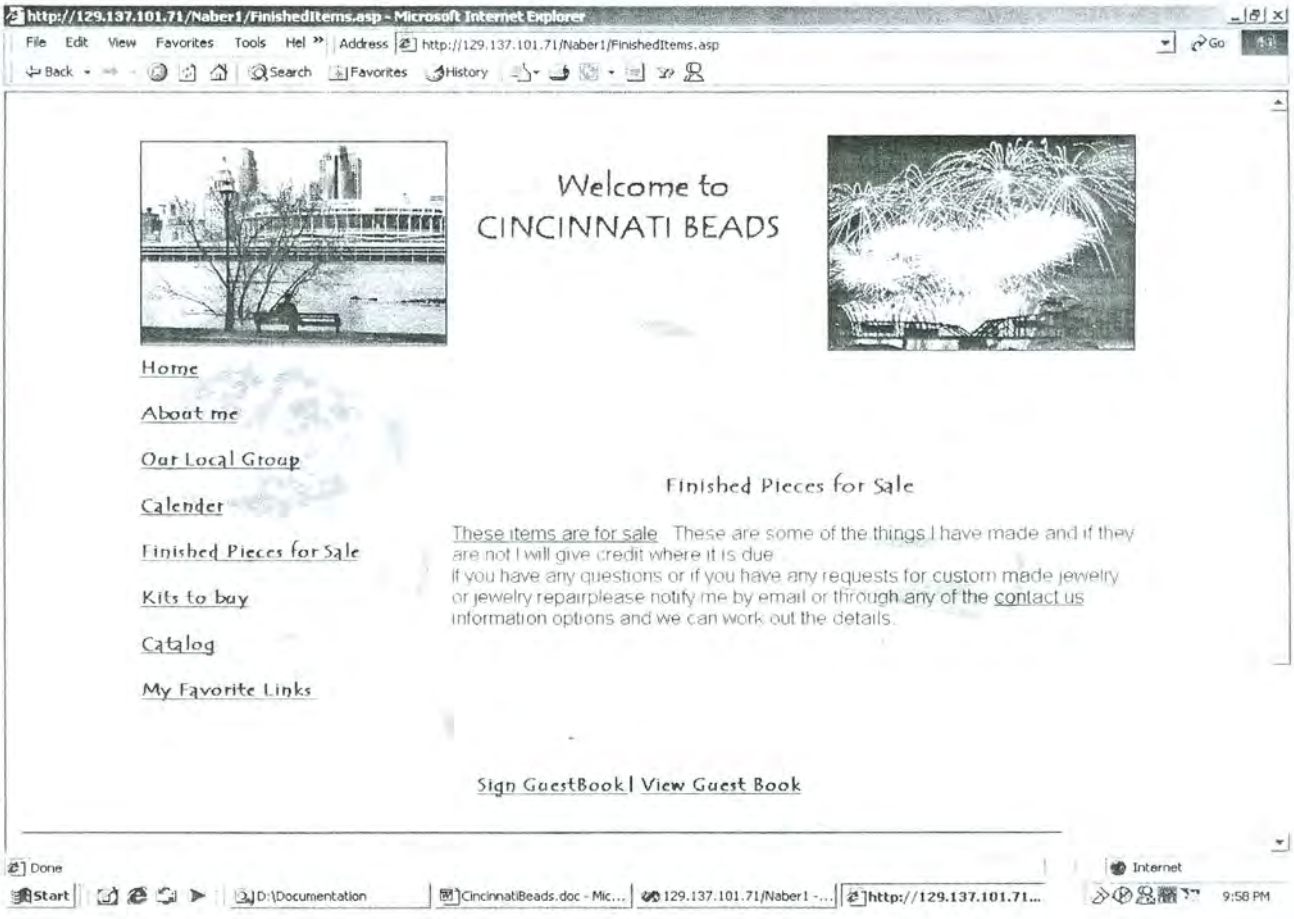

Figure 18. This shows the introduction to Finished Pieces for Sale.

It has a short paragraph identifies items that I have made, if they are not I credit the creator of the item. It also states that if the user has any questions or requests for repair work or custom-made jewelry he/she can contact me directly through e-mail. Within the paragraph I provide a link to the items that I have for sale.

The link "These items are for sale." goes to a page that has an overview of several items I have posted for sale. This page (See Figure19.) has a table to layout the items in a

neat and presentable way. In this table are pictures of the Items, the Item Name, Price and the option to buy.

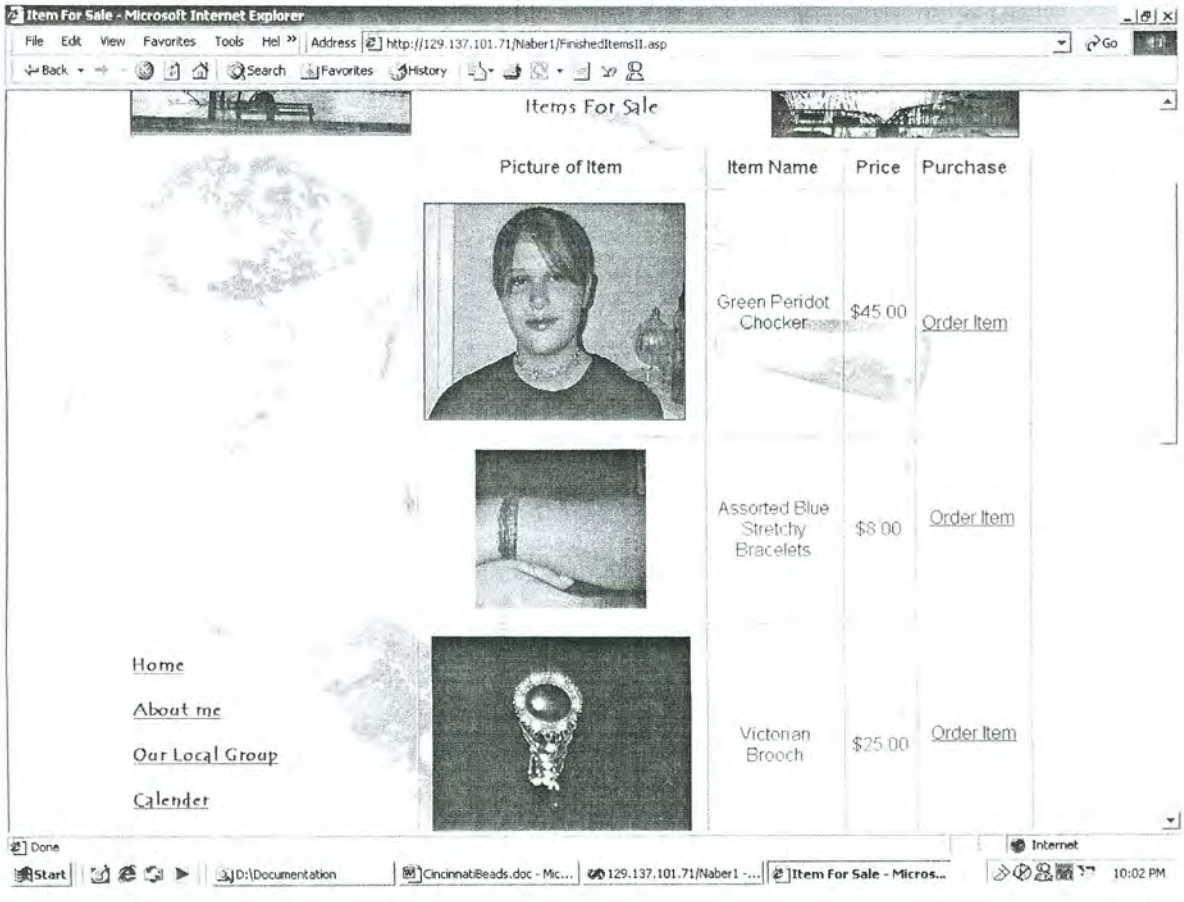

Figure 19. This shows the Items for Sale viewed in the browser.

The user can choose to select the "Order Item" link. This "Order Item" link goes to the "ViewItem1.asp". This code pulls the Item information from the ItemsForSale Table in the database and displays it on a preview page (see Figure 20.) so the user can take a closer look at his/her item of interest.

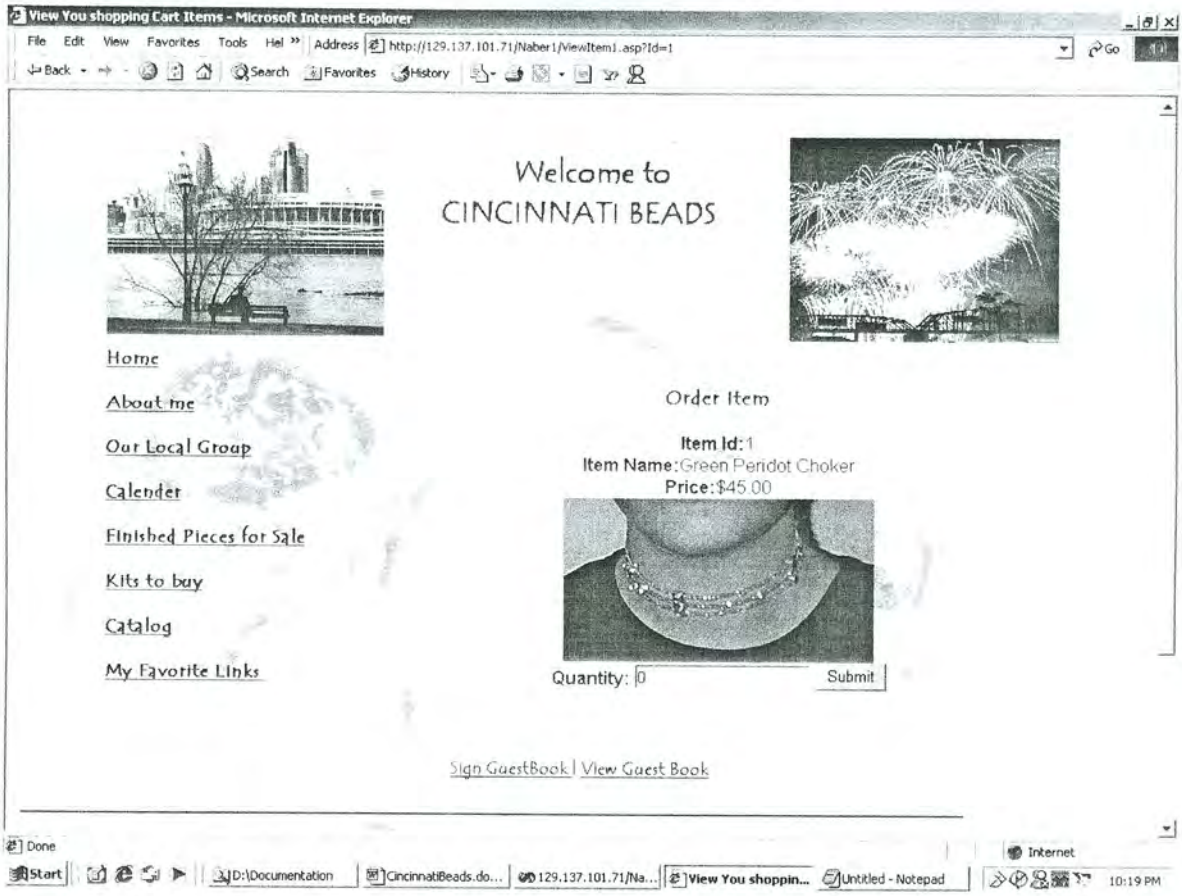

Figure 20. This shows Item that can be ordered.

The code that executes this task is:

```
<FORM id=FORM1 name=FORM1 action=add.asp method=post>

<!--#include file="DatabaseConn.asp"-->

<%
        item=Request.QueryString ("ID")

        sql="Select * from tblItemsforSale where ItemID=" & item
        set rec= NaberConn.Execute(sql)

Response.Write "<STRONG>Item Id:</STRONG>" & rec("ItemId") & "<BR>"
Response.Write "<STRONG>Item Name:</STRONG>" & rec("ItemName")& "<BR>"
Response.Write "<STRONG>Price:</STRONG>" & formatcurrency(rec("ItemPrice"),2)
& "<BR>"
Response.Write ("<img src=""images/" & rec("PicturePath") & """><BR>")
rec.movenext
Response.Write "<input type=hidden name=id value=" & item & ">"
```

Response.Write "<STRONG>Quantity:</STRONG> <input type=text name=Quantity value=0>"

%>
<INPUT id=submit1 type=submit value=Submit name=submit1>
</FORM>

From this point the user can then choose to enter a quantity and submit his/her order to the Shop Cart. It returns with the quantity submitted by the user and the item name, price per item and the merchandise subtotal (see Figure 21.)

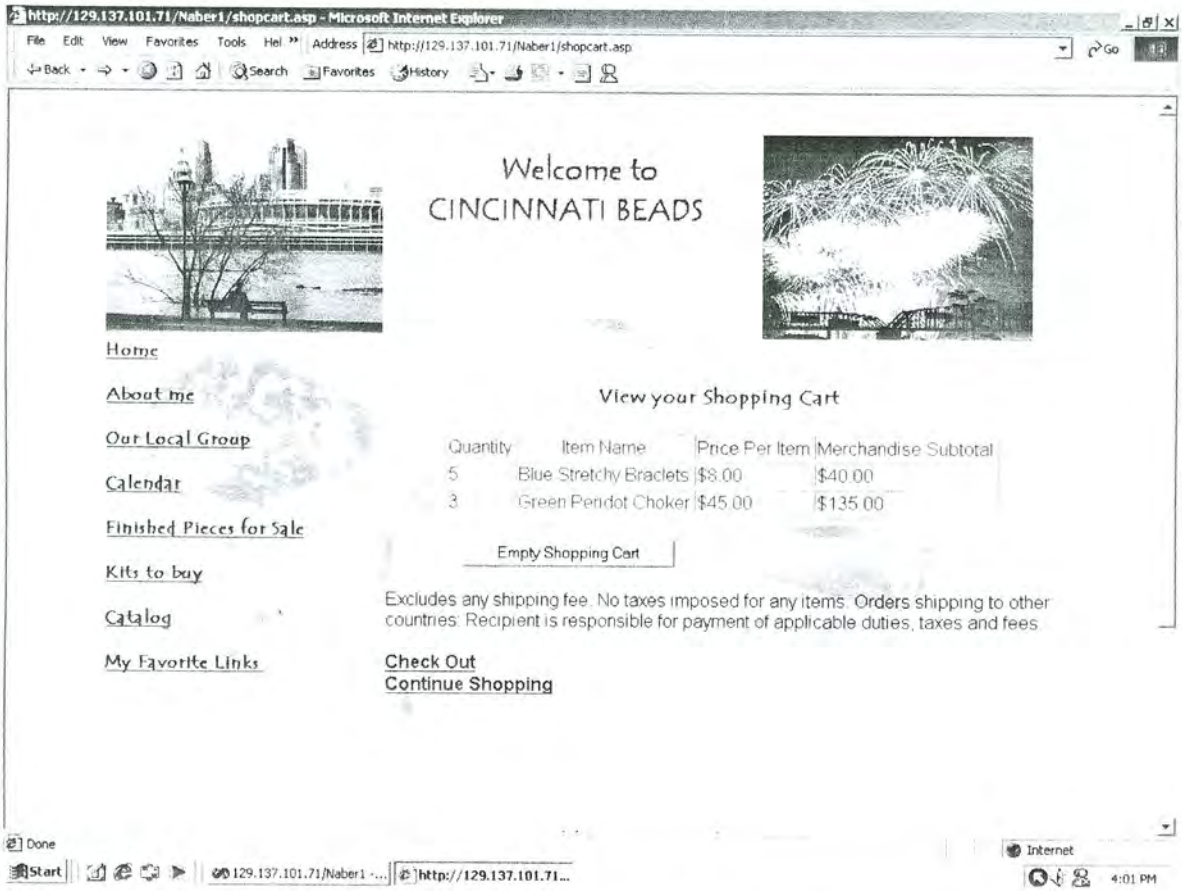

Figure 21. This shows the Shop Cart.

The code for this is:

```
<table border="1">
    <tr>
    <td>
        <P align=center>Quantity</P></td><td>
        <P align=center>Item Name</P> </td><td>
```

```
            <P align=center>Price Per Item</P> </td><td>
            <P align=center>Merchandise Subtotal</P> </td>
        </tr><!-- #include file="DatabaseConn.asp" -->
<%
        sql="SELECT tblShopCart.ID, tblShopCart.Qty, tblShopCart.session_id,
tblItemsforSale.ItemName, tblItemsforSale.ItemPrice FROM tblShopCart INNER JOIN
tblItemsforSale ON tblShopCart.ItemID = tblItemsforSale.ItemID where session_id =" &
Session.SessionID
        set rec = NaberConn.Execute (sql)

        do while not rec.eof
                Response.Write "<tr>"
                Response.Write  "<td>" & rec("qty") & "</td> <td>" &
rec("ItemName") & "</td><td>" & formatcurrency(rec("ItemPrice"),2) & "<td>" &
formatcurrency((rec("Qty")) * (rec("ItemPrice")),2) & "</td></tr></td></tr>"

    rec.movenext
     loop
%>
    </table>
```

The user can proceed to checkout or continue shopping. He/she could choose not to submit an order and go to any other site link that is available in the site navigation or they could choose to go to the guest book. If they choose the "Proceed to Checkout" link they are prompted to the login page. (see Figure 22.)

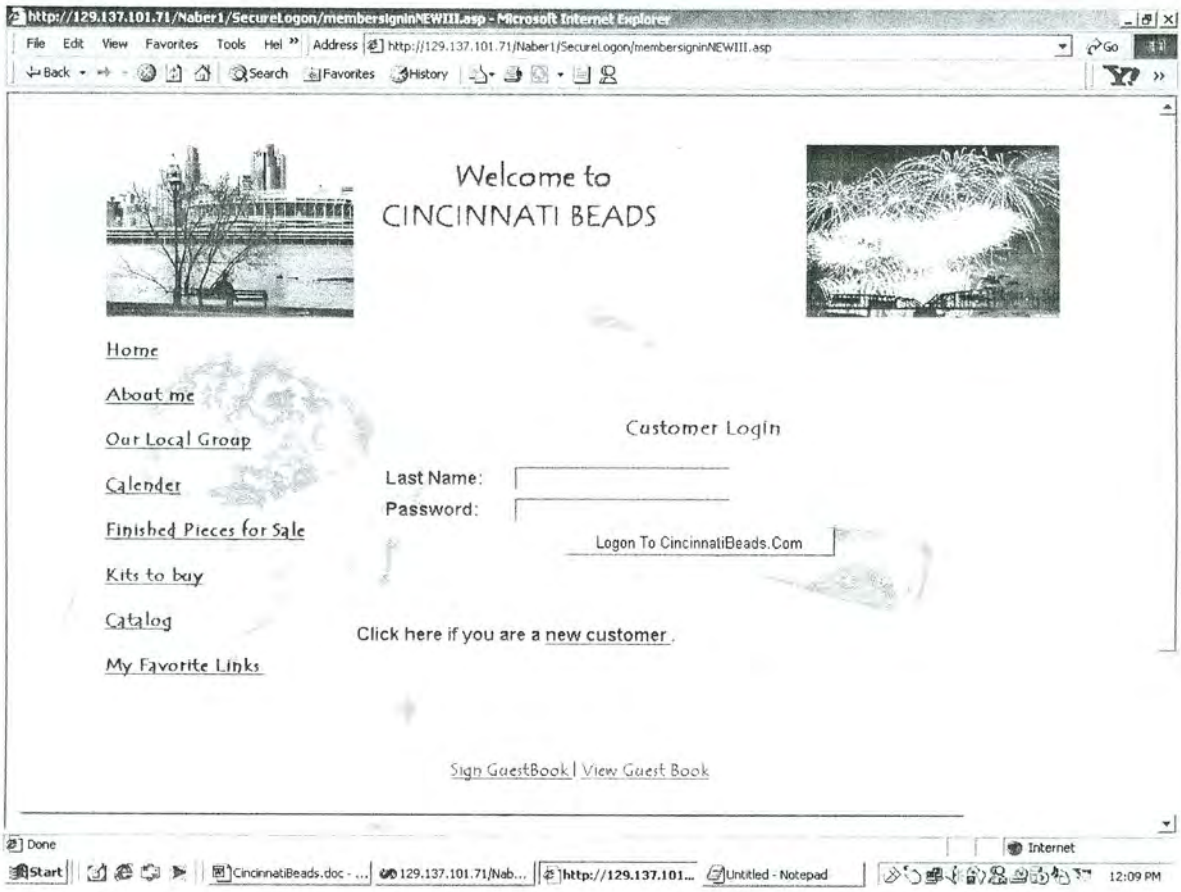

Figure 22. This shows the Customer Login screen.

Here the user has the option to login or sign up as a new member. If he/she is an existing member he/she will need to enter their Last Name and Password. If it is correct the order will be processed with the existing information in the Customers table. The Checkout page has a standard shipping added to the subtotal for the grand total (see Figure 23.)

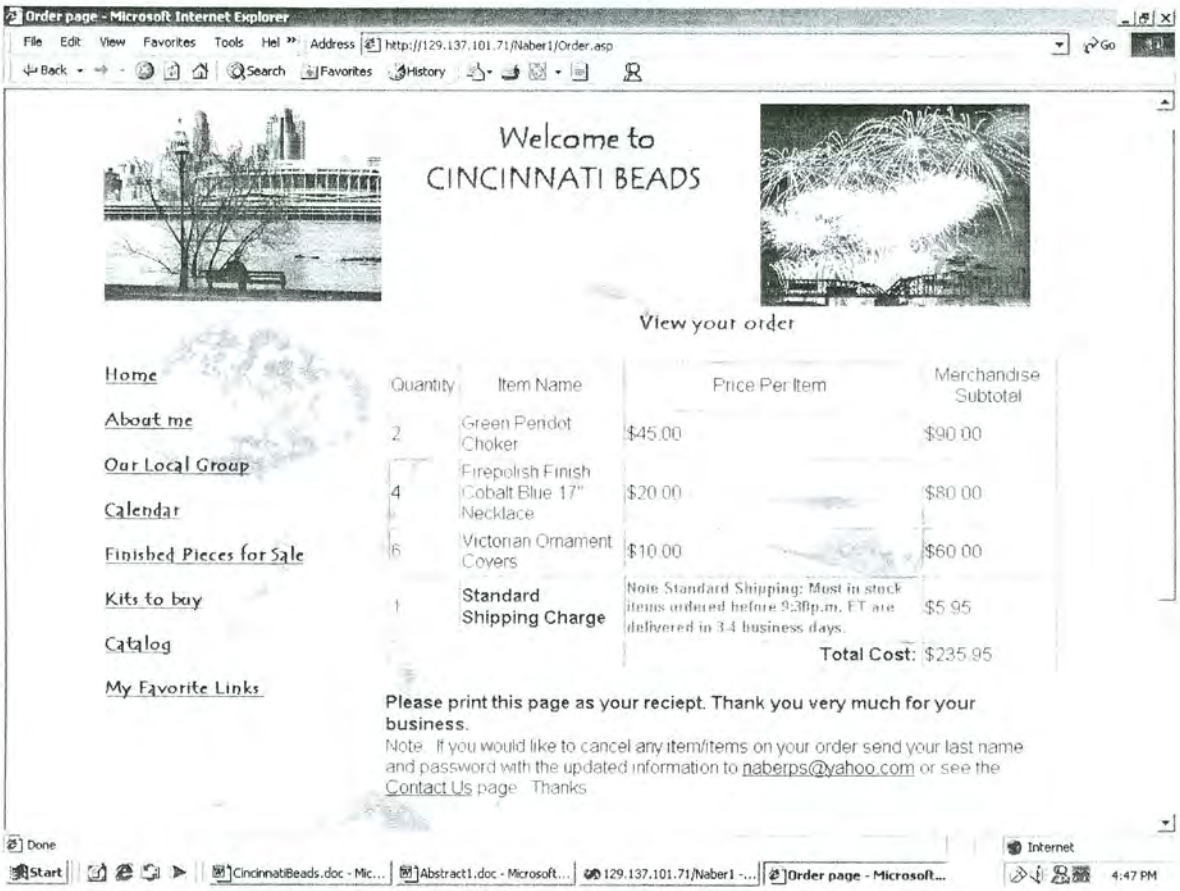

Figure 23. This shows the order page.

The customer is also instructed to print the page as a receipt.

If the login does not match a record in the database he/she will be told that his/her name and/or password are incorrect and to try again. The code that checks the login is:

```
</table></p></TD></TR><%
        'Check to see if the user is a valid user...
        Dim conn
        Dim rs
        If Request.Form("txtLName")<> " " or Request.form("txtPass") <> " " Then

        strConn = "DRIVER={SQL
        Server};Description=UserEntre;SERVER=129.137.101.71;UID=naber;PWD=pna
        ber;DATABASE=pammy"

        set conn = server.CreateObject("adodb.connection")
        set rs = server.CreateObject ("adodb.recordset")
        set rs1=server.CreateObject("adodb.recordset")
        conn.Open strConn
```

```
strSQL = "SELECT ID,LName, FName, Password FROM tblCustomers WHERE
LName='" & Trim(Request.Form("txtLName")) & "'"

        rs.Open strSQL, conn, 3, 1

        If rs.BOF and rs.EOF then

            'The username does not exist in the database.
    Response.Write "Sorry, the username that you have entered does not exist."
        Else
    'There is a matching user in the database.  Check to see if the password matches.

            If rs("Password")=Request.Form("txtPass") Then
        'If the password matches the username then put the membername in the
                'session variable and welcome them to the site.
                'Session("strMemberName") = rs("ChooseMemberName")
    strSQL="Select ID from tblshopCart where session_id=" & Session.SessionID
        rs1.Open strSQL,conn,3,1
        if not rs1.BOF and not rs.EOF then

'PUT THE ID NUMBER IN A SESSION VARABLE--WILL BE NEEDED LATER
    session.Contents("Id")=rs("ID")
Response.Write rs("FName") & ", you appear to have items in you shopping cart. Please
<a href="./Order.asp" >click here</a> to preview your order."
        else
    'move data in the tblShopCart over to the tbl
    Response.Write "Welcome " & rs("FName") & " to CincinnatiBeads.Com!"
    Response.Write("<A HREF="//Default.htm">click here</a>")
        end if

    Else
    'The password must not match, tell them and let them figure it out.
            Response.Write "The password for user " &
        Request.Form("txtUser") & " is incorrect."
    End If

        End If

        rs.Close
        conn.Close
        Set rs = Nothing
        Set conn = Nothing
    Else
    'Username was blank
```

```
        Response.Write "Sorry you must enter a username and password to log in. <br>
Please go back and enter a valid username and password."
        End If
%>
        </TABLE>
```

If the user is a first time customer they are sent to the New Customer Form, which must be filled out in order to process an order. The form requires information from the new customer such as name and address and credit card Information (see Figure 24.)

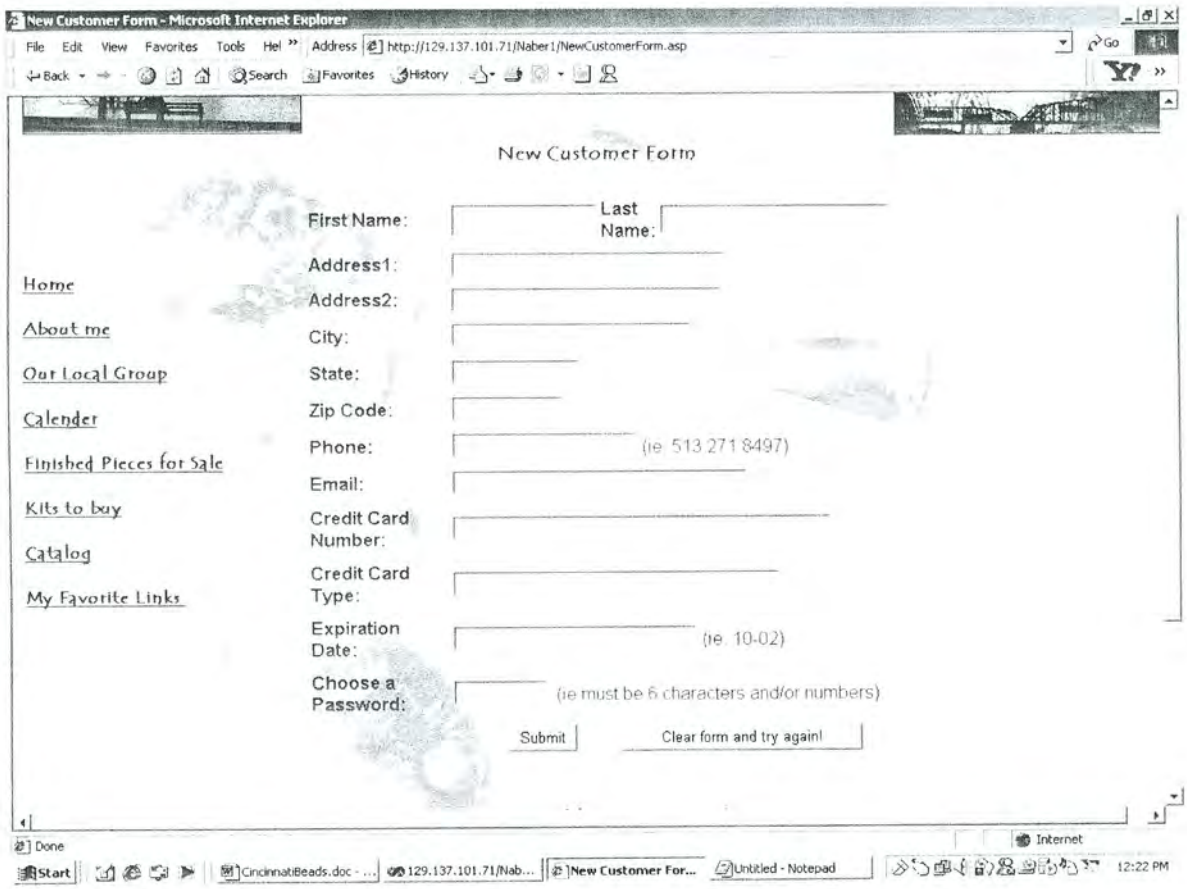

Figure 24. This shows the New Customer Form.

After he/she submits the New Customer Form he/she is alerted that the information was added to the database and he/she has the option to preview his/her order or to continue shopping.

Figure 25. This shows the New Customer acknowledgement screen.

The new customer would then preview his/her order, including a standard shipping fee and a grand total. There are instructions to print the page as their receipt.

The final main area of the site is the "My Favorite Links" Page.

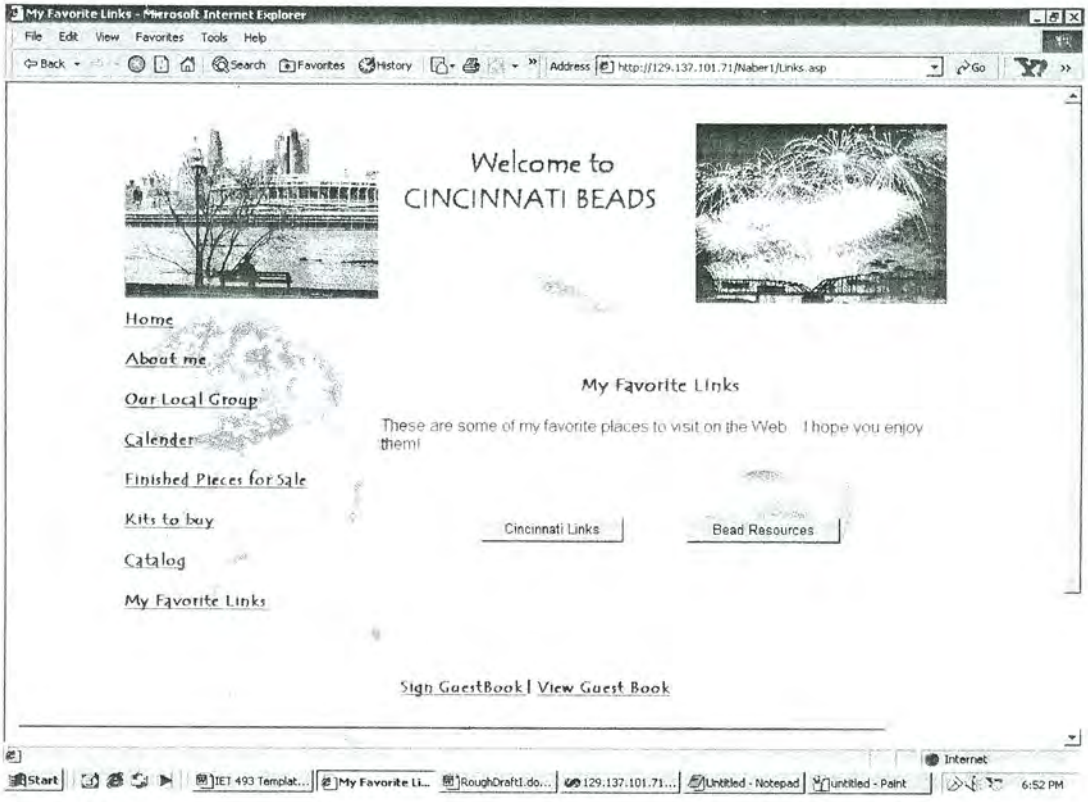

Figure 26. This shows the "My Favorite Links" page viewed in the browser.

This page has two command buttons that generate new pages to view the two different categories of links that are stored in the Links table. The content of these pages is created dynamically. One command button calls up the Cinci.asp file and the other command button calls up the BeadRec.asp page.

The code for these two command buttons is very similar. The code goes is:

```
<input type="button" value="Cincinnati Links"
onclick=window.navigate('CinciLinks.asp','BeadResources','toolbar=0,location=0,directo
ries=0,status=0,menubar=0,scrollbars=1,resizable=1')>


<input type="button" value="Bead Resources"
onclick=window.navigate('BeadRec.asp','BeadResources','toolbar=0,location=0,directorie
s=0,status=0,menubar=0,scrollbars=1,resizable=1')>
```

The CinciLinks.asp page and the BeadRec.asp page have some script and a recordset DTC to get the proper records from the Links table to display them in a new page. This code to get the Bead Resources links from the Links table is:

```
<%
Do while Not Recordset1.EOF
 If strcomp(Recordset1.fields.getValue ("CategoryID"), "BeadResources")=-1 then
        Response.Write "<a href=""" & trim(Recordset1.fields.getValue ("URL")) &
""">" & trim(Recordset1.fields.getValue ("LinkName")) & "</a>"
        'Response.Write trim(Recordset1.fields.getValue ("CategoryID"))
        Response.Write ("<br>")
 end if
        Recordset1.moveNext
loop

%>
```

This code dynamically generates the records from the Links table and displays them in another page. The code is the similar for the Cincinnati Resources link.

The final functionality for this project is the Guestbook. The Guestbook links are available on every page in the site. The view Guestbook link references the viewguestbook1.asp file (see Figure 27.)

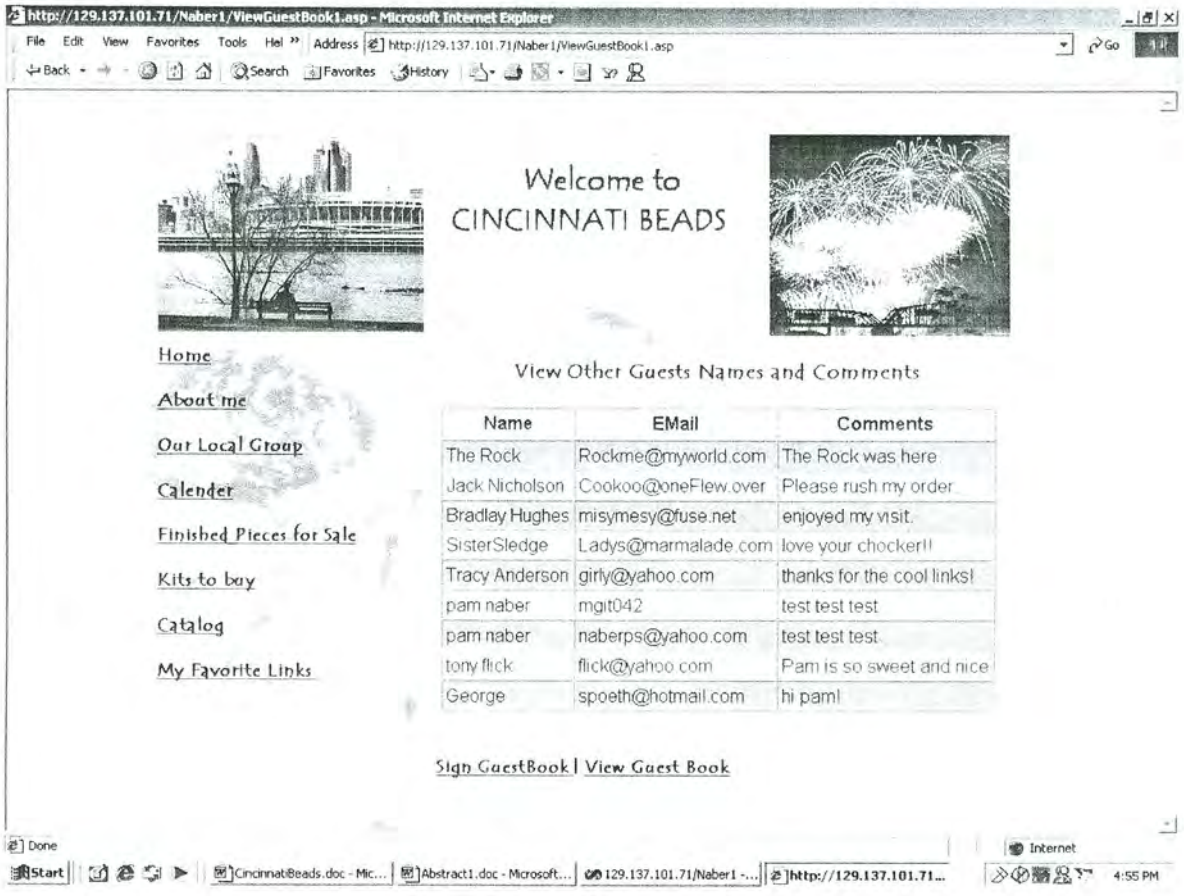

Figure 27. This shows View the Guestbook as it appears in the browser.

The code for this task is:

```
<%
sql = "SELECT * FROM [tblGuestbook];"
Set rsGbk = NaberConn.Execute(sql)
%>

<h3 align="center"><b>View Other Guests Names and Comments</b></h3>
<table border="1" align="center" cellspacing="0" cellpadding="3">

 <%
Response.Write "<tr>"
Response.Write "<th>Name</th>"
Response.Write "<th>EMail</th>"
Response.Write "<th>Comments</th>"
Response.Write "</tr>"
Response.Write "<tr>" & vbCrLf

        iCounter=1
        While Not rsGbk.EOF
```

```
                If (iCounter Mod 2) = 0 Then
                        Response.Write "<tr>"
            Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("Name") & "</td>"
            Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("Email") & "</td>"
        'Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("websitename") & "</td>"
        Response.Write "<td bgcolor=#e1e1e1>" & rsGbk("Comments") & "</td>"
                        Response.Write "</tr>"

                Else
                        Response.Write "<tr>"
            Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("Name") & "</td>"
            Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("Email") & "</td>"
        'Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("websitename") & "</td>"
        Response.Write "<td bgcolor=#c1c1c1>" & rsGbk("Comments") & "</td>"
                        Response.Write "</tr>"
                End If
                rsGbk.MoveNext
                iCounter = iCounter+1
            Wend
%>

    </table>

<%
    rsGbk.Close
    Set rsGbk = Nothing
    NaberConn.Close
    set NaberConn = nothing

%>
```

The Sign the Guestbook link at the bottom of all the pages in the site, references the sdIISignGuestBooksForm.asp (see Figure 28.) This Web form takes the information input from the user and adds it to the Members table.

Figure 28. This shows Sign the Guestbook as it appears in the browser.

This is the code that sends the information in the form and invokes the sdIISignGuestBook.asp where the script is to execute on the server and the information is added to the proper table:

<FORM id=form1 name=form1 **action=sdIISignGuestBook.asp** method=post>

After the sdIISignGuestBook.asp in invoked it sends a script to the server to be executed. That piece of code looks like this:

```
<%
        tempdate = Date
        sSQL = "INSERT INTO tblGuestBook (Name, Email, HomePageURL,
        WhereFrom, HowFoundMe, Comments)"
        sSQL = sSQL & "VALUES('" & Request.Form("txtName") & "', '" &
        Request.Form("txtEmail") & "', '" & Request.form("txtURL") & "', '" &
        Request.Form("txtFrom") & "', '" & Request.Form("txtFind") & "', '" &
        Request.Form("txtComments") & "')"
```

```
        NaberConn.Execute sSQL
        Response.Write " Thanks, your record was successfully inserted into the
database."
%>
```

7.0 Conclusions and Recommendations

I have learned so much and I am very grateful to have this educational opportunity to combine several different technologies and apply them to a functional Web site.

I would recommend several things to improve upon the project. I would create my Finished Items for Sale and Kits dynamically from a single table in the database as I did with the "Links" table to get the Bead resources and Cincinnati Links. I would look into additional aspects e-commerce sites more thoroughly, such as getting the current costs for Merchant Accounts, Secure Socket Layer, Web Hosting, and Domain Name. I would also provide more client side text validation for my project to give more protection to the database. I concentrated most of my time on the Web development, database development and programming skills needed to complete this project.

References

1. Amundsen, Michael. *Practical Visual InterDev 6*. Indianapolis, Indiana: Macmillian Computer Publishing, USA, 1999.

2. Aguirre, Susan H, "Healing Beadwork", http://idt.net/~wtw29/beading.html, August 2000.

3. Brockwood, Ted. "Getting Started With SQL". *http://www.webdevelopersjournal.com/articles/sql.html.* March 1999.

3. Coles, Janet and Robert Budwig. *The Book of Beads*. New York: Simon and Shuster, 1990

4. "Database". *www.webopedia.com*. January 2001.

5. Dubin, Lois Sherr, *The History of Beads* , Harry N. Abrams, Inc., Publishers, 1992.

6. Francis, Kauffman, Llibre, Sussman, and Ullman. *Beginning Active Server Pages 2.0*. Birmingham: WROX Press, 1998.

7. Liu, Robert K. A Universal Aesthetic: Collectible Beads. California: Ornament, Inc., 1999

8. *Microsoft Visual InterDev 6.0 Programmer's Guide*. Washington: Microsoft Press, 1998. Miller, Michael J. "Create a Great Site". PC Magazine. June 8, 1999. 98-175.

10. Murray, Maureen. *All About Beads*. England: B.T. Batsford Ltd., 1995

11. Mueller, Paul and Tom Sheldon. *Microsoft Internet Information Server 4*. California: Osborne, 1998.

12. Orr, Andrea. "Dotcom Deaths Cast Pall on Survivors." Infoweek.com.June 2000.

13. Wynkoop, Stephen. "Using Microsoft SQL Server 7.0". Indianapolis, Indiana: Macmillian Computer Publishing, USA, 1999.