

Accountants And The World Wide Web: A Review And Demonstration Of A Web Editor

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Abstract

This paper provides a review of the web editor AOLPress. AOLPress is an easy to use windows-based WYSIWYG web editor that can be freely downloaded from the Internet. This paper demonstrates how to design the front end of a simple accounting application, using AOLPress to create web forms, frames, lists, buttons, tables, and hyperlinks. There are screen dumps of each step in the process. Accounting professionals seem to be among the slowest to adopt new technology. Yet, there is an interest in web technology among accountants. The goal of this paper is to help accounting professionals and educators minimize the learning curve by removing some of the mystique associated with web technology.

Introduction

Current technology makes it feasible for firms to both retrieve and deliver financial information through the World Wide Web. Using a web page front end, a local database back end, and communications software linking the two and allowing them to exchange information, anyone having access to the Internet has at his or her fingertips access to both information and communication paths located literally all over the world. A firm doesn't have to have its own computer network in order to communicate with its stakeholders at remote sites; it just needs access to the Internet. The Internet supplies the network backbone, providing access to a world wide distributed database system -- a

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network of computers connected so that it appears to be a single computer to the user, where both the location of processing and the location of data are transparent to the user.

This can greatly enhance all paths of communication in which a firm engages, but will have specific impact on two areas of communications: 1) communication with investors and 2) communication with employees, customers, and vendors.

Communications with Investors

The "downstream" flow of information from the firms to those making investment decisions will be immediately impacted by this new technology. No longer will users of information

be content to wait for annual or even quarterly reports to be published. This technology provides on-line access to external events-driven databases so that decision makers can initiate a request to the firm's database and instantly retrieve disaggregated, real-time data and compile it in whatever ways seem appropriate to the user.

Currently, public accounting is turning out a product that is rapidly becoming obsolete. Audited financial statements are producer-driven, general-purpose, one-size-fits-all products, and often they are delivered to decision-makers after investment decisions have been made. Accounting has not changed much in the last five hundred years, but it is now set to begin to change dramatically. In a recent speech, Robert Elliott, managing partner at KPMG, said that the role of accountants is going to drastically change in the next five years (Elliott, 1996). He made the observations that 1) there has been market saturation; 2) public accounting firms' hiring is flat; and 3) we've trained systems so well that a major part of a CPA's job is vanishing -- many companies are now able to produce audit-class financial statements. What is more, investors are beginning to expect "on-line", "real-time" information.

To drive home his point that public accounting must become adaptable or it will become obsolete, he compared past information needs with present and future information needs of those who use financial information to make investment decisions. Table 1 shows this comparison.

Table 1: Comparison of Information Needs

In the past	Now
Periodic	On-demand
Historical	Real-time / projected
Cost-basis	Value-basis
Producer-Driven	User-Driven
General Purpose	Drill down

Current technology (mainly Internet technology) has brought about this change. Historically, however, accounting professionals have

been notorious for resisting new technology, and with the new Internet technology, they again seem to be "dragging their feet". In a recent survey of accounting professionals, though they believed that accounting must change in order to keep pace with current technology, their current employers were not taking advantage of the Internet and were not providing them with adequate training (Ward, Woodroof, and Harrington, 1997).

With the Internet, the technology is available to allow decision-makers (investors) to link into corporate data, display real-time financial information, and customize the components of information they use to make investment decisions. Public accounting (and public accountants) must become adaptable or it (and we) will become obsolete.

Communication with Employees, Customers, and Vendors

The second area of communication which will be impacted by the current technology is "upstream" in nature: the communication of a firm with its employees, customers, and vendors. It is this area of communication that is the focus of this paper. Firms that have employees who work at geographically disbursed locations are constantly challenged with how to effectively and efficiently populate firm databases so that they are updated with the various types of information that flow from the daily operations of a business -- client information, billing information, scheduling information, ordering information, etc. Important companies are investing great sums of money in this technology (Krantz, 1997).

Data entry forms designed in web pages on the Internet can link remote users (employees, suppliers, vendors) to the firm's local database and support information exchange. What is more, these web pages can be designed with minimal time and effort. From anywhere in the world, data can be entered into a form in a web page and submitted to populate a company's local database. Just a few examples of applications that can be designed and used include the fol-

lowing (Seymour, 1996): on-line order-entry systems, inventory quick-check systems, expense-account filing systems, professional-time billing systems, registration systems (for conferences, etc.), project and task tracking systems, dynamic production schedules, employees' work schedules in a complex shift-work setting, company telephone directories, and polling and survey systems.

Accounting professionals need to be made aware of the potential benefits of the Internet, and shown what types of applications can be designed for use in a professional accounting office. The necessary components for linking the Internet to a local database are: 1) an HTML (HyperText Markup Language) web page form front end; 2) an ODBC-compliant (Open DataBase Connectivity) in-house database; and 3) server software to invoke communications with the database.

Purpose

This paper shows, step by step, how accounting professionals and educators can design a web-based form that can serve as the front end of an Internet application that can help streamline information flows between field workers and their home offices. Hopefully, this paper will help remove the mystique associated with Internet technology and will encourage accounting professionals and educators to "roll up their sleeves" and begin utilizing the power of the World Wide Web. All that is needed to design and publish a web-based form is a web editor and disk space on an Internet server. Though web pages can be created with any text editor or word processor (web pages are text files), web editors vastly simplify the process.

AOLPress

There are many very good web editors available at no cost on the internet (see <http://www.windows95.com/apps/html.html>). The web editor that is the focus of this paper is AOLPress. AOLPress can be download directly from the Internet by accessing:

<http://www.aolpress.com/download.html>. After the zipped file is downloaded into a new directory (perhaps C:\AOLPress), it can be unzipped and run. Once it is run, the screen shown in Figure 1 will appear.

On this screen is a menu, a customizable icon bar, a location field that displays the Internet address of the current page, and a title field that displays the title of the current page. Before you begin to create and edit a web page, it is a good idea to set up the toolbar. By clicking on Tools, Preferences, Configure Toolbar, you can customize the toolbar to include your favorite web-editing icons (functions). My personal AOLPress toolbar configuration is shown in Table 2.

AOLPress is an easy-to-use, windows-based, "WYSIWYG", "Drag-and-Drop" web editor -- and it's free. Although AOLPress is extremely easy to use, it will allow you perform all the functions needed to build a dynamic web application. Among the functions that are available with AOLPress are: Text formatting (fonts and colors), Tables, Hyperlinks, Images, Forms, and Frames.

Each of these functions will be discussed and integrated into an example application. The accounting application chosen for discussion in this paper is a web interface to an application that manages billable hours. We will design the front end of an application that will allow employees to enter (from a client's remote location) their hours worked and to submit this data to populate a database located at the home office for time tracking and billing purposes.

We are now ready to begin developing a web page. We will actually design three web pages: 1) a frameset page -- Frameset.html; 2) a page to pull into the top frame of the frameset -- Title.html; and 3) a page to pull into the bottom frame of the frameset -- Detail.html. The Title and Detail pages will be designed first, and then the frameset. To give you an indication of what we are building, Figure 2 is the web page as it will look when we are finished. Let's begin de

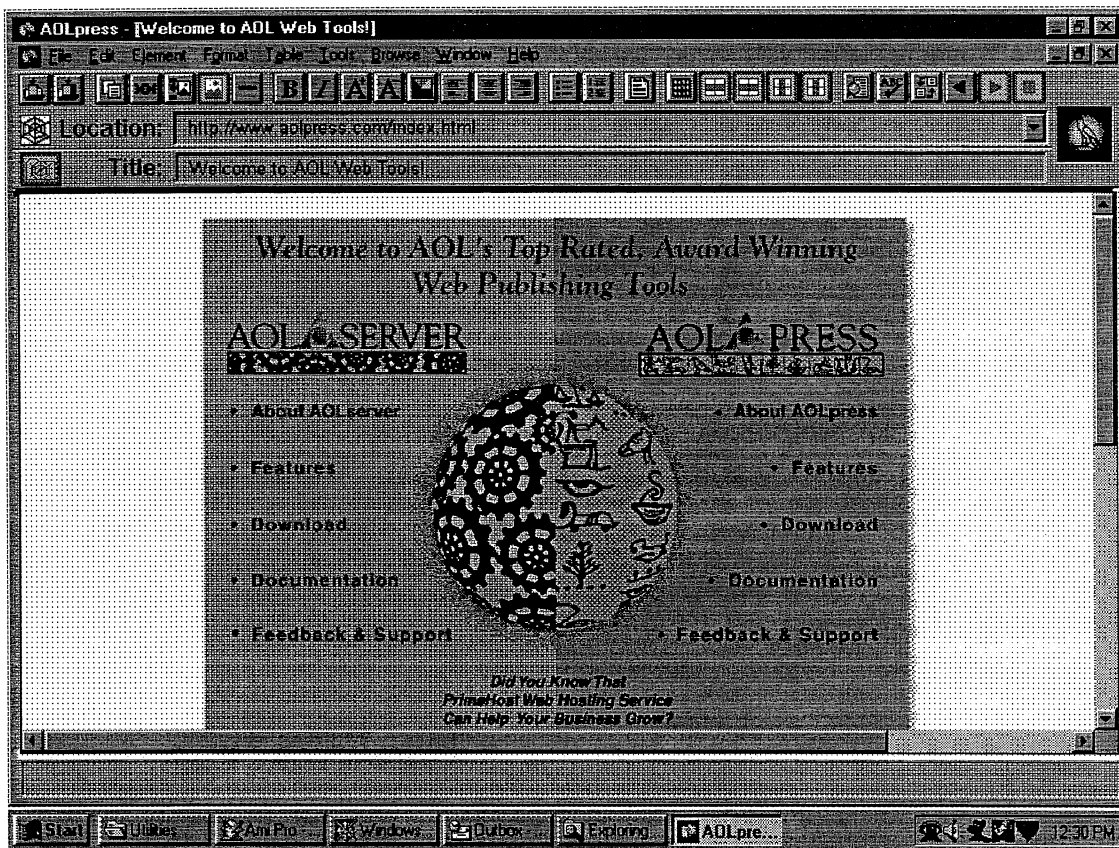


Figure 1: Opening Screen for AOLPress

veloping the Title page.

Title.html Page

Open a new page by clicking on File, New, New Page. A blank page will appear. To set the background for this first page, click on the page attributes icon.



This will allow you to choose a color or image for the background. Usually, lighter colors work well for backgrounds. Once the background is selected, type in the name of this page, perhaps "Parker & Sage Billing Page". You may then highlight the name, and then use the toolbar to select its attributes.



Next, import an image -- perhaps, the company logo. Picture files with extensions .gif and .jpg can be used in a web page. If you have a logo in this format, simply click on the image icon,



browse your disk, and locate the logo. In fact, any image that you see on the Internet can be pulled into your page. When you see an image you would like to include on your page, right click on it and a menu will pop up that will allow you to save it to your disk. After saving it, you may pull it in to your page as was just described (See:


















http://www.stars.com/Vlib/Providers/Images_and_Icons.html for a comprehensive selection of images and icons that you may use.).

Sometimes it is useful to link one page to another page, so that when you click on a certain word in one page, you are immediately taken to another page. This is called "hyperlinking". For example, a hyperlink could be designed to allow you to return to the company home page. To do this, write "Homepage" next to the logo you just pulled in. Then highlight "Homepage" by double-clicking on it. Now, click on the hyperlink icon,



and type in the Internet ad-

Table 2: Customizable Toolbar

	File Save, File Save As
	Copy
	Hyperlink
	Image, Image Map
	Bar
	Bold, Italics
	Increase Font Size, Decrease Font Size
	Custom Text Color
	Left, Center, Right Align
	Unnumbered and Number List
	Page Attributes
	Create Table
	Add / Delete Row / Column
	Show / Edit HTML Code
	Spell Checker
	Refresh Page
	Back, Forward, Stop

dress of your company home-page (i.e. <http://www.yourcompanyhomepage.com>) and click "OK".


Next, we will design a form with two input fields (Date and Client), and a Submit button. Press [Enter]. This will position the cursor at the right spot for the form. Type "Date:" at this location. On the menu, click on Format, Form . The dialog box shown in Figure 3 will appear. In the box "Form Handler Location:", name the form, "DateClient". Choose the "Post" method,

and click "OK". A dialog box will appear that will allow you to choose the type of field you want to use. Click on the "Text" button icon of the field choice dialog box. The dialog boxes will look like those shown in Figure 4.

Enter the Form tag "Date", enter 8 in both the Display Size and Max Input fields, and click "OK". Now, enter four or five spaces and type "Client". Click on the SList button of the field choice dialog box. A dialog box like the one shown in Figure 5 will appear.

This allows you to enter a drop down selection list that will display all billable clients. Enter the Form Tag "Client", and then enter your billable clients. You may check the Select box for the client that you want to be the default. You may also change the order of these clients as well as how many display lines you want. After making modifications to this dialog box, click "OK". The final object to create on this page is the Submit button. Click on the Submit button icon of the field choice dialog box, modify the word to be on the submit button (if needed), and then click "OK". Title.html is now finished, and we can begin to design the Detail Page.

Detail.html Page

Remember to save your work periodically by clicking on the save icon. 

Now, open a new page by clicking on File, New, New Page. A blank page will appear. This page will contain the detail section of the billing application -- a form with three input fields (Billing Category, Billable Hours, and Non-billable Hours), and a Submit button. First, set the page preferences as before. On the menu, click on Format, Form . The dialog box shown in Figure 3 will appear.

In the box "Form Handler Location:", name the form, "Details". Check the "Post"

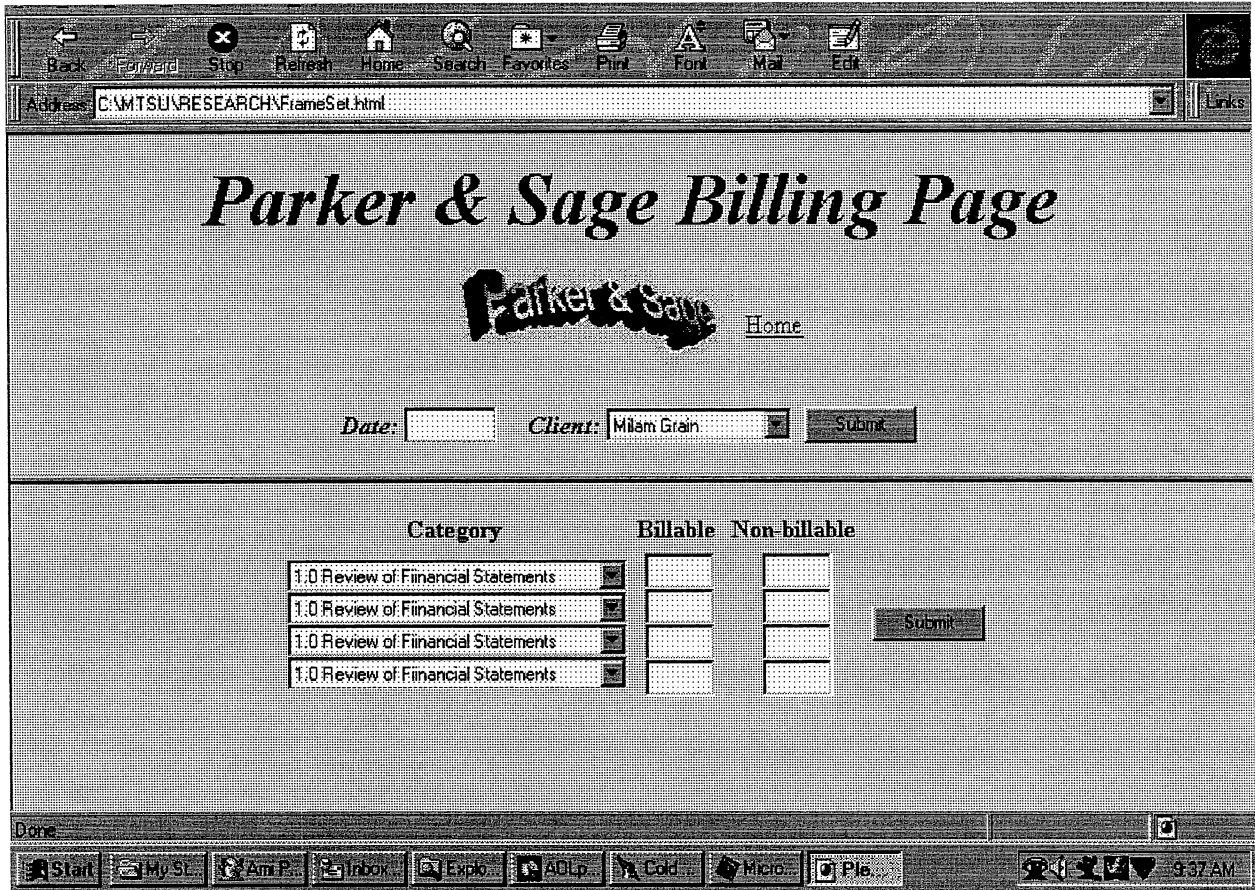


Figure 2: The Finished Web Page

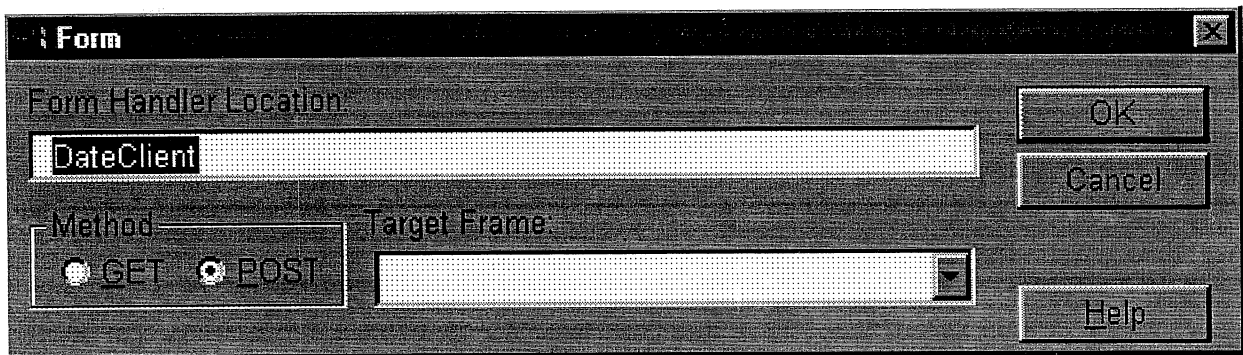


Figure 3: Form Dialog Box

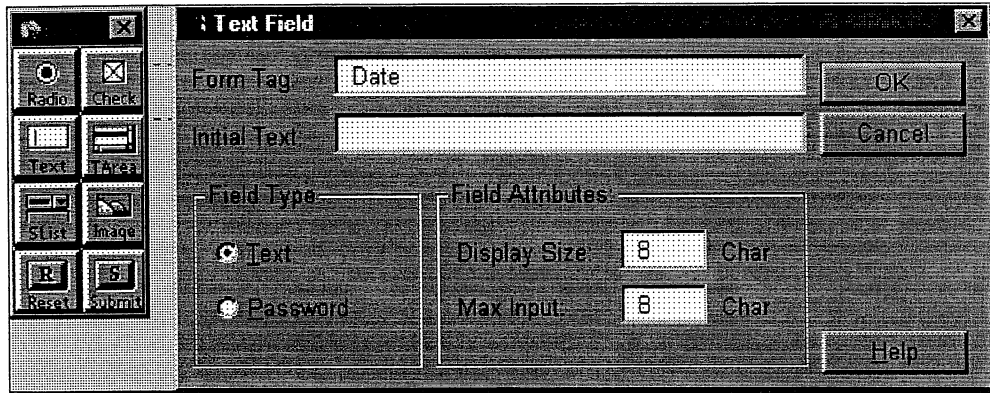


Figure 4: Field Dialog Boxes

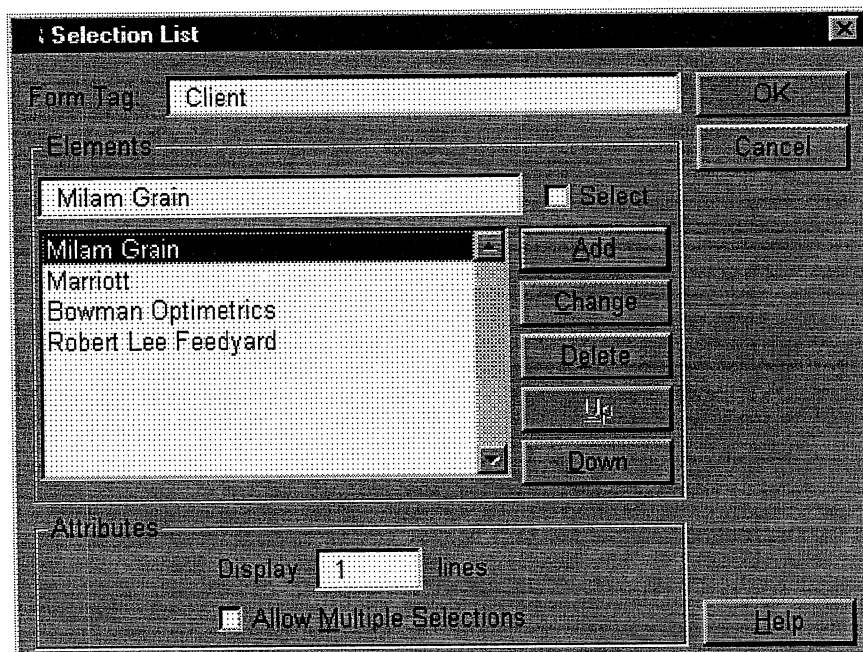


Figure 5: Selection List Dialog Box

Method, and click "OK". When the field choice dialog box appears that allows you to choose the type of field you want to use, click on the "SList" button icon. When the empty selection list dialog box shown in Figure 5 appears, enter the appropriate billing categories (i.e. Auditing, Review of Financial Statements, Write-Up of Financial Services, Other Assurance Services, etc.). Click "OK". Now select the "Text" button icon from the field choice dialog box. Enter the Form tag "BillHours", enter 5 in both the Display Size and Max Input fields, and click "OK". Repeat this step for the Non-billable Hours field.

Now create the submit button as you did on Title.html.

The billing application needs several rows of the three input fields just created for multiple entries to the same client on the same day. To do this, highlight the three fields as shown in Figure 6. On the menu, select Edit, Copy. Place the cursor between the last input field and the Submit button, hold the [Shift] key down and press [Enter] (this single spaces the entry). Paste the fields by selecting Edit, Paste. Repeat this procedure for as many rows of these

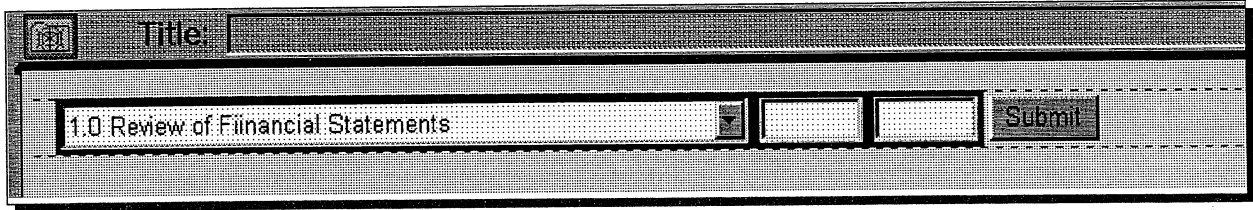


Figure 6: The Input Fields Highlighted

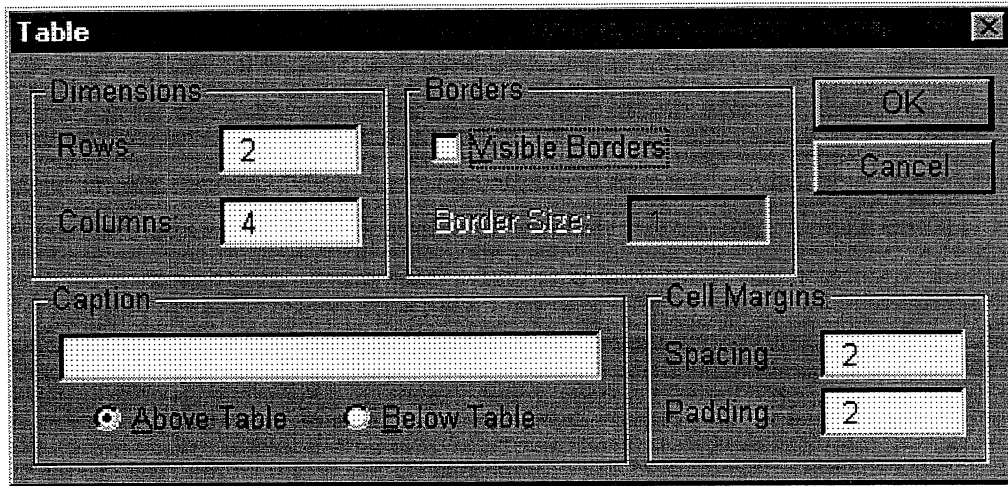



Figure 7: Table Dialog Box

fields as is needed.

Column titles now need to be positioned over the appropriate columns. Although objects and words cannot be as easily positioned with a web editor as they can be with a word processor, there are ways to get around this problem. One way is to create a table and place words and objects in various cells in the table for proper positioning. Position the cursor before the first field, and click on the Create Table icon.  The

dialog box shown in Figure 7 will appear.

Change the column number from 2 to 4 and uncheck the Visible Borders box (the only reason the table is being created is to position form field objects). Now click "OK".

Type the column headings, "Category", "Billable Hours", and "Non-billable Hours" into

the first three columns of the first row, and format this text according to your preferences. Place each of the fields beneath the appropriate column heading in the second row. This is done by highlighting, dragging, and dropping -- much like you would with a word processor. Finally, highlight, drag, and drop the Submit button into the last column. The detail page should look similar to what is shown in Figure 8. We are now ready to build the Frameset Page.

Frameset.html Page

In order to pull both the Title page and the Detail page into the same screen, a Frameset page is needed. To create a new frameset page, select File, New, New Frameset from the menu. Create two sections or frames in this frameset by dragging the top red border of the frameset about half-way down. Now right click in the top frame. The dialog box shown in Figure 9 will

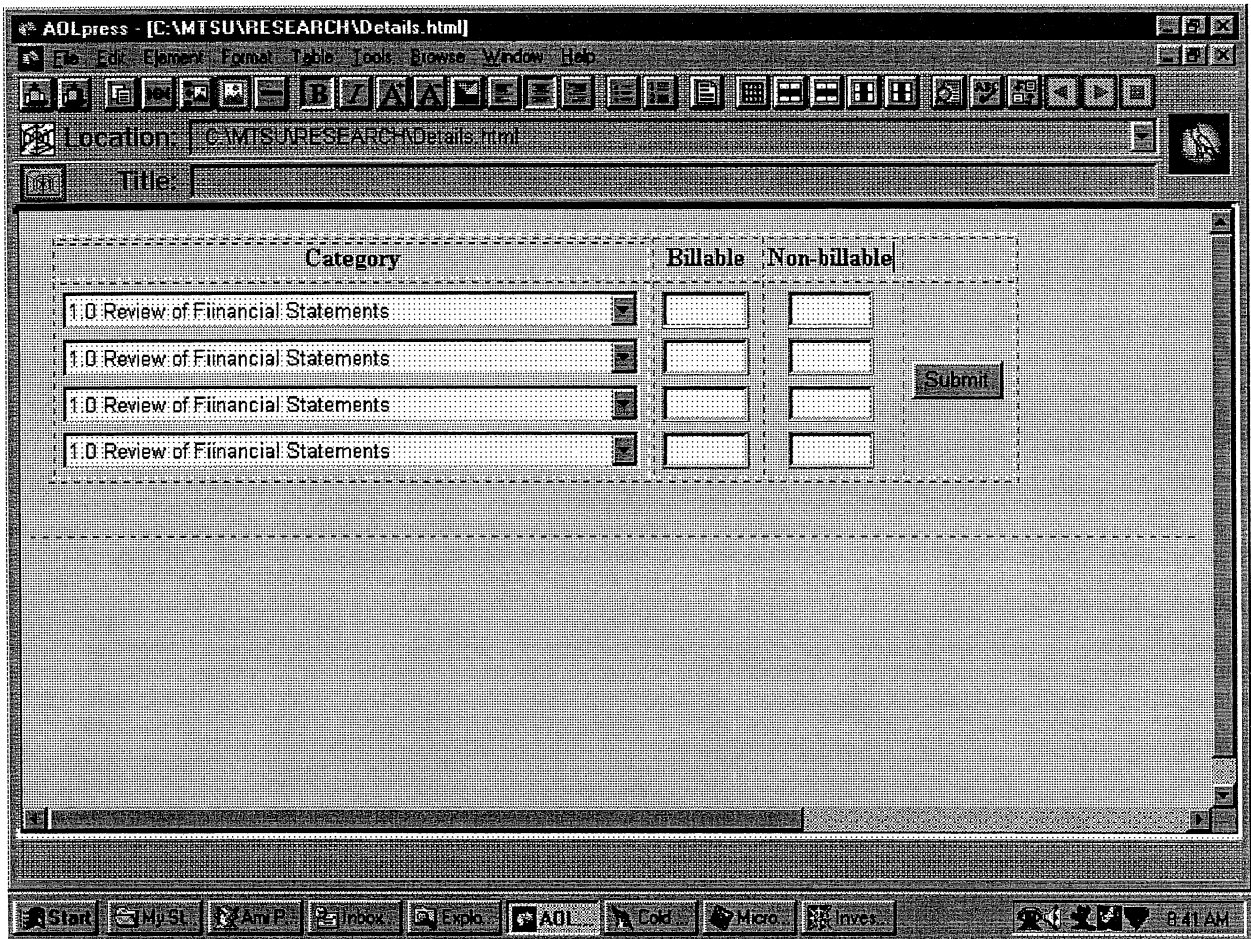


Figure 8: Detail Page

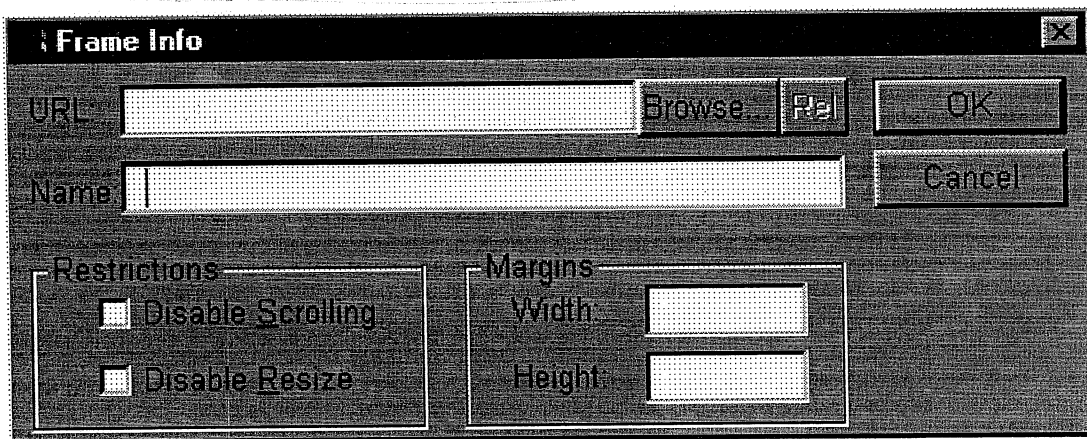


Figure 9: Frame Information Dialog Box

appear. In the URL box, type "Title.html", or browse to find this file. In the Name box, type "top", and disable the scrolling and re-sizing of this frame by checking the appropriate boxes. Click on "OK". Now, right click in the bottom frame and go through the same procedure, naming the frame "bottom".

Click on the bar between these pages and adjust it so that both pages are fully viewable, as shown in Figure 10. The frameset should now be the active window (the border of the entire frameset is colored lavender when active). Save the frameset by clicking on the Save As icon



and entering "Frameset.html". We have now completed the design and construction of the front end of a web-based billing application. This web page can now be viewed using Net-

scape or Internet Explorer. Simply open your browser, go to the menu, and select File, Open. When the dialog box appears, enter the path and name of the frameset.

Other Features of AOLPress

During the entire discussion about how to build a web page using AOLPress, not a word was mentioned about the Hypertext Markup Language (HTML). This is the language, consisting of special code and tags that allows a browser like Netscape or Internet Explorer to read and display pages on the Internet. The HTML code is generated automatically by AOLPress. This automatically generated code can be viewed and edited by clicking on the Show HTML icon.

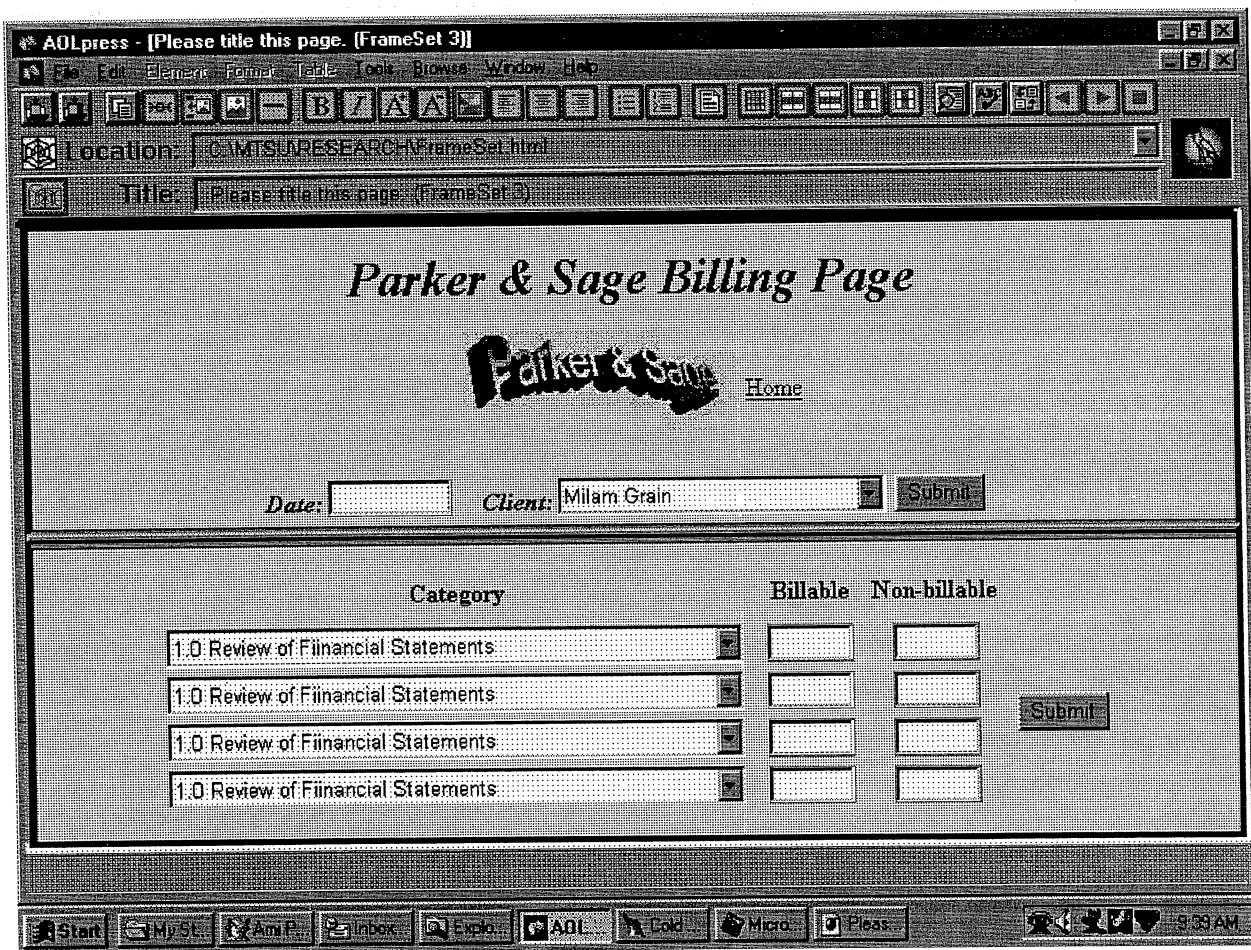



Figure 10: The Frameset Page

HTML code for the Title page is shown in Figure 11.

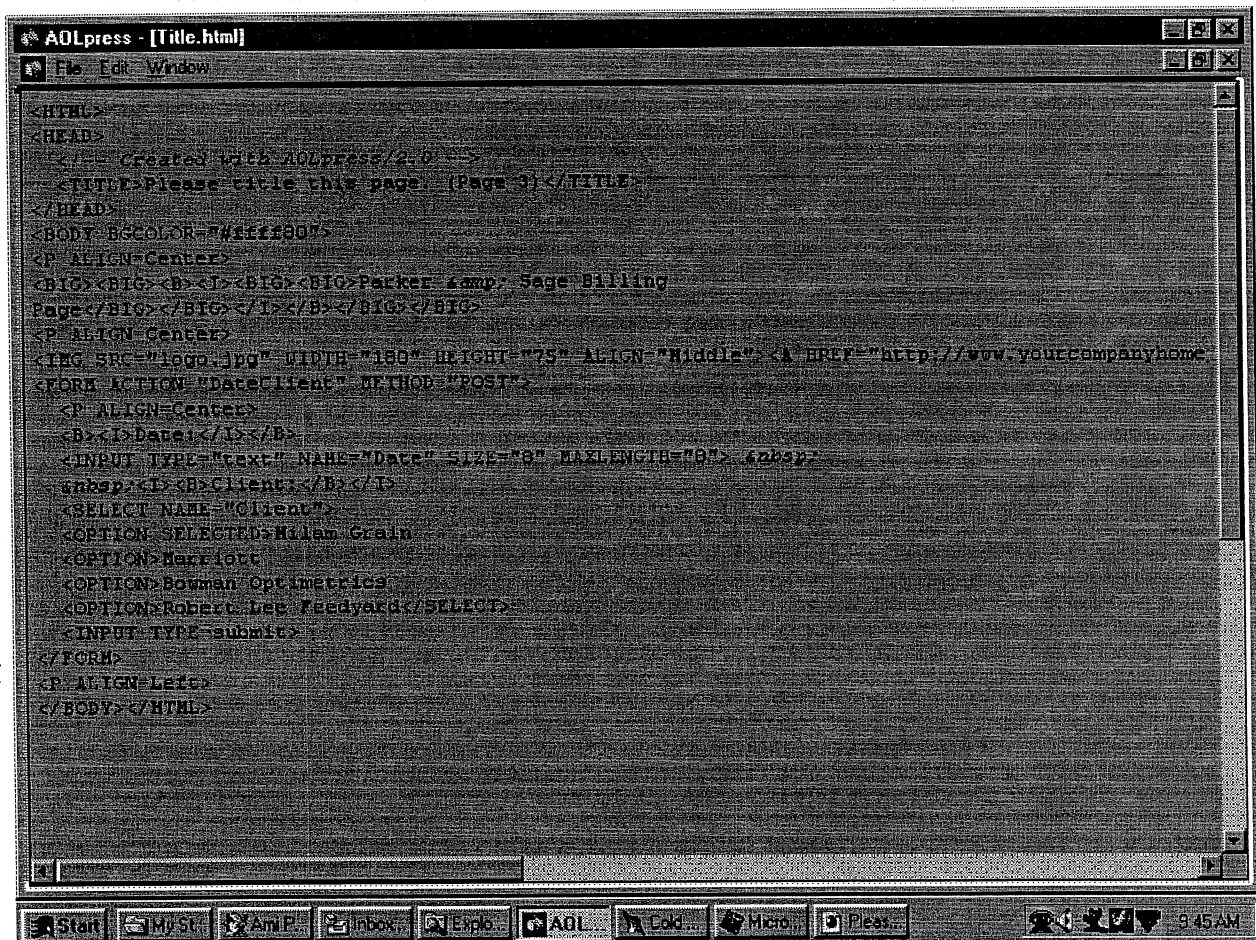
AOLPress, is not only a web editor, but a simplified web browser. In addition, it can access a File Transfer Protocol (FTP) server, so that files can be created and edited right on the Internet server. AOLPress also has a spell-checker  and excellent documentation.

Summary and Conclusions

This paper describes in detail how to design and build a web page using AOLPress. The web page form created is the front end of a web-based billing application. When combined with a local database back end and communications software linking the two together, the resulting

application allows employees to enter, from a client's remote location, their hours worked and to submit this data to a database located at the home office.

Public accounting must become adaptable or it will become obsolete. Current and future information needs of those who use financial information to make investment decisions are very different from information needs of the past. Accounting professionals must not resist the current technology that has brought about this change; namely, Internet technology. The purpose of this paper is to help remove the mystique associated with Internet technology and encourage accounting professionals and educators to begin utilizing the power of the World Wide Web.




```

<HTML>
<HEAD>
<!-- Created with AOLpress/2.0 -->
<TITLE>Please title this page (Page 3)</TITLE>
</HEAD>
<BODY BGCOLOR="#ffffff">
<P ALIGN="center">
<BIG><BIG><B><I><BIG><BIG>Parker &amp; Sage Billing
Page</BIG></BIG></I></B></BIG></BIG>
<P ALIGN="center">
<IMG SRC="logo.jpg" WIDTH="100" HEIGHT="75" ALIGN="middle"> <A HREF="http://www.yourcompanyhome">
<FORM ACTION="DataClient" METHOD="POST">
<P ALIGN="center">
<B><I>Date:</I></B>
<INPUT TYPE="text" NAME="Date" SIZE="8" MAXLENGTH="8"> <B><I>
<BR><I><B>Client:</B></I>
<SELECT NAME="Client">
<OPTION>Hilam Grain
<OPTION>Marriott
<OPTION>Bowman Optometrics
<OPTION>Robert Lee Feedyard</SELECT>
<INPUT TYPE="submit">
</FORM>
<P ALIGN="left">
</BODY></HTML>

```

Figure 11: HTML Code for Title.html

Implications for Future Research

Future research in this area could show accounting professionals and educators how to create the back end to the Internet application described in this paper. Then, it could be shown how to link the web-based data entry form front end with the local database back end so that information exchange could occur between accounting professionals who are working at remote sites and their firm's home office. 

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