

Chapter VII

Software Design

Tips for Online Surveys

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ABSTRACT

An online survey uses World Wide Web technology to deliver a survey instrument to a geographically dispersed audience, thus providing the benefits in elimination of mailing costs and an elimination of data entry costs. Both of these provide further secondary benefits such as elimination of follow-up mailing costs and fewer errors in data collection. This article explains the basics of constructing an online survey using World Wide Web technology, and provides some design tips for someone planning to construct such a survey. A simple online survey consists of three basic components. First, the survey is presented to the subject through a Web page that allows them to enter information or select options in response to questions. A simple HTML form will be used for this purpose. Second, a program is needed, on the Web server where the data will be stored, to take the values from the form and store them in a database. An active server page program will be used in this article for this purpose. This is, essentially, a program written in visual basic that takes values from the form and inserts them into a relational database. After a very simple example of each of these components is explained, some design tips will be provided that will make constructing, and exploiting an online survey much easier.

INTRODUCTION

An online survey uses World Wide Web technology to deliver a survey instrument to a geographically dispersed audience. The benefits of using this technology include the elimination of mailing costs (since instruments accessed via the Web do not have to be mailed out), and an elimination of data entry costs (since the values provided by the subjects are entered directly into a database).

Both of these provide further secondary benefits. For example, the elimination of mailing costs for the instrument also implies the elimination of mailing costs for follow-ups or reminders. And the elimination of data entry also eliminates data entry errors. The purpose of this article is to explain the basics of constructing an online survey using WWW technology, and to provide some design tips for someone planning to construct such a survey.

BACKGROUND

A simple online survey consists of three basic components. First, the survey is presented to the subject through a Web page that allows them to enter information or select options in response to questions. A simple HTML form will be used for this purpose. Second, a program is needed on the Web server, where the data will be stored, to take the values from the form and store them in a database. An active server page program will be used in this example for this purpose. This is, essentially, a program written in Visual Basic that takes values from the form and inserts them into a relational database. Finally, a database is needed to store the data. Finally, although it is not absolutely necessary, an example of a second active server page program will be provided. This second program will summarize the data in the database, and present it on a dynamically constructed Web page to show another benefit of online surveys: to provide up to the minute tallies of survey results. After a very simple example of each of these components is explained, some design tips will be provided that will make constructing and exploiting an online survey much easier.

The HTML Form

Figure 1 shows the rudiments of an HTML form. The entire form is enclosed within a `<form>` tag

that would reside with the body of an HTML document. Users would invoke the form by typing in the URL or by clicking on a link to the form. Such a link could be included in an e-mail message sent out to potential subjects in order to make accessing the form easier.

Within the form tag is an "ACTION" parameter. This is where the program that will process the form is specified. In Figure 1, it refers to a program on the server called `Surveyadd.asp` (which will be discussed later) that resides in the Survey directory on a Web server with domain name `MyServer.com`.

Only one user input field is provided in the figure, but any number of input fields can be included. The one provided here is called a radio button. Other options commonly used in online surveys include checkbox, select menu, and text field. A checkbox is similar to a radio button in that the user selects an answer from a list. However, a checkbox allows multiple responses, whereas the radio button only allows one response.

Sometimes the number of potential responses is large. For example, if you ask the user to enter their state or zip code, a radio button listing all the possible states or zip codes would take up far too much space. So a drop down select menu would take up far less room on the screen. The user would click on the menu. The choice would be displayed. The user would select a choice, and the menu would disappear again.

Figure 1. The HTML form

```
<FORM METHOD=POST  
ACTION="http://MyServer.com/Survey/Surveyadd.asp">  
<b>Question 1: </b>  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "1">Strongly Agree  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "2">Agree Somewhat  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "3">Neutral  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "4">Disagree Somewhat  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "5">Strongly Disagree  
<INPUT TYPE=RADIO NAME=Q1 VALUE = "6" CHECKED>No Opinion  
<p>  
<p>  
<INPUT TYPE="submit" VALUE="Submit Survey">  
<INPUT TYPE="reset" VALUE="Reset This Form">  
</FORM>
```

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