SAS/FSP®: Tricking the Small Screen Into Imitating Life
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ABSTRACT

In setting up screens for entering surveys, the best approach to speed up the data entry is to make the screens look as close to the paper survey form as possible. With longer surveys, SAS/FSP helps you on the way to this goal by automatically spilling the unadorned list of variables onto multiple screens. Then you are free to move the variables around and place all the survey question text onto the screens that you need. But, with shorter surveys where the initial list of variables only fits onto one screen, this is not so easy. That is, unless you are aware of a trick to turn on line numbers, making it possible to access a few editor commands to enlarge this one screen into two or more.

INTRODUCTION

The survey example here is a survey sent out to customers to poll their satisfaction with the Preclinical Computer Answer Line, staffed by two consultants who provided desktop and some LAN support services. The survey form itself consists of 18 questions, mostly multiple choice, plus two essay or text questions, all of which fit on two sides of one page. We decided to enter into SAS only the first 18 questions for basic statistical analysis and presented all comments made on the last two questions as appendices to our report to management. See figure 1 below for the first part of page one of the survey.

Preclinical Computer Answer Line - Customer Satisfaction Survey

To better serve you, we would like to know your opinion of the quality of the Preclinical Computer Answer Line. Please take a few minutes to answer the following questions (**ON BOTH SIDES**) and mail this survey back to I. Mendelson, 34/2, by August 31. Thank you in advance for your time.

1. I have had occasion to use the Preclinical Computer Answer Line ____ times in the past.

2. I use the Answer Line because I have: (check all that apply)

    ____ Questions about how to do something
    ____ Questions about what specific software will do
    ____ Problems that needed to be solved

3. My request(s) usually require an answer or solution in: (check all that apply)

    ____ less than one hour
    ____ less than eight hours
    ____ less than three days
    ____ less than one week
    ____ could wait longer than a week to receive an answer

Figure 1

SETUP FOR THE DATA ENTRY SCREENS

Armed with an ASCII text file of our survey form, it is now time to design the data entry screens. If your site has SAS/ASSIST® (as did mine), consider using it to create the screen and then lead your data entry personnel through its menus to edit or add more data at a later time. If your site does not have SAS/ASSIST, then use the following SAS code to create the new data set and screen.

```
PROC FSEDIT NEW=SASUSER.PCALSURV
```

```
SCREEN=SASUSER.PCALSURV.FSEDIT.SCREEN ;
RUN ;
```

The first step is to define the variables and then move on to the ugly screen with the straight variable names: IDNO, Q1, Q2A, Q2B, Q2C, Q3A, etc. Jump into the modify screen option and take the *Screen Modification and Field Identification* choice. From the next screen, FSEDIT Modify, you are now ready to customize the single screen you see with the 25 variables on it and stretch that single screen into as many screens as it will take to display all of the survey form that you want. Now the only question is how to do this. See figure 2 below for a picture of the FSEDIT Modify screen.

Figure 2

TURN NUMBERS ON

The trick is to the line numbers on so that you can easily customize and extend the screen. This brings up line numbers on the left hand side of the screen, as if you were using the Program Manager window under Display Manager to write a SAS program.   This can be done by typing NUMS ON on the Command ===> line or by clicking on *Globals* and then *Options* and then *Numbers*, depending on whether you are using a command line or a Windows interface to SAS. See figure 3 below for the resulting screen. Now use the DD block commands in the line number or prefix area to erase the ugly screen by putting DD on line 00001 and DD on the last line before hitting RETURN. Bring in the survey form ASCII file by using the INCLUDE command on the Command ===> line or in the Command box.

```
+FSEDIT Modify----------------------------------------------------------------+
|00001  IDNO: _____     Q1:    _____      Q2A:   _                  |
|00002  Q2B:   _              Q2C:   _                Q3A:   _                  |
|00003  Q3B:   _              Q3C:   _                Q3D:   _                  |
|00004  Q3E:   _              Q4:    __               Q5:    __                 |
|00005  Q6:    __             Q7:    __               Q8:    __                 |
|00006  Q9:    __             Q10:   __               Q11:   __                 |
|00007  Q12:   __             Q13:   __               Q14:   __                 |
|00008  Q15:   __             Q16:   __               Q17:   __                 |
|00009  Q18:   __                                         .                    |
|00010                                                                         |
|00011                                                                         |
|00012                                                                         |
|00013                                                                         |
|00014                                                                         |
|00015                                                                         |
|00016                                                                         |
|00017                                                                         |
|00018                                                                         |
|00019                                                                         |
|00020                                                                         |
|00021                                                                         |
|00022                                                                         |
+------------------------------------------------------------------------------+
```

Figure 3

Complete the customization desired, which could include shortening some of the fill-in-the-blanks from the survey form or adding lines through the I command in the line number or prefix area. (On the VAX, the Page Down key moves you to the next screen of the data entry form.) See figure 4 below for the resulting screen. And, as you End out of the FSEDIT Modify screen, identify all of the variables, meaning link them to fill-in-the-blank areas on the screens. At the FSEDIT Menu, go into *Assign Special Attributes to Fields* if you want to make a field such as ID Number required; otherwise, exit to return to the data entry screen that you have just finished customizing to start the real job of entering data.

```
+FSEDIT Modify----------------------------------------------------------------+
|                                     ID Number: _____                   |
|Preclinical Computer Answer Line - Customer Satisfaction Survey               |
|                                                                              |
|                                                                              |
|To better serve you, we would like to know your opinion of the quality of the|
|Preclinical Computer Answer Line.  Please take a few minutes to answer the    |
|following questions (ON BOTH SIDES) and mail this survey back to I.           |
|Mendelson, 34/2, by August 31.  Thank you in advance for your time.           |
|                                                                              |
|                                                                              |
|1.      I have had occasion to use the Preclinical Computer Answer Line ____  |
|        times in the past.                                                    |
|                                                                              |
|2.      I use the Answer Line because I have: (check all that apply)          |
|                                                                              |
|        ____    Questions about how to do something                          |
|        ____    Questions about what specific software will do               |
|        ____    Problems that needed to be solved                            |
|                                                                              |
|3.      My request(s) usually require an answer or solution in: (check all th|
|        apply)                                                                |
|                                                                              |
+------------------------------------------------------------------------------+
```

Figure 4

CONCLUSION

In setting up screens for entering surveys, the best approach to speed up the data entry is to make the screens look as close to the paper survey form as possible. With longer surveys, SAS/FSP helps you on the way to this goal by automatically spilling the unadorned list of variables onto multiple screens. Then you are free to move the variables around and place all the survey question text onto the screens that you need. But, with shorter surveys where the initial list of variables only fits onto one screen, this is not so easy. That is, unless you are aware of a trick to turn on line numbers, making it possible to access a few editor commands to enlarge this one screen into two or more.

REFERENCES

SAS Institute Inc. (1989), *SAS/FSP Software: Usage and Reference, Version 6, First Edition,* Cary, NC: SAS Institute Inc.

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