

21 BROWSE AND SCROLL FUNCTIONS

Browse and scroll functions may appear in many shapes and sizes. FPA strives to count these different shapes and sizes in the same fashion when they provide the same functionality even though they have been realized in a different way. As a result, this illustration will go into a large number of different situations and will indicate how each situation should be counted.

21.1 Selection via uniquely identifying data

Problem description

A unique customer number is entered for the function "Show Customer Data". Once this has been done, the following situations can present themselves:

1. The data of the customer concerned is displayed. No option exists to use functions in order to retrieve the data of a different customer.
2. The data of the customer concerned is displayed, after which the data of the following or previous customer can be retrieved by using function keys.
3. The core data of all customers is displayed on an overview screen (one line per customer), starting from the customer number entered. The user can scroll through this data when the screen cannot display all of it because of a lack of room.
4. The core data of all customers is displayed on an overview screen (one line per customer), starting from the customer number entered. The user can scroll through this data when the screen cannot display all of it because of a lack of room. After one of the customers on this screen has been selected, the application displays its detailed data.
5. The detailed data of the customer concerned is displayed. Via a function key, a user can then request a screen-display overview of the core data of all customers (one line per customer), starting from the customer that was shown on the detailed screen. The user can then scroll through this data if the screen cannot display all of it because of a lack of room. A particular customer can then again be selected on the overview screen, after which the application displays its data on a detailed screen.
6. The core data of all customers is displayed on an overview screen (one line per customer), starting from the customer number entered. The user can scroll through this data if the screen cannot display all of it because of a lack of room. After one of the customers on this screen has been selected, the application displays its detailed data, after which the data of the following or previous customer can be retrieved by using function keys.

Which external outputs and/or external inquiries should be identified in each of the situations above?

Discussion

Situation one is clearly an external inquiry; nothing more, nothing less. The customer is determined in a unique fashion by its customer number. Only one customer has that number. No opportunity to browse is given.

Situation two also seems to be a case of an external inquiry. In reality, however, the function allows the user to browse through all the customers from a defined starting point. The entire collection of customers is provided and the quantity of customers that can appear varies. This means that one external output is present.

Situation three also has an external output. Here, too, a starting point has been defined. Several customers are displayed and the number of customers that will follow from that starting point is not known. As a result, one external output must be identified. It does not matter whether the user can scroll further with the function key because there are more customers than the screen can display. Scrolling within the same collection is not a separate function, but rather a part of the external output. The only difference between situation three and two is that all the data of a customer can be displayed in two and only core data in three.

Two functions are in fact provided in situation four. Just as in situation three, the overview screen is an external output.

Displaying data of a specific customer on the detailed screen is considered a different functionality because a different set of data element types is involved. (Only the core data of a customer appears on the overview screen, whereas all the data of a customer is displayed on the detailed screen.) Moreover, calling the function is optional. Additionally, the function itself could exist independently. Therefore, this function is also an elementary process. This, in turn, means that the displaying of detailed data is counted as a separate function. It is an external inquiry because the user cannot scroll through information once he is on the detailed screen. There is one external output and one external inquiry.

From a functional standpoint, situation five is the same as situation four, only the screens appear in a different sequence. The sequence of screens is not important to FPA. The same functions identified in situation four are identified in five.

Just as in situation four, two functions are provided in situation six. The overview screen is once again an external output. Displaying data of a specific customer on the detailed screen is considered a different functionality because a different set of data element types is involved. (Only the core data of a customer appears on the overview screen, whereas all the data of a customer is displayed on the detailed screen.) Moreover, calling the function is optional. The function itself could exist independently. Therefore, this function is also an elementary process. This, in turn, means that the displaying of detailed data is counted as a separate function. Unlike situation four, however, situation six does allow the user to browse through the detailed screens and, so, the same functionality is provided as in situation two. The displaying of detailed data is therefore counted as one external output. As a result, situation six has two external outputs in total.

Solution

Identify the following functions:

Situation 1: One external inquiry

Situation 2: One external output

Situation 3: One external output

Situation 4: One external output and one external inquiry

Situation 5: One external output and one external inquiry

Situation 6: Two external outputs

References to the standard

4.17, 8.2.a, 8.2.c, 8.2.u, 9.2.c, 9.2.f, 9.2.g, 9.2.h and 9.2.j

21.2 Selection via non-uniquely identifying data, followed by browsing

Problem description

When a user enters a unique representative number for the function *Show Customer Data*, the first customer of the representative concerned is displayed. Using the functions keys, the user can then browse to a previous customer of the representative or to a following one.

Are there one or more external inquiries present here and/or one or more external outputs?

Discussion

When a user enters a unique representative number, he does not know how many customers this representative has. This means that the output varies in size and that it is counted as one external output. The browse function is a part of the external output, and the function keys used to browse with are not counted as an additional function or as data element types.

Solution

Count one external output.

References to the standard

4.17, 8.2.a, 8.2.c, 8.2.u, 8.3.g and 9.2.j

21.3 Selection via uniquely identifying data, followed by browsing after another selection

Problem description

When querying customer data via a unique customer number, a user can retrieve a previous or following customer of the same representative by using function keys.

Is there one or more external inquiries present here and/or one or more external outputs?

Discussion

When a user queries the data by customer number, the output is determined uniquely by that customer number and does not vary in size. This is an external inquiry.

When function keys are used to retrieve the previous or the following customer of the same representative, the customer number of the customer displayed and the representative number are used as search keys. This means that a different logical processing is necessary. Even though the customer specifically shown has been determined uniquely, the user now browses through the collection of customers belonging to a single representative. The size of this collection varies and, therefore, an external output is present.

Solution

Count one external inquiry and one external output.

References to the standard

4.17, 8.2.a, 8.2.c, 8.2.u, 9.2.c, 9.2.f, 9.2.g, 9.2.h and 9.2.j