Tailor-made forms

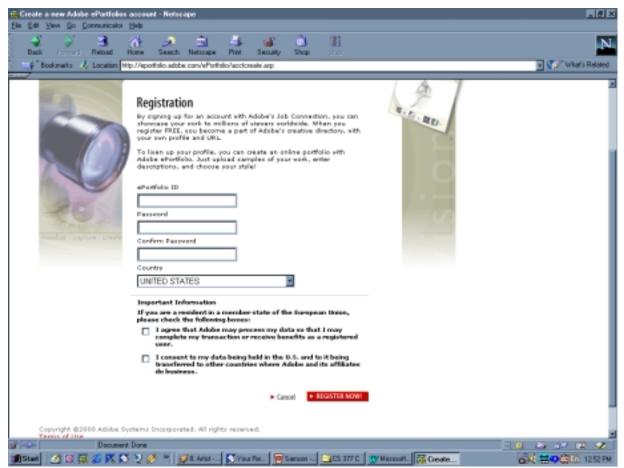


Photo 1: A form for registering to some online community.

Context

When you need to gather some **standard information** from online users, one straightforward way is to actually do it online. Such information is collected such that it can be stored in a database easily.

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Problem statement

How can we prompt online users of information that we need, in a way that easiest for the users?

Examples

When we go online shopping on Amazon.com, we do not simply choose and item and say we want this item, have it delivered to me. Instead, we go through a painstaking process of filling in all the details of our credit cards, billing address, and shipping address if it's different from the billing address. This is often the case if you are a student using your dad's credit card, or if you are buying a present for someone else. In order to help the user to fill out the information, Amazon will group together relevant information in a logical fashion. For example, it asks for your name (as it appears on the credit card), the card number, and expiration date in a single page, and in almost the same layout and would be found on your credit card. This helps the users map the information onto the form.

Consider another scenario where you want to buy a used car. You visit Edmunds.com to check the market value of the particular car you were looking at. You see a form asking you for the make, model, year, mileage and color. Initially, only the *make* field is enabled. After you have selected the make of the car from the pull down menu, the form updates itself by enabling the model field. The data entry part is a pull down menu of all the models of the particular make you chose. Having chosen the model, it only allows you to choose the years in which this model was made. This pleasant feature eliminates irrelevant details, allowing fast convergence into the target.

This continuous interaction is also found in TurboTax web. At each stage, it analyzes your responses and jumps only to relevant parts of the tax form for you, making the tax filing process a whole lot faster and easier. Because a tax form usually long, TurboTax allows users to save their data, and continue in some later session. Also, it shows exactly what stage you are at in the whole process, so you do not feel lost.

Ingredients that make a data-collecting form successful:

- It interacts with you. It is almost as though it is holding a conversation with you, giving a sense that this form is tailor-made.
- It groups together information in a meaningful way, giving you a sub-heading to each group so to gear your mind set to that particular topic (e.g. credit card).
- It is self-explanatory, with minimal explanation. Usually done by giving examples.
- It shows your progress.

Solution

Only prompt for information that is relevant to users. Use an organizational structure and put relevant information together. Let users know their progress.

| TT 1' A | | Step 2 of 7 |
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| Heading A | | |
| Information A1: | | |
| Information A2: | | Next > |
| | | |

References

One important way to make a form clear and easy for the user to fill in is to use some **intelligent defaults**. If there are very standard answers (such as month), we could use **choices**. However, answers are not always as standard, in which case we can use **bound on field size** to limit on user's length of answer.

We should group information that is sensible from the user's perspective (**user-oriented grouping**). Where the form is large, use a **schematic locator** to tell the user where he is in relation to the entire form.

Problem statements and solutions for the five referenced patterns:

Intelligent defaults

How do we give instructions for input without cluttering up space?

Give a likely answer that user will use in a format that the underlying database accepts.

Choices

How do we severely limit input? Give users choices.

Bound on input size

How do we mildly limit input? Set a bound on the input size.

User-oriented grouping

How do we group information? Group according to common perception from target users.

Schematic locator

How do we prevent users from a lost feeling? Show them a schematic picture, and tell them where they are on the picture.