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THE DESIGNER'S GUIDE TO WEB APPLICATIONS | PART II:

Web Apps Tour 2007:

LEARNING from SUCCESSFUL DESIGNS

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FREE CHAPTER

User Interface Engineering

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3 SERENATA FLOWERS

WWW.SERENATAFLOWERS.COM

Serenata Flowers (www.serenataflowers.com) is a British-based online florist designed for anyone in the U.K. who wants to order flowers online. When it comes to ordering flowers, customers have many questions: What's appropriate to send for a new baby? What should I send to my wife after backing her car into a post? When I forget an important birthday?

With a telephone order, florists guide customers through the purchase process and offer valuable advice and recommendations, including what type of flowers to buy and how much to pay. Let's examine how Serenata Flowers guides users through the purchase process with filtering controls.

3.1 WHAT DO WE BUY FOR BABY?

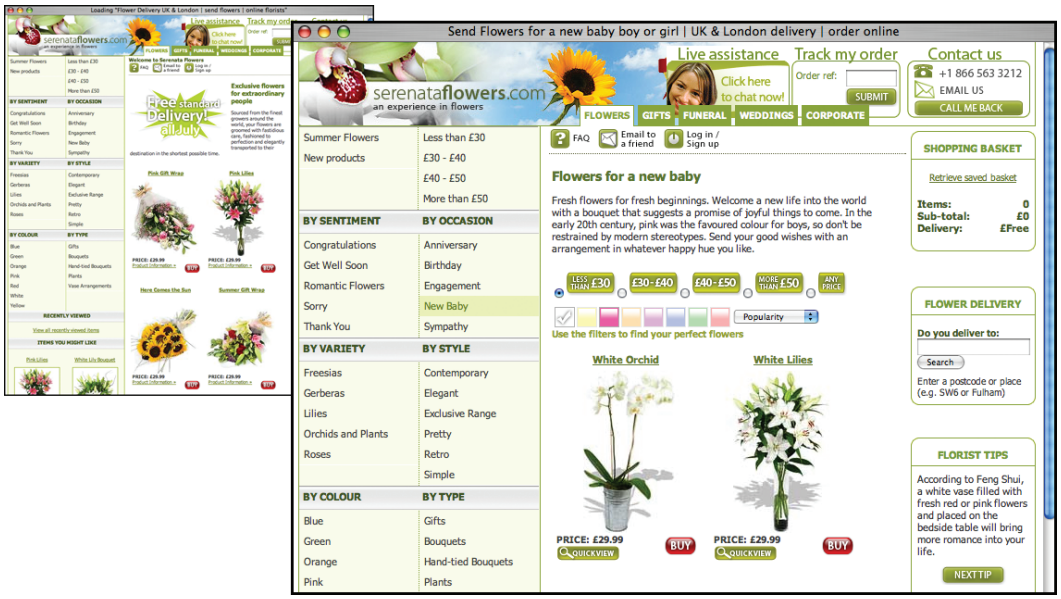

Figure 3-1: Finding flower arrangements at Serenata Flowers

Serenata's home page (Figure 3-1, left) displays sample flower arrangements that include flower photos, prices, and a **Buy** button. Compared to other flower sites, there's nothing exceptional or new to see here until you notice some less common controls on the left for filtering and displaying a subset of flowers.

Let's imagine a user needs some flowers for a newborn. Our user begins by clicking **New Baby** and immediately sees a reduced list of flowers on the right that are suitable. (Figure 3-1, right) Without a page refresh, the controls on the left filter the information displayed on the right. (Editors Note: This only works in some browsers.)

We've seen a number of web applications use this kind of filtering control: it's quick, easy to understand, and useful. However, Serenata Flowers takes this strategy even further.

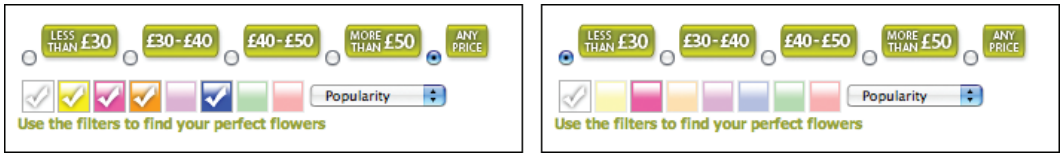

Figure 3-2: Serenata's filtering controls

Our user still has too many flower choices for New Baby and wants to further narrow them down. Serenata Flowers includes controls right above the flowers. (Figure 3-2, left) The first row shows prices: **Less than £30, £30-£40, £40-£50, More than £50**, and **Any Price**. The default setting is currently **any price**. Because our user only has £30 to spend, they'll want to eliminate expensive arrangements. When our user clicks the appropriate radio button, the application reduces the list of flowers to display only the arrangements priced less than £30. Jolly good!

Below the prices, we find a row of colorful checkboxes. These checkboxes correspond with flower colors. Our user likes white flowers and un-checks the squares until only white is checked (Figure 3-1, right.) The arrangements disappear from the list below until only white flowers priced less than £30 remain.

Serenata Flowers' filtering is very powerful and useful. Users can grasp how to interact with the filtering controls quickly because they can see the changes happening right in front of them by clicking and un-clicking the controls. We call this *dynamic filtering*.

Dynamic filtering changes the list of items in real time, updating the information as users apply each filter. Users can immediately see the results of applying a filter and make changes accordingly. It comes as no surprise, with these advantages, that users find dynamic filtering very satisfying. We expect to see much more dynamic filtering in the next few years of web application design.

3.2 FILTERS THAT REVEAL THE DATA

Another strength of filters is that they reflect the underlying data. In Figure 3-3 on the left, the flowers range in price from **£30-£40**. When we examine the checkboxes, we see that the application has already reduced the color choices with only five colors users can choose.

When users change the price range to more than **£50,** they only have three colors available to them. (Figure 3-3, right) In addition to un-checking the other choices, Serenata Flowers' designers have also disabled them. Users cannot check the options because they're not in the specified price range—it's a reflection of the data. We call this *indicative filtering*.

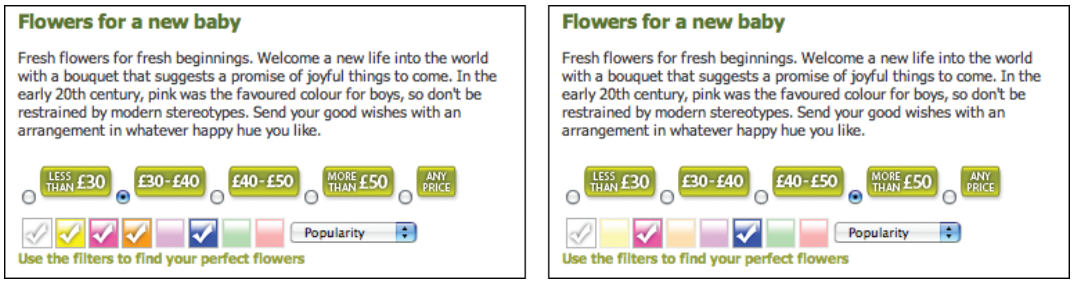

Figure 3-3: Depending on the price range, different colors are available.

Indicative filtering provides users with information about the data, answering such questions as, "how will applying this filter affect the data?" and, "how will it affect other filters?" When users understand them, these can be extremely powerful tools.

The designers of Serenata Flowers make excellent use of indicative filtering, yet they don't take it quite far enough. For example, wouldn't it be nice if users could choose flower arrangements based on color? Users could check the blue color chip and the price ranges would update to show only those ranges with blue flowers available. Unfortunately, with the existing design, if users want to see price ranges with blue flowers, they have to click on each of the price ranges and scan the checkboxes.

Figure 3-4: When should a filter be turned off?

One problem designers face when creating filtering interfaces is how to determine which filters should be in effect, and how to enable users to disable all or some of the filters and begin the task again.

For example, imagine that our user selects **By Sentiment: Romantic Flowers**, then **Pink** and **Red**. (Figure 3-4) Then, our user changes their mind and clicks on **By Style: Elegant**. Should the **Pink** and **Red** filters still be active? How can designers determine which behavior is more desirable? How will users know if the filter is active?

All types of filters face serious design challenges that require real creativity and user testing. We believe Serenata Flowers' controls are definitely a step in the right direction.

3.3 FILTERING ON THE HORIZON

When designing filters, it's critical to determine *the attributes users can filter.* Serenata's designers created a set of filters for a handful of quantitative attributes: **price**, **color**, **sentiment**, **variety**, **style** and **occasion**. However, their users cannot filter on the type of vase or the physical dimensions of the arrangement. (Maybe those attributes were too difficult to implement or they felt there were too many attributes already, making the design more complicated?)

Once you know the attributes, the next step is to provide controls to apply the various filters. For price, Serenata Flowers offers only a few price ranges, which is too bad. Many numeric filters are often too limiting and may not match users' needs. For example, with the existing design, users can't consider *any* flowers that cost less than $40. They have to click on the **Less than $30** radio button, examine the list, then click on the **$30-$40** radio button and examine that list too. If users want to consider flowers between **$25** and **$45**, it's not possible with Serenata Flowers' existing controls. It's important to consider *how users will want to filter.*

As web applications grow to manage larger and larger amounts of information, the quality of filtering controls will become increasingly important. Serenata Flowers' designers put forth a great starting point and their design can serve as a model for all of us.

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THE DESIGNER'S GUIDE TO WEB APPLICATIONS, PART II:

WEB APPS TOUR 2007

By Hagan and David Rivers, Two Rivers Consulting

In this comprehensive 55-page report, Hagan and David Rivers, two premier web application designers, explore the designs of seven of today's most complex, innovative, and thriving web applications. Each application solves hard problems in interesting ways. The designs you'll encounter on this Web App Tour are guaranteed to give you some ideas when you start to approach your own web apps.

SEVEN STOPS ON YOUR WEB APPS TOUR

In this comprehensive report, Hagan and David give you a guided tour targeting seven successful web applications. You'll investigate the purpose of each application, its target users, and how each application tackles its specific design issues. You'll see:

SALESFORCE.COM

Founded in 1999, Salesforce.com changed the face of the enterprise software world by making a major suite of sales force automation tools available through the browser. They now have more than 550,000 subscribers at 27,100 companies worldwide, using their web-based application solutions. In their fiscal 2006 year, their application generated more than $280 million dollars in revenue.

The success of Salesforce.com's business is a testament to how effectiveness of their application's design. Every detail, from the way they distribute the functionality, to how they present the individual pieces of data, has been well tuned for their audience.

WEBOFFICE

WebOffice is trying to tackle a difficult problem of helping remote workers easily collaborate, to give them a virtual office. What makes WebOffice interesting is their approach to supplying a rich functionality while keeping the design straightforward. It's a nice comparison to Saleforce.com's design.

SERENATA FLOWERS

SerenataFlowers.com has stepped away from the mainstream, with a very interactive approach to displaying their products. By utilizing AJAX technology, they've created an innovative method to quickly winnow down the selection of products by price and color.

This is an important tour stop for anyone who needs to deliver to their users a fast method for selecting an item out of a large list of possibilities.

BACKPACK

Backpack is one of a series of interesting products from the folks at 37 Signals. What makes Backpack interesting is how they've managed to create a minimalist approach to design, by only revealing functionality when it's necessary to see it. This technique could be very useful to anyone building an application requiring sophisticated data manipulation.

APPLE CONFIGURATORS

Apple.com wants to sell you a computer. Yet, their computers have a complicated array of options. How does Apple ensure you get the computer you want? They've created a configuration tool that lets the customer specify the options they desire.

SURVEYMONKEY

SurveyMonkey is one of the oldest applications on the web, providing a tool to create, manage, and analyze online surveys. It provides an interesting editing capability and some very effective project management solutions. SurveyMonkey has been around the block a few times and their experience shows in their design approach.

WRITELY (NOW GOOGLE DOCS)

Writely turned the web-based application world on its head when it produced a browser-based word processor that mimicked much of the functionality and interface available in traditional desktop word processors, such as Microsoft Word. Of all the applications on our tour, this is the one that will be most interesting to those designers who are moving their applications from a desktop environment into a browser delivery platform.

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