



# Heuristic Evaluation

## Team Members

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## Objectives of the Evaluation

After conducting a competitive analysis of two competitors' websites, and as a precursor to user testing, our team conducted a heuristic evaluation of the PCC website in order to gain an understanding of the usability of the site's interface. This involved creating scenarios and tasks that expert users (aka Team 4) attempted to complete in order to evaluate the user interface design. We evaluated the site using the 10 Usability Heuristics for User Interface Design, created by the Nielsen Norman Group. We rated each of these 10 heuristics with a number score between 1 and 5: 1 being the least functional, and 5 being the most functional. Along the way, we documented problem areas within the user interface and gave suggestions as to how correct them.

## User Scenarios and Tasks

### Scenario 1 - Grocery Shopper

Our user is from out of town and is visiting with his 4-child family and staying at an AirBnB in Green Lake. He has very picky children and they really want Gogurt pops. He does not know the area well and needs to find the closest PCC and make sure that it has the product that he is looking for. From

the main page, each team member performed the following tasks as if they were that out-of-town dad.

## User Tasks

1. Find Gogurt
2. Find his closest location

## Scenario 2 - Enthusiastic Cook

Our user is an international student from India that just started school at the UW. She had been used to eating with her family, but her mother's recipes were always kept a secret. She wants to learn to cook traditional Indian cuisine in order to impress her mother during her mother's first visit to the US next month.

## User Tasks

1. Find a vegetarian Indian curry recipe, comment on the recipe, and add recipe ingredients to a shopping list.
2. Find an Indian cuisine cooking class, learn about signing up for the class, then enroll in the class.

# 10 Usability Heuristics for User Interface Design

## Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

## Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

## User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

## **Consistency and standards**

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

## **Error prevention**

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

## **Recognition rather than recall**

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

## **Flexibility and efficiency of use**

Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

## **Aesthetic and minimalist design**

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

## **Help users recognize, diagnose, and recover from errors**

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

## **Help and documentation**

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

# Findings

## Scenario 1 - Grocery Shopper

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### 1 - Visibility of system status

	Liz	Trang	Griffin	Marco	Average
Task 1	5	4	5	4	4.5
Task 2	5	5	5	4	4.75

### 2 - Match between system and the real world

	Liz	Trang	Griffin	Marco	Average
Task 1	5	5	5	5	5
Task 2	5	5	5	5	5

### 3 - User control and freedom

	Liz	Trang	Griffin	Marco	Average
Task 1	5	3	4	4	4
Task 2	5	5	4	5	4.75

### 4 - Consistency and standards

	Liz	Trang	Griffin	Marco	Average
Task 1	3	2	3	3	2.75
Task 2	3	5	5	4	4.25

### 5 - Error prevention

	Liz	Trang	Griffin	Marco	Average
Task 1	4	5	5	5	4.75
Task 2	5	5	4	5	4.75

### 6 - Recognition rather than recall

	Liz	Trang	Griffin	Marco	Average
Task 1	2	1	2	1	1.5
Task 2	5	2	5	5	4.25

### 7 - Flexibility and efficiency of use

	Liz	Trang	Griffin	Marco	Average
Task 1	3	2	2	2	2.25
Task 2	5	2	4	5	4

## 8 - Aesthetic and minimalist design

	Liz	Trang	Griffin	Marco	Average
Task 1	5	1	1	2	2.25
Task 2	5	1	4	5	3.75

## 9 - Help users recognize, diagnose, and recover from errors

	Liz	Trang	Griffin	Marco	Average
Task 1	3	3	5	3	3.5
Task 2	2	3	5	4	3.5

## 10 - Help and documentation

	Liz	Trang	Griffin	Marco	Average
Task 1	4	3	3	3	3.25
Task 2	5	5	5	5	5

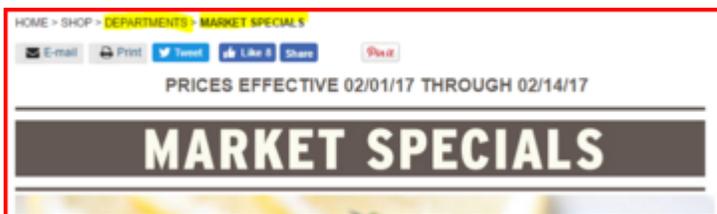
## Task 1 Analysis

Searching for a particular product or brand proved to be relatively challenging. It required clicking around and making satisficing guesses.

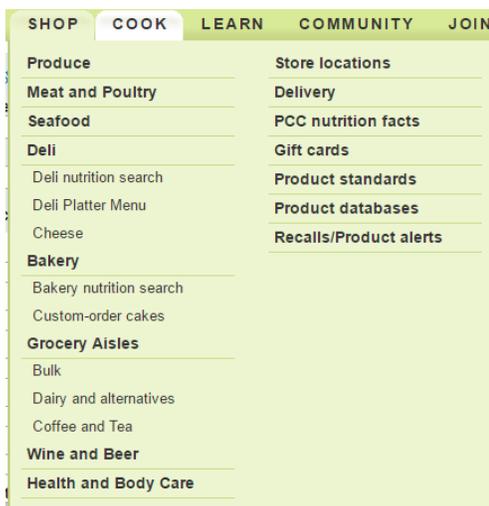
The following are some of the biggest heuristic breaches we discovered.

### Recognition rather than recall

PCC employs a bread crumb which in theory is a good rule of thumb however it didn't always match our, the user's, path to the page. It almost created confusion rather than clarifying.



For example, based on this bread crumb it appears that *Market Specials* and *Departments* would appear in the *Shop* menu.



But a look in the navigation shows neither *Departments* nor *Market Specials* in the *Shop* drop down menu.

Not only that but in this menu, dairy products are listed under the unrelated sub-category: *Grocery Aisles*. A user might have expected dairy to be its own category at the same level as *Produce* or *Seafood*.

Furthermore, *Dairy and Alternatives* seem unrelated to subcategories *Bulk* and *Coffee and Tea*.

## DEPARTMENTS

- Produce
- Meat and Poultry
- Seafood
- Grocery Aisles
- Deli
- Deli Platter Menu
- Bakery
- Coffee and Tea
- Health and Body Care
- Wine and Beer

If the user, remembering that *Market Specials* was under *Departments*, attempted to locate *Market Specials* in the *Departments* menu, they would be disappointed.

A user trying to retrace their steps using the breadcrumb would have a difficult time. It seems like a PHP function could be devised such that it would display a breadcrumb based on the links you clicked to get to where you are thus giving a user a more accurate picture of how they got to where they are..

## Error prevention

Because the site is not responsive, when a user views the site in a smaller window, and clicks the *product search* in the *Kids Pick* screen, at first it appears that nothing has happened. It is not until the window is enlarged that a right hand navigation search field is discovered.

HOME > PARTICIPATE > PCC HEALTHY KIDS > PCC KID PICKS

E-mail Print Tweet Like 0 Share Pin it

## How to find Kid Picks items



We offer close to 1,700 kid-approved products in our stores. Approved products are flagged in our stores with the bright orange Kid Picks logo, making them easy to find. Or you can search our Kid Picks product database here.

**Kid Pick**  
Search by [input]  
Browse by [input]  
ALL CATEG  
Bakery & De  
Baking Proc  
Beverages  
Breads  
Bulk Foods  
Organic?

## Aesthetic and minimalist design

One pathway a member of our team took, in his search for Gogurt was: *Shop -> Grocery Aisles -> Dairy and Dairy Alternatives*.

### Yogurt with live active cultures



Since its humble beginnings thousands of years ago, yogurt has helped nourish and sustain cultures around the globe. These days, it's still available plain but also in scores of flavors and varieties, rich in protein, calcium, riboflavin and B vitamins.

We carry cow's milk, sheep's milk, goat's milk, coconut milk, almond milk, soy- and rice-based yogurts, as well as kefir, with live active cultures that can promote healthier digestion, improve nutrient absorption, or just improve your day with their tangy, creamy flavor. Learn even more

about our yogurt selection in [this Sound Consumer story](#).

On the *Dairy and Dairy Alternatives page* were recipes including one, inexplicably, for Asparagus and Black Bean Tacos. Not only was it baffling to see a list of recipes here but not all of the recipes seemed appropriate for the category.

A user would expect recipes to be in the *Cook* section of the site and to find actual products in the *Shop* section of the site.

### Yogurt: Cooking and baking

Yogurt can make a great stand-in for sour cream and similar dairy ingredients in your cooking and baking. Here are some recipes from our database for inspiration.

- [Allspice Pickled Radish Tzatziki Sauce](#)
- [Apple Chicken Salad](#)
- [Apple Pie Overnight Oatmeal](#)
- [Apri-Pops](#)
- [Asparagus and Black Bean Tacos with Avocado Cream](#)
- [Baked Barley Custard](#)
- [Balsamic Cherry Parfait](#)

## Task 2 Analysis

Overall this was a simple and straightforward task to complete. The *Find us* tab is easily spotted in the main nav bar, and the *Store locator* is obvious in the utility nav bar.

### Consistency and standards

#### Bothell PCC

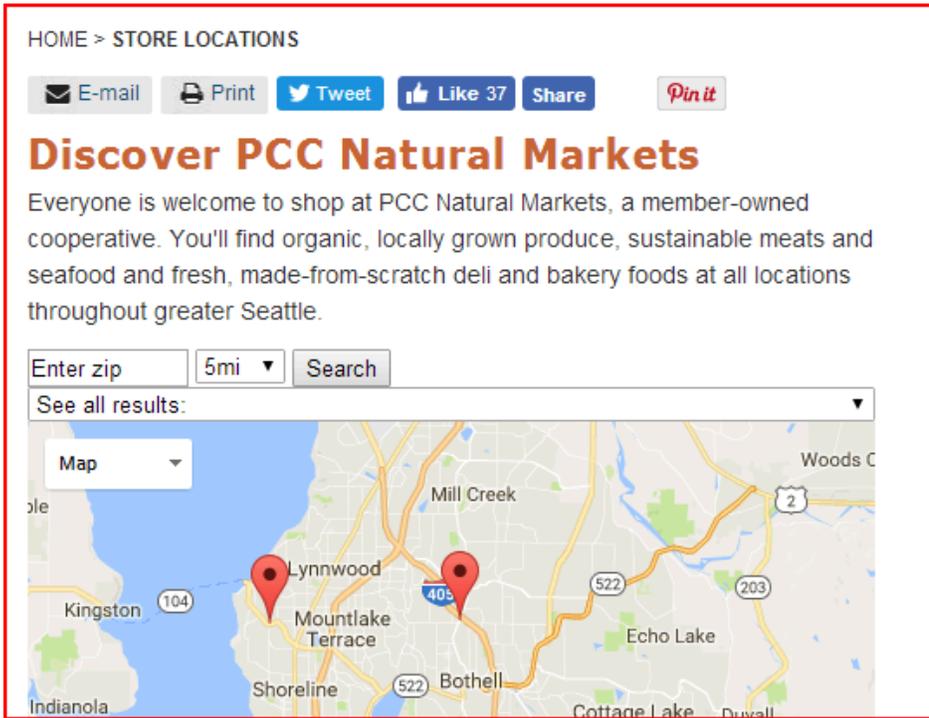
22621 Bothell Everett Highway  
Bothell, WA 98021

Open daily 6 a.m. to 11 p.m.

[425-492-0122](tel:425-492-0122)

[Get directions](#)

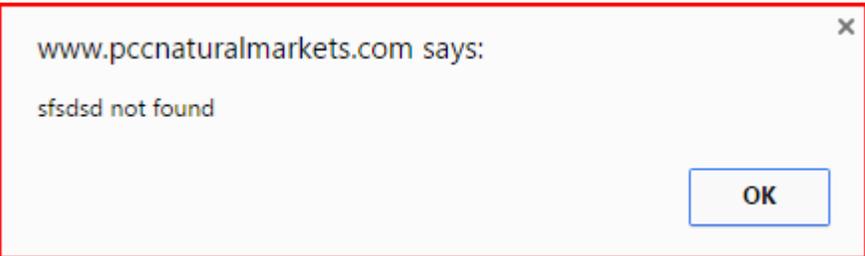
Each store has basic location information including two graphics with a phone number and *Get directions*. *Get directions* is a button that takes you to a Google map but the phone number is not a button even though it looks like one. A savvy computer user might have thought the phone number was a link to a skype phone number and be confused by the lack of functionality when attempting to click it.



The search by zip code field could be made more obvious and the form as a whole could be formatted in the style/font of the website as a whole.

**Help users recognize, diagnose, and recover from errors**

If the user inputs an invalid zip code an error message saying “<input> not found appears. This messaging could be modified to give a more descriptive message such as “Please enter a proper zip code”.



**Scenario 2 - Enthusiastic Cook**

**1 - Visibility of system status**

	Liz	Trang	Griffin	Marco	Average
Task 1	5	4	5	4	4.5
Task 2	5	5	5	4	4.75

## 2 - Match between system and the real world

	Liz	Trang	Griffin	Marco	Average
Task 1	5	5	5	5	5
Task 2	4	5	5	5	4.75

## 3 - User control and freedom

	Liz	Trang	Griffin	Marco	Average
Task 1	5	3	5	2	3.75
Task 2	5	5	5	4	4.75

## 4 - Consistency and standards

	Liz	Trang	Griffin	Marco	Average
Task 1	5	2	5	5	3.5
Task 2	2	5	5	4	4

## 5 - Error prevention

	Liz	Trang	Griffin	Marco	Average
Task 1	5	5	5	4	3.75
Task 2	5	5	5	5	5

## 6 - Recognition rather than recall

	Liz	Trang	Griffin	Marco	Average
Task 1	5	1	4	5	3.75
Task 2	3	2	3	3	2.75

## 7 - Flexibility and efficiency of use

	Liz	Trang	Griffin	Marco	Average
Task 1	4	2	4	4	3.5
Task 2	4	2	4	4	3.5

## 8 - Aesthetic and minimalist design

	Liz	Trang	Griffin	Marco	Average
Task 1	5	1	3	4	3.25
Task 2	3	1	4	4	3

## 9 - Help users recognize, diagnose, and recover from errors

	Liz	Trang	Griffin	Marco	Average
Task 1	5	3	5	3	4
Task 2	5	3	5	5	4.5

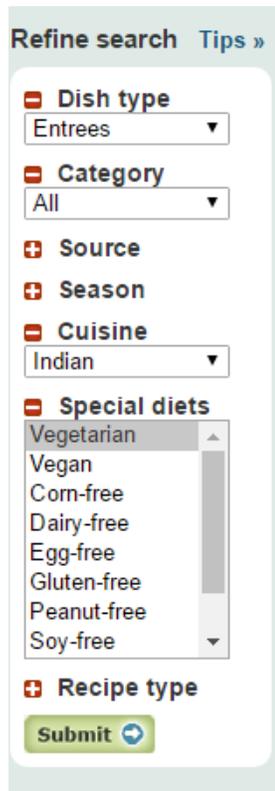
## 10 - Help and documentation

	Liz	Trang	Griffin	Marco	Average
Task 1	4	3	5	4	4
Task 2	5	5	4	5	4.75

## Task 1 Analysis

Sorting for a recipe is largely functional, and we had a high success rate with finding a vegetarian Indian dish. Adding the items to a cart was straight-forward as well, but required a user account to take advantage of it's full functionality.

### Flexibility and efficiency of use



The image shows a 'Refine search' sidebar with the following elements:

- Refine search** [Tips »](#)
- Dish type**: Entrees
- Category**: All
- Source**: (plus icon)
- Season**: (plus icon)
- Cuisine**: Indian
- Special diets**:
  - Vegetarian
  - Vegan
  - Corn-free
  - Dairy-free
  - Egg-free
  - Gluten-free
  - Peanut-free
  - Soy-free
- Recipe type**: (plus icon)
- Submit** (button with right arrow)

When using the *Refine search* functionality, it was a little confusing selecting criteria from *Special Diets*. It took a bit of clicking to realize that the special diets was the only drop down menu in which the user can select more than one criteria.

## Aesthetic and minimalist design

### Featured recipes

- PCC Taste
- Sound Consumer
- Kid-friendly recipes
- "Gardening with Ciscoe"
- Gluten-free cooking



Watch our **videos**

### Newest recipes

Asian Noodle Salad with Broccoli and Toasted Sesame Dressing

Golden Mushroom-Basil Cashew Soup

Sweet Potato Corn Muffins

A+ Avocado Arame Almond Salad

Deconstructed Beef Wellington

More »

### Top-rated recipes

### Cooking resources

### Your recipe box

There seems to be too much information in the sidebar on the *Recipes* sub-category page. Many of these filters would be more sensibly found in the *Refine search* sidebar as described above. This is an example of space being cluttered with redundant information

Another sample is the *Browse our recipes* section found at the bottom of the *Recipes* subcategory page. These 3 categories (*Course*, *Category*, and *Special diets*) are already found in the *Refine search* sidebar. Having this list on the bottom of the page further adds to the clutter and redundancy.

### Browse our recipes

#### Course

- Appetizers
- Beverages
- Breakfast/Brunch
- Desserts
- Entrees
- Salads
- Sandwiches/Wraps
- Sauces/Spreads
- Side dishes
- Snacks
- Soups/Stews

#### Category

- 5 or less
- All Baking
- Baking/Bread
- Baking/Cakes
- Baking/Cookies
- Baking/Muffins/Scones
- Baking/Pies
- Fruit/Vegetables
- Grains/Beans
- Grilling
- Kid-friendly
- Kid-friendly/Ages 2-6
- Kid-friendly/Ages 7+
- Meat
- Seafood
- Pasta

#### Special diets

- Vegetarian
- Vegan
- Corn-free
- Dairy-free
- Egg-free
- Gluten-free
- Peanut-free
- Soy-free
- Tree nut-free
- Wheat-free

If PCC natural markets wants to make a stronger call to action with temporary content found in *Featured recipes*, *Newest recipes*, and *Top-rated recipes*, it may make more sense to add this content to a larger spotlight, centered in the body of the page.

## User control and freedom

When selecting options from a filter, the user should be able to see consistent validation of their selection. Options may be hidden from the user when using the *Refine search* sidebar of the *Recipes* page. The problem looks to be associated with the expanding and collapsing categories within the filter.

### Refine search **Tips** »

- + Dish type
- + Category
- + Source
- + Season
- + Cuisine
- + Special diets
- + Recipe type

Submit

Looking at the filter search on the left sidebar of the screen, we have options to narrow our scope. We can expand and collapse the categories to view the filter options for each.

A vertical sidebar of search filters. At the top, 'Dish type' is expanded to show 'Salads'. Below it are 'Category', 'Source', 'Season', 'Cuisine', 'Special diets', and 'Recipe type', all collapsed. A 'Submit' button is at the bottom.

We can filter the search by expanding each category, and selecting from the drop-down or selection menus. In this case, I've simply chosen *Salads* from the *Dish type* category filter.

A vertical sidebar titled 'Refine search' with a 'Tips' link. All filters ('Dish type', 'Category', 'Source', 'Season', 'Cuisine', 'Special diets', 'Recipe type') are collapsed. A 'Submit' button is at the bottom.

Confusion may occur when collapsing the *Dish type* category filter. The user may not know whether the filter is still active if it is not visually affirmed. Further, if the user wants to refine the search after altering multiple filters, a bit of exploration may be required if the categories have been collapsed. Determining the best filter to adjust will require more clicks and participation from the user than necessary.

A vertical sidebar of search filters. 'Dish type' is set to 'Salads', 'Category' to 'All', 'Source' to 'All', 'Season' to 'All', and 'Cuisine' to 'All'. 'Special diets' is expanded to show a list: Vegetarian, Vegan, Corn-free, Dairy-free, Egg-free (highlighted), Gluten-free, Peanut-free, Soy-free. 'Recipe type' is set to 'Food'. A 'Submit' button is at the bottom.

Last, an elegant solution already exists. I found the *Refine search* layout is replaced after a search is performed. This image shows a visually affirmative filtered selection, where the user can quickly adjust and re-submit a query. This shows an inconsistency in the layout of an identical search on two different pages.

One final thought on the first task is that commenting on a recipe seemed unnecessarily involved. It requires the user to sign in, which is expected, but one piece of information required is a phone number. How willing would a user be to supply a phone number? How often will this deter someone from simply leaving a comment?

## Task 2 Analysis

### Match between system and the real world

Searching for a specific cuisine cooking class (in this case, Indian) wasn't entirely intuitive. I happened to get lucky with my intuition, though.



For example, my best guess for an Indian cuisine class was to choose *Global Gourmet* from the left navigation. I wasn't confident that was correct, but it ended up being right.

Terms such as *One of a Kind* or *Global Gourmet* may require insider knowledge to understand them. PCC specific terms cater to an experienced user, and could alienate inexperienced users.

### Flexibility and efficiency of use

Trying to determine how to register for a class took a little more work than I would have liked. At first I thought I had to sign in, in order to learn more. However, I happened to notice *Registration information* on the left sidebar. The link was difficult to find, I had to scroll down the page in order to see it.



But, it yielded good information, including 5 ways to register for a class.

### Five ways to register

- 1. Online:** Begin by browsing the [classes offered](#), then [log in](#) or [create an account](#) before adding the classes of your choice to your class cart. Then proceed to checkout. American Express, Visa, MasterCard, Discover or PayPal.
- 2. Phone:** 206-545-7112, Monday to Friday, 9 a.m. to 5 p.m. Credit card or PCC gift card.
- 3. In person:** at our [Co-op business office](#), Monday to Friday, 9 a.m. to 5 p.m., at 3131 Elliott Avenue, Suite 500, Seattle. Cash, check, credit card or PCC gift card.
- 4. Fax:** Use the form from the printed schedule, available at all PCC Natural Markets, or [download the registration form](#)  and fax to 206-545-7131. Credit card or PCC gift card (include card number with order).
- 5. Mail:** Use the form from the printed schedule, available at all PCC Natural Markets, or [download the registration form](#)  and mail to our [Co-op office](#). Check, credit card or PCC gift card (include card number with order).

## User Control and Freedom

The examples below show the breadcrumb navigation trailing off. Each example shows the breadcrumb reading *Home -> Cook -> PCC Cooks*. The screenshot on the left is a page that should have a breadcrumb reading *Home -> Cook -> PCC Cooks -> Global Gourmet*. The screenshot of the right is a page that should have a breadcrumb reading *Home -> Cook -> PCC Cooks -> Global Gourmet -> Savor India*.

HOME > COOK > PCC COOKS

E-mail Print Tweet Like 6 Share Pin it

### Global Gourmet



Experience the unique flavors of place - from right here in the Pacific Northwest to half-way around the world.

HOME > COOK > PCC COOKS

E-mail Print Tweet Like 0 Share Pin it

### Savor India

DEMO

Archana will show us how to use aromatic and flavorful Indian spices to prepare a comforting and grounding winter's night meal. We'll start with a hearty Curried Tomato Soup and pair it with a Vegetable Kathi Roll, an Indian-style burrito or wrap filled with paneer and spiced with the three C's (cumin, coriander and cayenne). You'll also enjoy the classic comfort food pairing of Chana Masala with Vegetable Biryani. Vegetarian with dairy; no eggs.

Members: \$45, Non-members: \$50

## Recognition and Recall

### Italian Winter in the Langhe



Paola Albanesi

The screenshot above is the title of a cooking class. The symbology on the right describes the class to include Wine-sampling and Hands-on interactions. I know this because I have found symbology information in the *Registration information* page, found in the screenshot below.

All cooking classes offer generous samples of the recipes. Adult classes are either demonstration or hands-on (designated by the DEMO or HANDS-ON symbol). All kids' classes (ages 2 to 15) are hands-on.

These symbols denote wine or beer sampling in class:  . Gluten-free classes are denoted with the GF symbol.

Lastly, the *Registration information* page is not an immediate call to action within the *PCC Cooks* subcategory page. Therefore, the key may often not be found by the user. Without reference, the significance of the symbology may be confusing or lost to the user.