The Pancake Recipe Challenge

Google the words “pancake recipe,” and you will get more than 1 million hits. Looking more closely, there are actually many ways to make such a simple thing as pancakes. For example:

Oatmeal Pancakes
Adapted and just tweaked a little from Good to the Grain

Makes about 18 pancakes

3/4 cup oat flour (you can make this by pulsing rolled oats into a food processor or spice grinder until finely ground; 1 cup of oats yielded 3/4 cup oat flour for me)
1 cup all-purpose flour
2 tablespoons sugar
2 teaspoon baking powder
3/4 teaspoon Kosher or coarse salt
3 tablespoons unsalted butter, melted and cooled slightly (plus extra for the pan)
1 1/4 cups whole milk
1 cup cooked oatmeal*
1 tablespoon unsulphured (not blackstrap) molasses or 1 tablespoon honey
2 large eggs

Whisk the dry ingredients (oat flour, flour, sugar, baking powder and salt) together in a large bowl. In a smaller bowl, whisk the butter, milk, cooked oatmeal, honey and eggs together until thoroughly combined. Gently fold the wet ingredients into the dry ingredients. Using a light hand is important for tender pancakes; the batter should be slightly thick with a holey surface.

Heat a 10-inch cast-iron pan or griddle over medium heat until water sizzles when splashed onto the pan. Lower to medium-low. (This is my tip; I find pancakes impossible to cook well over higher heats. I've got more pancake tips over here.) Rub the pan generously with butter; Boyce says this is the key to crisp, buttery edges. Working quickly, dollop 1/4-cup mounds of batter onto the pan, 2 or 3 at a time. Once bubbles have begun to form on the top side of the pancake, flip the pancake and cook until the bottom is dark golden-brown, about 5 minutes total. Wipe the pan with a cloth before griddling the next pancake. Continue with the rest of the batter.

Serve the pancakes hot, straight from the skillet or keep them warm in a low oven. We also found these to reheat surprisingly well the next morning, again in a low oven.

Good Old Fashioned Pancakes allrecipes.com

Rated: ★★★★½
Submitted By: dakota kelly
Photo By: justamom

Prep Time: 5 Minutes
Cook Time: 15 Minutes
Ready In: 20 Minutes
Servings: 8

"This is a great recipe that I found in my Grandma's recipe book. Judging from the weathered look of this recipe card, this was a family favorite."

INGREDIENTS:

1 1/2 cups all-purpose flour
3 1/2 teaspoons baking powder
1 teaspoon salt
1 tablespoon white sugar
1 1/4 cups milk
1 egg
3 tablespoons butter, melted

DIRECTIONS:

1. In a large bowl, sift together the flour, baking powder, salt and sugar. Make a well in the center and pour in the milk, egg and melted butter; mix until smooth.
2. Heat a lightly oiled griddle or frying pan over medium high heat. Pour or scoop the batter onto the griddle, using approximately 1/4 cup for each pancake. Brown on both sides and serve hot.

In this exercise, you and your teammates will design an interactive visualization system to overcome some challenge that involves making sense of all these recipes. You'll do this in three phases: the first phase will focus on creating a data and task abstraction to support you in answering your pancake challenge question; in the second phase you'll sketch ideas for your visualization system; and in the third phase you'll have to tackle some additional design challenges and create a mock-up of your complete interface.

PHASE 1

(in class in groups of two or three)

1) Your first assignment is to **decide on a question for the challenge.** The idea is to think of some sort of question that requires making use of many different pancake recipes, perhaps along with some additional data you would need to acquire -- note that there could be many possible ways to acquire data besides just Google! A list of possible questions includes:

1. What pancake recipe(s) can I make given the contents of my pantry?
2. Which recipes are the best if I'm on diet?
3. What recipe will require the least amount of money?
4. Just *how* different are the recipes?
5. I am making pancakes -- I wonder what recipe my friends recommend?
6. What are the most common extensions to the basic pancake recipe?

You are free to come up with your own question as well. Note that the data is *many* pancake recipes and not just one, so your interface should scale to *billions* of pancake recipes (just

kidding - but you get the point). The data you need to acquire doesn't have to actually exist at the moment, but is something that could be imagined (like, through a questionaire).

2) Your next assignment is to **create a data and task abstraction** for supporting your pancake challenge goal.

What are the subquestions you need to be able to answer in order to answer your challenge questions? What kinds of visualization analysis tasks are these subquestions? Describe the classes of change that will support these analysis tasks.

What additional data besides the recipes do you need? What sorts of data transformations must you do? Describe the data and attribute types (i.e., table, network, categorical, ordinal, etc), along with their semantics (quantity, temperature, availability, etc).

PHASE 2
(at home, individually)

1) **Refine and write down your own version of the abstraction**.

2) **Sketch out three rough, but different, design ideas** for a visualization tool that will support your abstraction. What mark types and encoding channels are you using for the attributes in your data abstraction? What interaction mechanisms are available to support your task abstraction? Pick your favorite idea and *briefly* **describe your design** in terms of mark types, encoding channels, and interaction mechanisms. Also **give a short justification** for your decisions.

3) Bring your abstraction, sketches, and design description to class. You will need to turn it in at the end of the in-class portion of the exercise.

PHASE 3
(in class in groups of five or six)

1) You and your initial teammate must combine forces with at least one other team that has a different pancake challenge question. **Recast your challenge** in terms of both of these questions. This could be a single high-level question, or, several questions that share a common theme. What is it that you want to design a visualization system to enable?

2) Each member of your new super team should **write down the individual elements of your data and task abstraction**. Use a single post-it note for an individual data attribute as well as for each analysis question and task.

3) As a super team, **create an affinity diagram** of all of your post-it notes. Which post-its are describing the same thing? What are the more general groups of data types and tasks that emerge? You'll need to come to a consensus of the more general abstraction for your super team.

4) From the affinity diagram, **sketch out a visualization interface** to support your combined pancake challenge question(s). At the end, you will **present your design to the class** and explain how the visual elements and possible user interactions are supporting the goals of your super group.

5) Write down the names of each member of your super team on your final design sketch. Turn this in along with each teammate's homework.