# Tinkering with Your App

# Experiment 1: Changing the data

With the existing app, there are a number of things you can do to change how the game is played. Let's review the current rules first. In the game, there are three dice. When you roll, all the dice are rolled at the same time. Triples score points, doubles score points as well. Now, based on these rules, let's ask some what if questions to see how we could change the app. What if you rolled more than three dice? What if you rolled one die at a time? What if you had the player predict a roll? With each of these questions, there are some additional questions to think about to help you try and solve these what if scenarios.

First, if you rolled more than three dice, could you do that by adding additional dice to the array list? Would that be enough? How would additional dice change how you tested if there are matching combinations? If you rolled one die at a time, how would you keep track of the die you were rolling at one time? If you had to guess a roll, how could you let the player indicate what their guess is before they initiate the roll? As you think of these questions and consider the answer, you're now thinking like a programmer. This is because you are now thinking about how the code needs to be written to solve for these scenarios.

Here are some simple tips to help you out. Look for simple solutions. Sometimes the easiest solution is best. Don't worry if your solution isn't good enough. It is almost impossible to have the perfect solution on your first attempt, so try multiple solutions to see which ones might work out best. And if you find something that works, try to iterate on it and make it better. But if you get stuck, sometimes it's best to take a step back, grab some paper and pencil, and sketch it out. Moving away from the computer can sometimes be the best way to solve a complex problem.