

# Preface

There are many many different ways to solve this problem. What we are looking for is good code and good software design (it's up to you to decide what that is). We expect that this will take you somewhere around 2-4 hours to complete, so we aren't expecting "perfect" code (if there is such a thing). If you find yourself stuck or spending too much time on the problem, send us what you have with an explanation of what you planned on doing.

Here are a few things to keep in mind:

- Your code should be easily readable, commented, and maintainable.
- If you need to store data, using an in-memory "database" is OK (simple Collections are fine).
- Your application may be viewed by many users at the same time.
- Include unit tests to validate your application's functionality (edge cases, normal operation, etc). You don't need 100% code coverage.
- Feel free to use any build tools and/or libraries you are comfortable with. If it's anything other than standard Java or Maven, please document how to build/run your solution.

## Directions

1. You'll need git installed to complete this project. Please install it if you haven't already.
2. Create a new local git repository for this project (e.g. `git init`)
3. Please complete the 3 parts below sequentially. After each committing your work for each part, please create a tag (e.g. `git tag -a 'part1' -m 'Secret Santa Part 1'`)
4. When you're done, create a git bundle to send to us (e.g. `git bundle create secretSanta.bundle master`)

## Problem Parts

### Part One

Imagine that every year your extended family does a "Secret Santa" gift exchange. For this gift exchange, each person draws another person at random and then gets a gift for them (obviously, a person cannot be their own Secret Santa). Write a program that will choose a Secret Santa for everyone given a list of all the members of your extended family.

## Part Two

After the third year of having the Secret Santa gift exchange, you've heard complaints of having the same Secret Santa year after year. Modify your program so that a family member can only have the same Secret Santa once every 3 years.

## Part Three

As your extended family has grown, members have gotten married and/or had children. Those families usually get gifts for members of their immediate family, so it doesn't make a sense for anyone to be a Secret Santa for a member of their immediate family (spouse, parents, or children). Modify your program to take this constraint into consideration when choosing Secret Santas.