

## Assignment

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A teacher of a scrum course has prepared an exercise in which he needed to divide his pupils into groups of 5 (or 6). Being a very thoughtful teacher, he wanted these groups to be as varied as possible (or at least varied enough). When pupils enrolled to his course he gathered the following information on each participant:

- o Name (for some odd reason he never has two pupils with the same name)
- o Gender (MALE or FEMALE)
- o Number of years of experience: The number of years this pupil has been working with this particular technology.
- o Role: (DEVELOPER, SCRUM\_MASTER, PROJ\_LEAD, TEST\_LEAD or TESTER)

All of this information he has gathered in a csv file, and he set out to create a java program that will divide the pupils on his list in such a way that the groups are as diverse as possible. This means, that if there are 5 male participants and 5 female participants, then the groups should be mixed by gender. In the same way, if there are 3 developers and 5 testers, then all developers should not end up being in the same group. Here again, the same goes for the number years of experience. We do not want all experts in one group and all novices in another group.

Being just a teacher and not a cool java developer, he got to the point to read the csv file, and write a csv file, but the actual logic he could not overcome. This is where he thought of his developer friend. You.

Please finish the program for him. Finish the following method:

```
com.hm.assignment.groups.Group.distribute(int, Collection<Participant>)
```

### About the assignment

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Your friend, the teacher, has planned to use the code you produce, not only to divide his pupils in a thoughtful way, but also to present as development exercise for a job he is applying for at H&M. This means that your code needs to prove that you are able to separate concerns, follow coding standards, give thought to readability and maintainability. He really wants this job!

This coding exercise is expected to take one full working day. This is why you will get this exercise by email in the morning, and we expect you to submit your results by the end of that working day. It is probably not a good idea to send your result as an attached zip file containing java files, because our email server does not let such emails pass. Instead, let us download your code from a server (like dropbox, or github...). If you have any questions or comments about this assignment, please do not hesitate to send an email to me at: daniel.schwartz@hm.com.

Enjoy your assignment  
/Daniel at H&M