

Qualitative Codebook

Purpose and scope

Our qualitative analysis is part of the “Mind the Gap: Gender, Micro-inequities and Barriers in Software Development” study. The main goal of this study is to analyze micro-inequities (e.g., interruptions, lack of eye contact, being assigned menial tasks in a project) and barriers experienced by software professionals working in technical roles with a gender perspective. For conducting the analysis, we collected 359 answers of software professionals (50:50 women:men ratio). The research consists of a qualitative and quantitatively analysis. This codebook will give an overview about our qualitative analysis.

The objective of the qualitative research is to get a better overview and understanding of what software professionals perceive as their main obstacles and unfair treatments in their daily working live from a gender perspective. The underlying research question is:

Do software professionals face barriers previously detected in men-dominated fields? How do these experiences differ among genders?

For answering this question, software professionals had the option to answer two open questions in the survey:

- Have you ever had the feeling that you've been treated unfairly in the software industry? Could you explain?
- What is the biggest obstacle you face, or have faced in the past, regarding to your work in the software industry? Could you explain?

We used an open coding process to qualitatively analyse the results of the questions. We will detail our used approach and the codes in the following sections.

Code list

We open coded 31 unfair treatments for the first open question:

- Have you ever had the feeling that you've been treated unfairly in the software industry? Could you explain?

We grouped them into six higher-level categories related to

1. Team dynamics:

We label all perceived unfair treatments as **team dynamics** in which team members have treated the respondents disadvantageously. The unfair treatment can occur in a one-to-one interaction with another colleague (e.g. harassment) or in a group interaction (e.g. bro culture). We used the following labels to code for team dynamics:

- Verbal mistreatment
- Harassment
- Bro culture
- Exclusion
- Interruption

- No recognition
- Opinion not considered
- Prove myself
- Stolen ideas
- Trust issues
- Placing wrong blame
- Someone else presented the ideas
- Non-technical/skill level
- Leadership

2. Biases

- Ageism
 - Favoritism
 - Sexism
 - Racism
 - Seniority
 - Language
3. reward
 4. management
 5. workload and work-life balance,
 6. technical and specific project issue

The second element of a codebook is the code list, which is the core of your analysis. This section lists all the codes that you use to label and classify your data, along with their definitions, examples, and rules.

Coding process

The third element of a codebook is the coding process, which describes how you apply the codes to your data. This section explains the steps, tools, and techniques that you use to code your data, such as manual or software-based coding, deductive or inductive coding, or single or multiple coding.