Appendix D - Large Scale Survey Manifestations of Empathy

Purpose: The survey aims to understand how software practitioners define empathy, their motivations for demonstrating empathy, the SE activities where empathy is considered applicable or not, and other factors that influence their empathetic behaviours.

Section 1:
1 - How old are you?
Answers: **(Multiple choice - select one)**
Below 20, 20-30, 31-40, 41-50, 51-60, 61-70, Above 70, Prefer not to answer

2 - How do you identify your gender?
Answers:
- Woman
- Man
- Prefer to self-describe as (Add a textbox to capture input)
- Prefer not to answer

3 - What is your Country of residence?
Answers: **Dropdown** of countries to select from or input field

4 - Country of your residence when you were working on your most recent role where you interacted with other software practitioners?
Answers: **Dropdown** of countries to select from or input field

5 - How many years of experience do you have in working as a software practitioner?
Answers: (Multiple choice - select one)
- Less than 1 year
- Between 1-2 years
- Between 3-5 years
- Between 5-10 years
- Between 10-15 years
- Between 15-20 years
- Between 20-30 years
- Between 30-40 years
- Between 40-50 years
- More than 50 years

6 - What is the title/designation of your current role? (**Short answer**)

7 - What are the job responsibilities of your current role?

8 - What types of software development methodologies have you primarily been involved in? (Select all that apply)
Answers: (Checklist of items)
- Traditional (Waterfall)
- Agile - Kanban
- Agile - Scrum
- Agile - XP
- Other (Please specify)

9 - What is the nature of the organisation you are affiliated with in your current role?
Answers: **(Multiple choice - select one)**
- Self-Employed
- Startup (5-10 employees)
- Small (10 -100 employees)
- Medium (100 - 500 employees)
- Large (More than 500 employees)

10 - How many team members are part of your current team?
Answers: **(Multiple choice - select one)**
- No members
- Less than or equal to 5
- 5-10
- 10-20
- More than 20

Section 2:

11.1 - What comes to your mind when you hear the word empathy? How do you **define empathy?**

11.2 - What does **empathy mean to you when interacting with developers/stakeholders?**

12 - What **motivates you to demonstrate empathy** in your role as a software practitioner? Please briefly explain your reasons.

13 - In what types of **software engineering activities do you think empathy is applicable and not applicable**? Please provide examples where possible and explain why you think empathy is or isn't relevant in these scenarios.

14 - We found that factors such as personality, culture, job role, and team composition influence empathy in software practitioners:
- *Personality*: Some practitioners are naturally more empathetic, while others may show less empathy.
- *Culture*: Empathy is influenced by cultural norms, with open and inclusive cultures encouraging it, while rigid or hierarchical cultures tend to hinder its expression.
- *Job role*: Empathy varies across SE roles, fostering understanding when their goals align but reinforcing tensions when they conflict.
- *Team composition*: Diverse teams, particularly those with a mix of genders, were observed to communicate more openly and foster greater empathy compared to less diverse teams.

In your experience, do you think these factors influence empathy? What **other factors influence your empathy** and why do you think so?

15 - Is there anything else you would like to share with us?