

## Interview Questionnaire for Mobile App Developers

This survey is designed to get detailed feedback from mobile app developers on how they go about handling human-centric issues in eHealth apps' development for its more effective usages and fundamental future needs. The questionnaire is divided in two sections. The first section collects some demographic information of the participants. No identifying information is collected in this questionnaire. Then, the second section collects their views on human-centric issues in this domain.

The interviewer will complete this questionnaire during or after a Zoom or face to face interview. The interviewer will record the interview for post-completion ONLY if consented by the participant, else will complete during the interview.

### Section 1: Demographic Information

1. Country of residence:
2. Age:
3. Gender:
4. Highest qualification:
5. Area of qualification:
6. Experience (in years) in mobile app development:
7. Current role in development team (tick all that apply):
  - a. Project manager
  - b. Business consultant/Marketing manager/Sales personnel
  - c. Requirements analyst
  - d. Software architect
  - e. Programmer
  - f. User interface or Graphical User interface designer/developer/engineer
  - g. App animator or operations developer/engineer
  - h. QA engineer
  - i. Tester
  - j. Other:

Please write here

8. Former roles in development teams (tick all that apply):
  - a. Project manager
  - b. Business consultant/Marketing manager/Sales personnel
  - c. Requirements analyst
  - d. Software architect
  - e. User interface designer/developer/UX experience developer/engineer
  - f. QA engineer
  - g. Programmer
  - h. Tester
  - i. Operations
  - j. Other:

Please write here

9. Do you ever work on an eHealth app development project?

- ☐ Yes (go to next question i.e., question 10)  
☐ No (go to section 2 i.e., question 11)

10. What sub-domain of an eHealth app have you worked on (tick all that apply):

- a. Telehealth and telemedicine
- b. Health and Fitness tracking
- c. Mental health
- d. Mobile games to improve health issues
- e. App based solution for a health issue
- f. Electronic Health Records (EHR)
- g. Electronic Medical Records (EMR)
- h. Health IT systems
- i. Consumer health IT data
- j. Virtual healthcare
- k. Mobile health decision making
- l. Big data systems used in digital health
- m. Other:

Please write here

## Section 2: Views on Human-centric Issues in eHealth Apps

11. Pick a eHealth app (if possible) or a related mobile app development project that you have worked, and that you think had particularly challenging human-centric issues e.g., end-user age, culture, language, gender, physical or mental challenges, socio-economic status, living situation, other particular vulnerability, etc.

Please tell me a bit about the system, what it was meant to do, and particular human-centric characteristics that you had to know about and/or accommodate in the mobile app:

a. System:

Please explain

b. What meant to do:

Please explain

c. Particular human-centric characteristics had to accommodate:

Please explain

12. Why were these human-centric characteristics challenging to meet?

Please explain

13. When did you find out about these particular issues? During app requirements gathering? App coding? App Interface design? During app testing? Via user reviews/user issues reporting? Or Others?

Please explain

14. Which particular human-centric issues were discovered during which phase of app development? Who highlighted them e.g., end-user, developer, domain experts or other stakeholders?

Please explain

15. How does your software team talk about these issues? Capture them in requirements, designs, tests? How do you talk with stakeholders or users about them?

Please explain

16. Are there any limitations in your current approaches for recognising or handling some human centric issues you mentioned in Question 15?

Please explain

17. If you discovered some issues during acceptance testing or via defect reports/user reviews, how were these described by the testers/end users? Were their descriptions clear?

Please explain

18. Could you specify the faults highlighted in Question 17? Did you agree with the assessment of these issues as defects? Did you manage to fix them in the app itself?

Please explain

19. Did you use any particular design approach, tools, coding, APIs, test cases to fix the issues mentioned in Questions 17 and 18?

Please explain

20. Do you think mobile app development teams take sufficient account of the diverse end users of their applications? Why or why not?

Please explain

21. Do you have any suggestions about ways mobile app developers (especially eHealth app developers) could be better supported to address these end user human-centric issues?

Please explain

22. Any other comments for us about these issues, this survey?

Please explain

**Thank you for your time in answering our survey and participating in this interview!**

**If you would like a copy of our final report, please let me know an email we can send it to. This will be removed from the interview transcript:**

Please tell me your email address