

# Data Dictionary of "Eyes on Code Smells: Analyzing Developers' Responses During Code Snippet Analysis" Paper

- "experiment\_id" - Participant identifier.
- "Timestamp" - Date and time of registration.
- "ParticipantConsent" - Consent of the participant.
- "KnowsCodeSmells" - Read this definition of code smells: Code smells are poor design and implementation choices in code development that affect understanding and maintenance of the software.
- "CodeSnippetXXDesc" - Please, describe how the code snippets works.
- "CodeSnippetXXComplexity" - Is the analyzed code snippets hard to comprehend?
- "CodeSnippetXXExplanation" - Based on the previous answer, explain why.
- "CodeSnippetXXSmell" - Is there a code smell in the analyzed code snippet?
- "CodeSnippetXXSmellType" - What code smell(s)?
- "CodeSnippetXXSmellSeverity" - What is the code smell severity?
- "CodeSnippetXXSeverityReason" - What was your reason for choosing this severity?
- "CodeSnippetXXFeeling" - How did you feel during the analysis of this code snippet? (1 for very uncomfortable to 5 for very comfortable).
- "HighestEducation" - Which is the highest level of formal education that you graduated?
- "ProgExperienceYears" - How long professional experience in programming do you have? (Answer in years and months. Ex.: 1Y3M or 0Y2M)

- "SoftwareDevExperienceYears" - How long professional experience in software development do you have? (Please include programming, testing, administration, management, projects, etc.)
- "JavaExperienceYears" - How long professional experience in programming in Java do you have?
- "LanguagesUsed" - Which programming languages did you use throughout your career?
- "ToolsUsed" - Which of those tools did you ever use?
- "ProfessionalRoles" - Which of those roles have you held throughout your professional career?
- "CurrentRole" - Which of those are your current roles?
  - "KnowsCodeReview" - Read this definition of code review: A code review is a process where someone, other than the author(s) of a piece of code, examines that code.
- "UsedCodeReviewTools" - Have you ever used any code review analysis tools?
- "CodeReviewExperience" - Please describe your earlier experience with code review analysis tools.
- "CodeReviewFrequency" - How long have you been conducting regular code reviews for your peers?
- "ComfortableReviewLanguages" - Code in which of those languages would you feel comfortable reviewing?
- "RecognizableSmells" - Which of the following code smells do you believe you can recognize?
- "CodeSmellsAffectMaintenance" - Do you feel that code smells in traditional sense make the code less maintainable?
- "SmellTransferability" - Do you feel that concept of code smell can be transferred between programming languages?
- "MainCodeComprehensionIssue" - What is the biggest problem you encounter in comprehending code written by you or other people?
- "QATechniquesUsed" - Which quality assurance techniques do you use in your daily work?
- "BeliefInReviewBenefit" - Do you believe that reviews contribute to code quality?

- "BiosensorResearchParticipation" - Have you ever participated in any research with biosensors? If yes, please describe.
- "FeelingDuringCodeAnalysis" - How did you feel during the analysis of all code snippets? (1 for very uncomfortable to 5 for very comfortable).
- "BiosensorsImpactOnSmellDetection" - Do you think the use of biosensors (smartwatch and eye tracker) affected your ability to analyze code snippets in search of code smells?
- "BiosensorsValueInSmellAnalysis" - Do you think the use of biosensors by developers can provide valuable data to understand the code smell analysis process?
- "OpenToBiosensorsForCoding" - Would you be open to using biosensors in your daily coding activities to better understand your performance and potentially improve your code quality?
- "BiosensorUsageImprovementSuggestions" - Do you have any suggestions to improve the use of biosensors in the context of code smell analysis?
- "KeyEyeTrackingFeatures" - What features do you think are most relevant when using eye tracking to assess code comprehensibility?