**The use of commenting tools in the open source development**

Background questions:

Question1 How many years have you been programming professionally? [Completion]

Question2 What roles have you ever played in the open source projects you have participated in? [Multiple Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Team leader | 52 | 65% |
| Maintainer | 61 | 76.25% |
| Long term contributor (have contribution regularly in the project for at least one year) | 67 | 83.75% |
| Occasional contributor | 45 | 56.25% |
| Others | 2 | 2.5% |
| Total | 80 |  |

Question3 Which is the programming language you primarily work with? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Java | 71 | 88.75% |
| C/C++ | 2 | 2.5% |
| Python | 1 | 1.25% |
| JavaScript | 3 | 3.75% |
| PHP | 0 | 0% |
| Others | 3 | 3.75% |
| Total | 80 |  |

**Scenario - Developers may use tools for code comments (e.g., comment-checking tools and comment-generating tools).**

Question4 Have you yourself used comment-checking tools or witnessed someone else use them, e.g., Javadoc and Checkstyle? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Yes | 65 | 81.25% |
| No | 15 | 18.75% |
| Total | 80 |  |

Question5 How often do you (or other developers in your projects) ignore warnings (or even errors) reported by comment-checking tools? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Never | 9 | 13.85% |
| Rarely | 13 | 20% |
| Sometimes | 21 | 32.31% |
| Often | 18 | 27.69% |
| Always | 4 | 6.15% |
| Total | 65 |  |

Question6 Why do you think developers ignore the warnings?(or even errors) [Multiple Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Developers believe most warnings are not critical | 40 | 71.43% |
| Developers tend to accumulate minor issues and fix them together | 15 | 26.79% |
| These kind of fixes would be left for the specific developer on the team | 3 | 5.36% |
| Others | 18 | 32.14% |
| Total | 56 |  |

Question7 Have you yourself used comment -generating tools or witnessed someone else use them? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Yes | 48 | 60% |
| No | 32 | 40% |
| Total | 80 |  |

Question8 How often do you (or other developers in your projects) update auto-generated comments? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Never | 3 | 6.25% |
| Rarely | 9 | 18.75% |
| Sometimes | 13 | 27.08% |
| Often | 16 | 33.33% |
| Always | 7 | 14.58% |
| Total | 48 |  |

Question9 Do you think current comment-generating tools generate good comments? [Single Choice]

|  |  |  |
| --- | --- | --- |
| Choices | Count | Ratio |
| Highly unlikely | 15 | 31.25% |
| Unlikely | 13 | 27.08% |
| Neutral | 13 | 27.08% |
| Likely | 7 | 14.58% |
| Highly likely | 0 | 0% |
| Total | 48 |  |

Question10 Are there any other practices of commenting tools that we missed but you would like to share? If there are, please describe. [Completion]