

RQ2 - Codebooks

(i) Categories of Reasons to Select the Issue	Category description	Examples of quotes
PERCEIVED EASE	Considering the issue was easy or simple to solve	<p>"I just thought it would be something related to UI and I could easily add those fields to the Default Layout by just adding those keywords in the list." (P2)</p> <p>"That issue looked the most easy issue." (P5)</p> <p>"After looking at the description it appears to update the deprecated tag with the new one and change the parsers where that particular tag is being used. That looks simple, so I chose it" (P8)</p>
SKILLS MATCHING	Considering the skills required to solve the issue matches with the participants skills	<p>"I found that I would be able to find the bug." (P3)</p> <p>"I have some knowledge about where could go wrong" (P14)</p> <p>"because I have dealt with these kinds of parameter issues in newer package versions before." (P7)</p>
MORAL	Feeling it is important that the issue be solved	<p>"I felt that fixing this issue would lead to better optimization if the build." (P12)</p> <p>"I chose this issue since it could lead to huge problems when not addressed on time" (P6)</p>
CURIOSITY	Feeling curious or intrigued to solve the issue	<p>"I find bugs interesting to solve and a search problem seemed more interesting too." (P16)</p> <p>"I want to fix this issue and excited to fix the bugs." (P13)</p>

(ii) Categories of Difficulties to Solve the Issue	Category description	Examples of quotes
DEBUG PROCESS	Identifying clear steps to reproduce or troubleshoot the issue was hard, making debugging a complex and time-consuming process.	"The issue dont give enough information to solve the problem" (P0) "There are no proper steps on how to reproduce the issue. that makes difficult to know about the application" (P3)
FINDING THE ISSUE IN CODE	Identifying the relevant file and pinpointing the issue within the code was challenging, making it difficult to determine	"It felt difficult to me to find the code related ot that issue" (P12) "My skill was not enough to find the bug." (P15)
ISSUE COMPLEXITY	The issue was inherently complex, requiring deep understanding, intricate problem-solving, or extensive modifications to resolve.	"Adding support for the autocite command was trivial, but properly implementing the second request (blockquote) would have required rearchitecting the main parsing function/regex." (P24)
LACK OF CLARITY	The issue had an amiguous, confusing or not clear description	"I mostly understood the issue but there did seem to be some ambiguity in what was presented. That being said there was a little lack of clarity;" (P25)

(iii) Categories of Suggestions on how to facilitate the solution	Category description	Examples of quotes
SPLIT THE ISSUE INTO LESS COMPLEX ISSUES	Break down the issue into smaller, manageable issues	"Split the issue into two parts, one with the trivial fix and one with the hard fix." (P25)

IMPROVE THE ISSUE DESCRIPTION	Clarify and detail the issue description, as providing clear steps, pictures, expected vs. actual behavior, or relevant logs.	"the issue should have more descriptions about the problem and identify which file the problem happened" (P0) "Pictures of how to reproduce could be good for someone that does not know the application" (P1) "If the file was given then it will be easy to fix the bugs." (P13)
ENHANCE THE CODE READABILITY	Refactoring code for better structure, adding meaningful comments, or following consistent naming conventions.	"If the comments for the function and variables are given in depth." (P3) "Comments for the existing code or documentation of the build would have made it easier for me." (P12)
AUTOMATE TESTING	Implementing or improving automated tests.	"A more automated way to run automated tests even more easily than in the IDE." (P19)