

ID	Category	# concurrent	# reflective	Total count
1	What the user is currently doing/about to do; intermediate goal; maybe will include approach for achieving it	73	1	74
2	Encountering an error/mistake or an edge case, something unexpected, and possibly making a fix	25	2	27
3	Planning, decision making, thinking	22	2	24
4	Speaking verbatim what they're currently typing, or the action they're performing	20	2	22
5	Limitations or unfinished work	5	13	18
6	References some documentation, or says they need to check documentation	4	14	18
7	Sharing opinions/facts about the content; tangents about content	6	11	17
8	Frustrations, difficulties, confusion; or indication something isn't working	16	0	16
9	Short utterances, talking to self	13	3	16
10	Process suggestions/opinions, or things to do just to be safe; tips	7	7	14
11	Talking about the tool, opinions about it	3	10	13
12	General discussion of creation process	1	12	13
13	Indicating that something is done now, or commenting on the output	12	0	12
14	Explanation for why they're doing something (for functional or stylistic reasons)	10	0	10
15	Says they'll get back to something later; may or may not do something temporary	10	0	10
16	Questions/comments related to study environment	9	0	9
17	Requirements/end-goals/intent for the artifact	6	3	9
18	Meta comments about think-aloud	2	7	9
19	Meta discussion about conveying a design, handing it off to others	8	0	8
20	Environment config, or basic software interactions	4	3	7
21	Commenting on the state of something (e.g., variable/input arg, model feature)	5	1	6
22	Sharing their opinion about the state of the artifact	5	1	6
23	Todo items or delegating	3	3	6
24	Testing/trying something out; checking the accuracy of something (e.g., by googling)	5	0	5
25	Explaining how some already written code works, or how some model was created, or some content on a slide, or in general something that's been done already	4	0	4
26	Intended audience, or what additional info/context is needed to understand the artifact	4	0	4
27	Realization	4	0	4
28	Uncertainty about content	4	0	4
29	Simplification/trick they're using, or something that's messy/probably not ideal	3	1	4
30	Discussing how they would share their artifact with others, collaborate with others	0	4	4
31	Talking about tool usage	3	0	3
32	Making a quick, maybe arbitrary decision	3	0	3
33	Skimming/reading the web for relevant content	3	0	3
34	Challenges, things that are tricky	2	1	3
35	Following/not following best practices	1	2	3
36	Info about tool/software or how to use it	1	2	3
37	Talking to software/computer, usually with some dissatisfaction	1	2	3
38	Reference to something external (e.g., library, part)	1	2	3
39	Motivation, background for making this artifact, or some part of it	2	0	2
40	Explanation of what a current action enables	2	0	2

ID	Category	# concurrent	# reflective	Total count
41	Design decisions (e.g., regarding implementation, modularity, placement of slide content)	2	0	2
42	What they would do differently in the future/with more time	0	2	2
43	High-level description of their process and thoughts; possibly including challenges/pitfalls they faced	0	2	2
44	High-level description	1	0	1
45	Doing some cleaning/refactoring of the artifact (e.g., the code)	1	0	1
46	Changing/deleting something existing (e.g., code) due to some change in needs or creator having better clarity	1	0	1
47	Trying to make the artifact (e.g., slides) more fun/interesting	1	0	1
48	Prediction about the outcome (e.g., of some code)	1	0	1
49	Checking their work	1	0	1
50	Retrying something	1	0	1
51	Talking about a change/refactoring that needs to be made (i.e., due to change in requirements)	1	0	1
52	Things to keep in mind, or that would need to be changed, for different environments, different configs, different materials, different parameters; or explaining that something was built to allow flexibility or satisfy some requirements wrt other parts/objects	1	0	1
53	Warnings	1	0	1
54	Saying what can be modified	1	0	1
55	Explanation of program input/output	0	1	1
56	Talking about the nature of the artifact/notes	0	1	1
57	Explaining decisions related to manufacturing intentions and needs	0	1	1