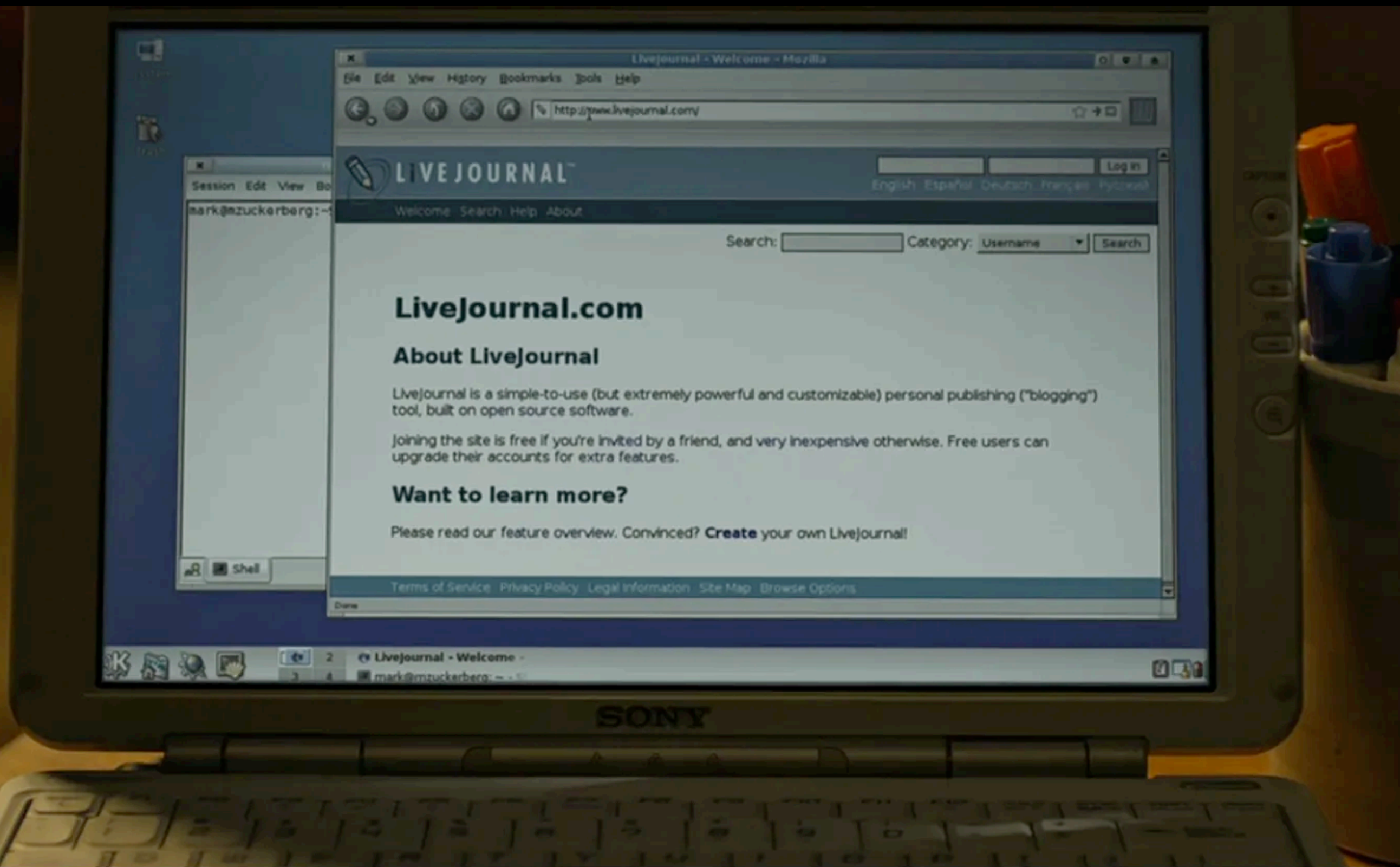


What could go wrong?



The Social Network, 2010





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Support Requests

Open Support Requests

Below are all support requests that are open (they just came in and haven't been touched yet) or answered (either awaiting to be closed by the person needing help, or the person requested they still need help). The [closed reports](#) are also available. If you help somebody out and they confirm you helped them, you get the number of points indicated in the status column. These points will show up on your userinfo page.

[1579 total open requests]

Show only Open ▼ requests of type: (All) ▼ [Filter](#)

ID#	Summary	Problem Area	Posted	Status
233388	Interest	General/Unknown	1 minute ago	open (1 point)
233386	Font on LJ	General/Unknown	2 minutes ago	open (1 point)
233383	about journal entirires	General/Unknown	35 minutes ago	open (1 point)
233381	Comment Count Displays Incorrectly; Always says "(1 comment)" only.	General/Unknown	46 minutes ago	open (1 point)
233379	i want my icon to be a picture i took on my digital camera	User Picture Icons	54 minutes ago	open (1 point)
233375	Calandar not showing up	General/Unknown	1 hour ago	open (1 point)
233372	live journals buttons/icons not loading	General/Unknown	1 hour ago	open (1 point)
233364	Journal entry layout	Style Systems	1 hour ago	open (1 point)
233356	How Do You Add a chatter box?	General/Unknown	1 hour ago	open (1 point)
233354	Crossposting on LJ and Xanga	General/Unknown	1 hour ago	open (1 point)
233346	want to delete an old journal	General/Unknown	2 hours ago	answered awaiting close (1 point)
233343	Adding counters	General/Unknown	2 hours ago	answered awaiting close (1 point)

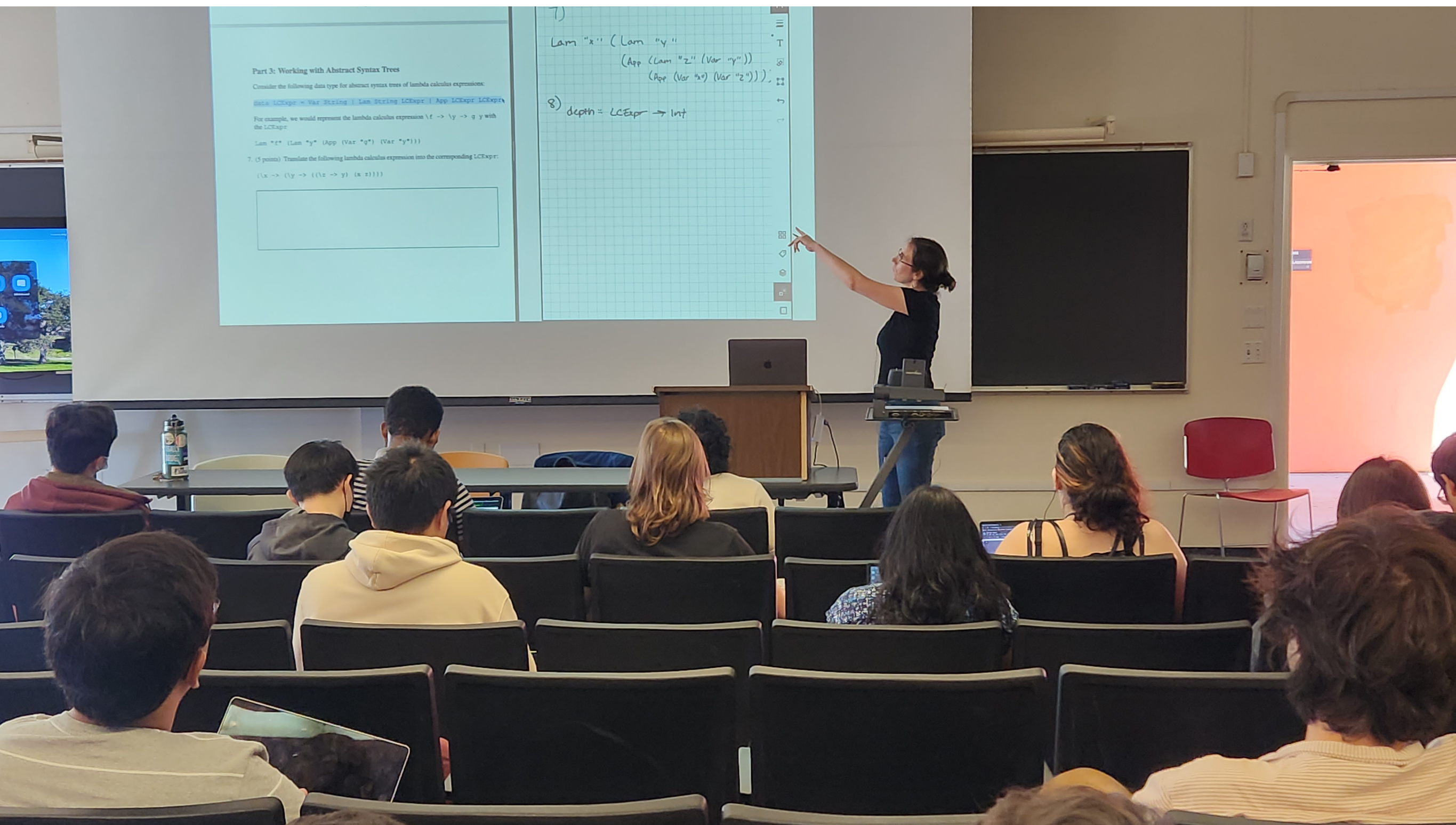
High Scores

The following people have helped other users in the support area:

Page 1 of 16

<< **[1]** [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] >>

1.	 rahaeli - i'm inland with st. russell sniffing airplane glue	28027 points
2.	 asciident - Melissa	18090 points
3.	 sherm - Mike Sherman	9508 points
4.	 jillw - Jillian	8152 points
5.	 erinn - i'm not ready yet.	7347 points
6.	 highway - Life is a Highway	7287 points
7.	 markf - I have a weird mix of skills	5903 points
8.	 opal1159 - Fairly Unbalanced	5902 points
9. (+2)	 kamara - ✖ // doot.	5807 points
10.	 xtremesaints - Ela	5733 points
11.	 coffeechica - Carrie -- gravity fails me	5621 points
12.	 emmavescence - (¯`·._._.-> Emma <-. _._.'¯)	5555 points
13. (-2)	 dakus - Dakus Lat	5272 points
14.	 rho - ρ	5132 points
15.	 arie - Arie	4642 points
16.	 thebubba - teh teh teh teh teh teh teh	3980 points
17.	 isabeau - to hell with that shadow of doubt	3943 points
18.	 malerin - Schtoltenheim Reinbach III	3806 points
19.	 gooner - Mister Sifter	3730 points
20.	 solcita - shines like silver	3648 points
21.	 jenett - Analogy Girl	3645 points
22.	 liliaceous - Lily - parallelepipeds rock!	3492 points
23.	 smileloki - Verdandi	3413 points
24.	 mullenkamp - 千仇の王子	3382 points
25.	 elfbabe - Marissa	3379 points
25.	 leora - Leora	3379 points
27.	 mark3 - Mark	3128 points
28.	 fweebles - Starin' down the barrel of a loaded Thnikkaman	3051 points
29.	 nyxie - lost in the law of averages	2988 points
30. (-1)	 bluemoonshark - blue	2951 points
31.	 acerbic - wrap her up in a package of <s>lies</s> tickyboxes	2943 points



Part 3: Working with Abstract Syntax Trees

Consider the following data type for abstract syntax trees of lambda calculus expressions:

```
data LExpr = Var String | Lam String LExpr | App LExpr LExpr
```

For example, we would represent the lambda calculus expression $\lambda x \rightarrow \lambda y \rightarrow q \ y$ with the LExpr:

```
Lam "x" (Lam "y" (App (Var "q") (Var "y")))
```

7. (5 points) Translate the following lambda calculus expression into the corresponding LExpr:

```
(\x -> (\y -> ((\z -> y) (x z))))
```

7)
 $\text{Lam "x" (Lam "y" (App (Lam "z" (Var "y")) (App (Var "x") (Var "z"))))}$

8) $\text{depth} = \text{LExpr} \rightarrow \text{Int}$

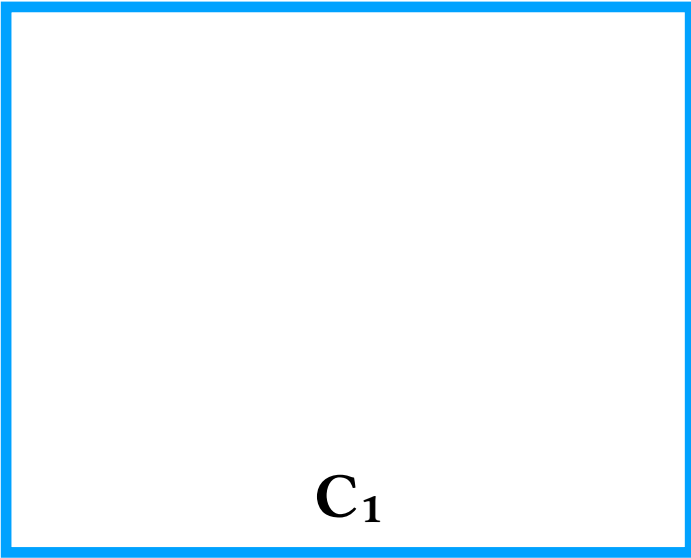
Leslie Lamport, the father of distributed systems



Leslie Lamport, the father of distributed systems



“A *distributed system* is a system in which the **failure** of a computer that you didn’t even know existed can render your own computer unusable.”





C_1

C_2



C_1



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C_2



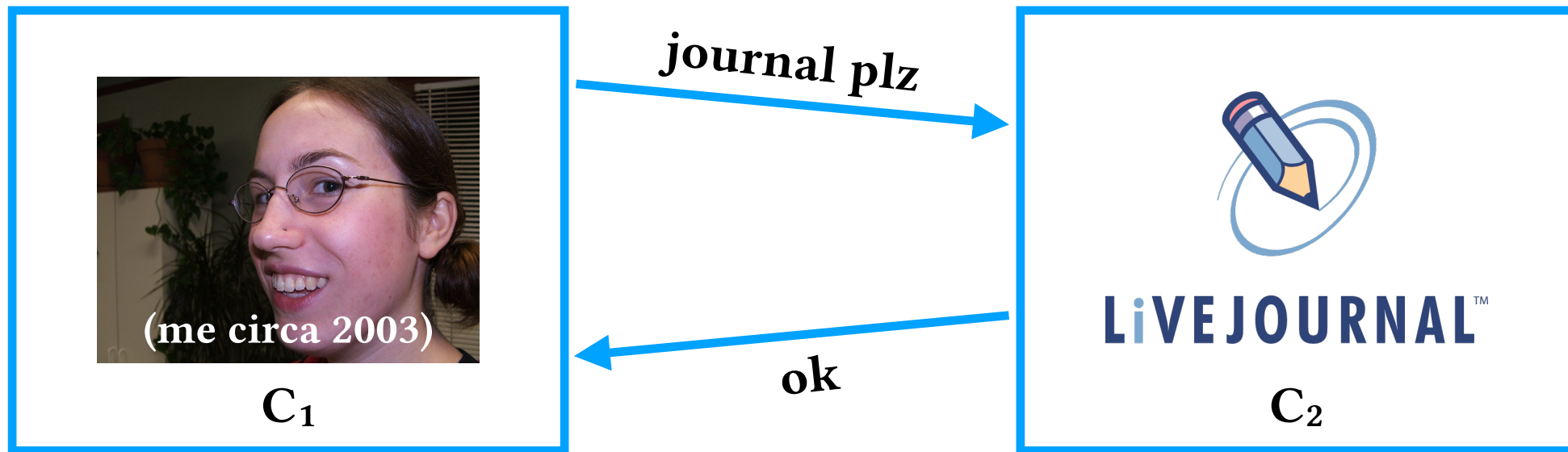
C_1

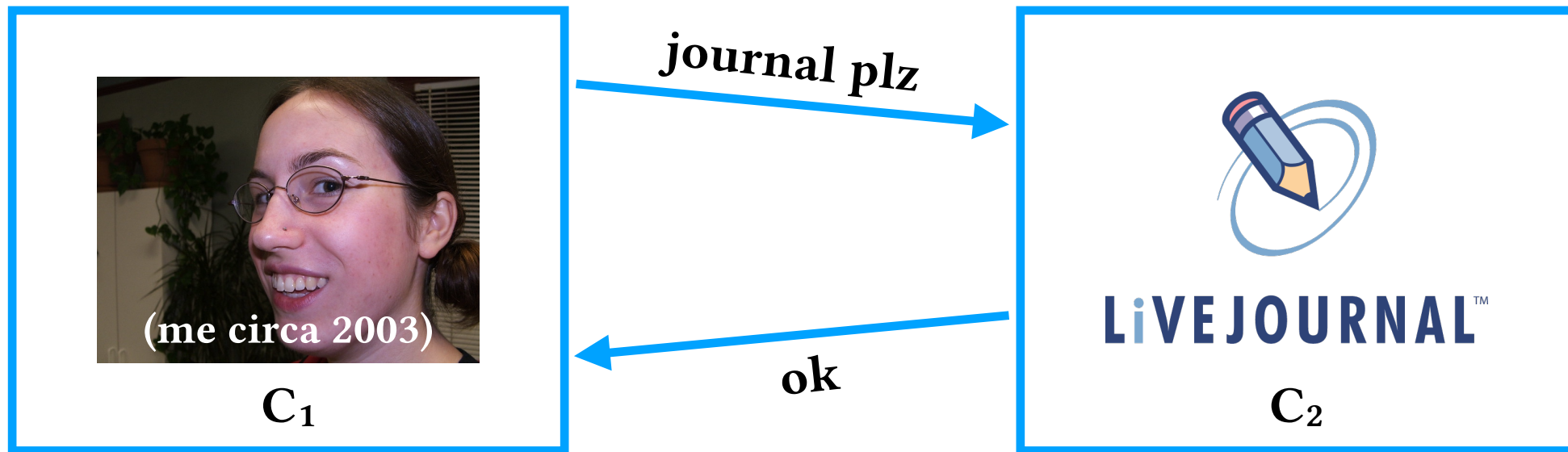
journal plz



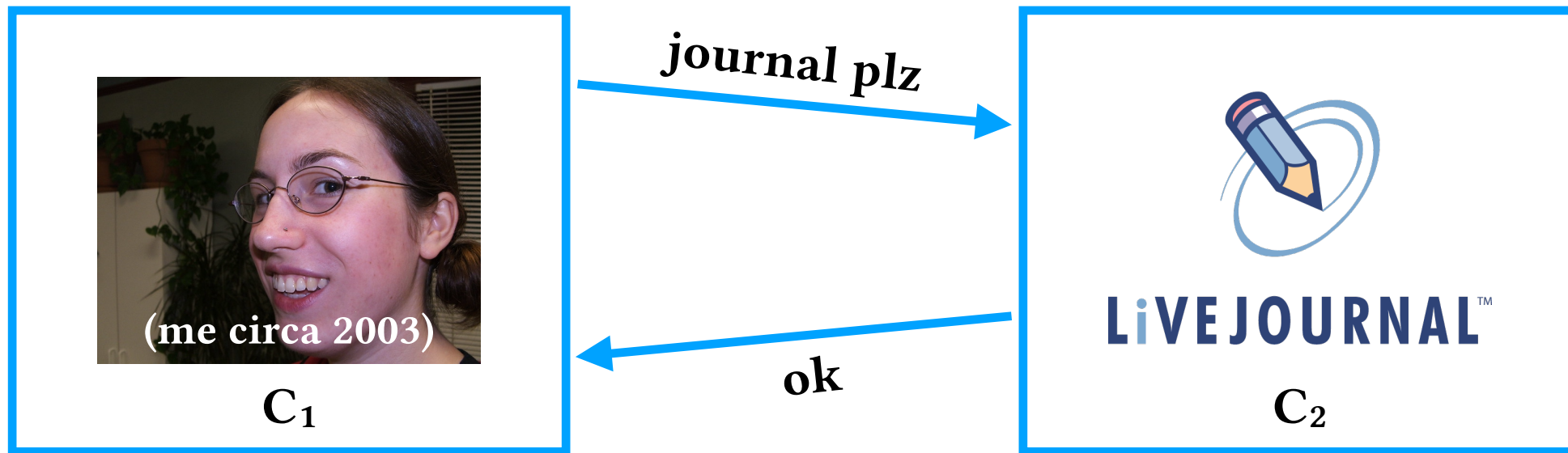
LiVEJOURNAL™

C_2



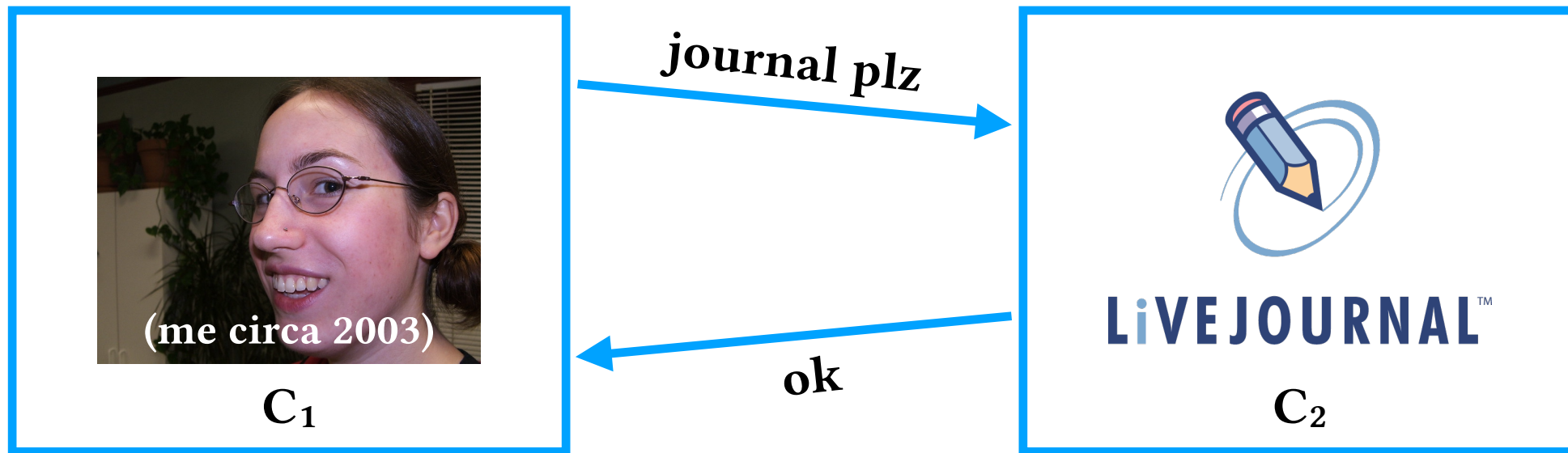


What could go wrong?



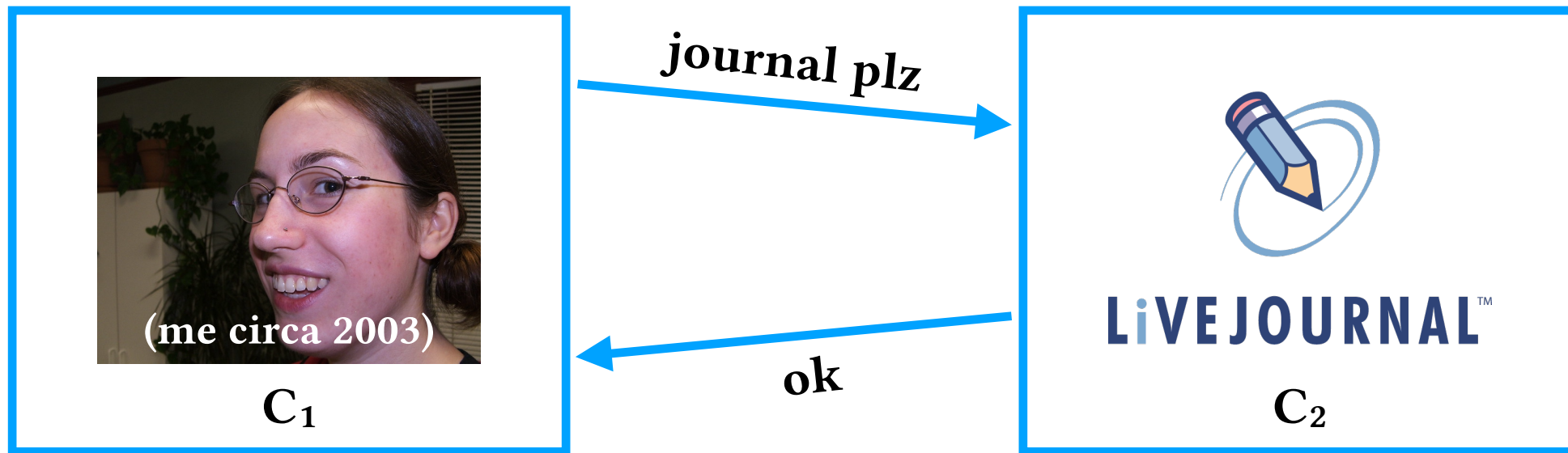
What could go wrong?

- Request from C_1 to C_2 could get lost



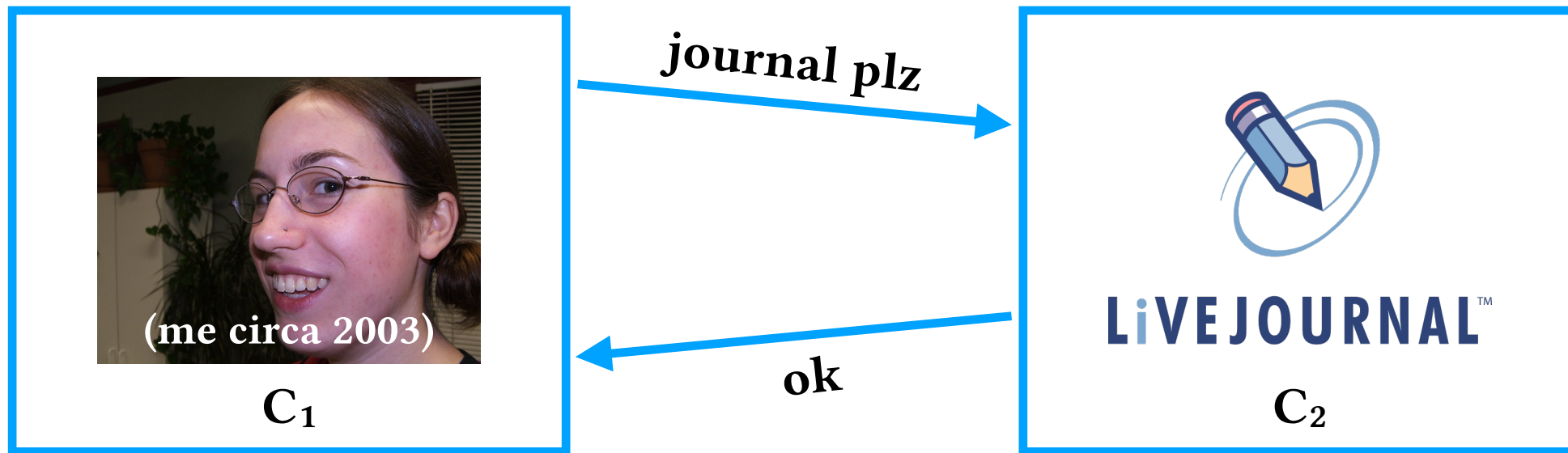
What could go wrong?

- Request from C_1 to C_2 could get lost
- Request from C_1 to C_2 could just be slow



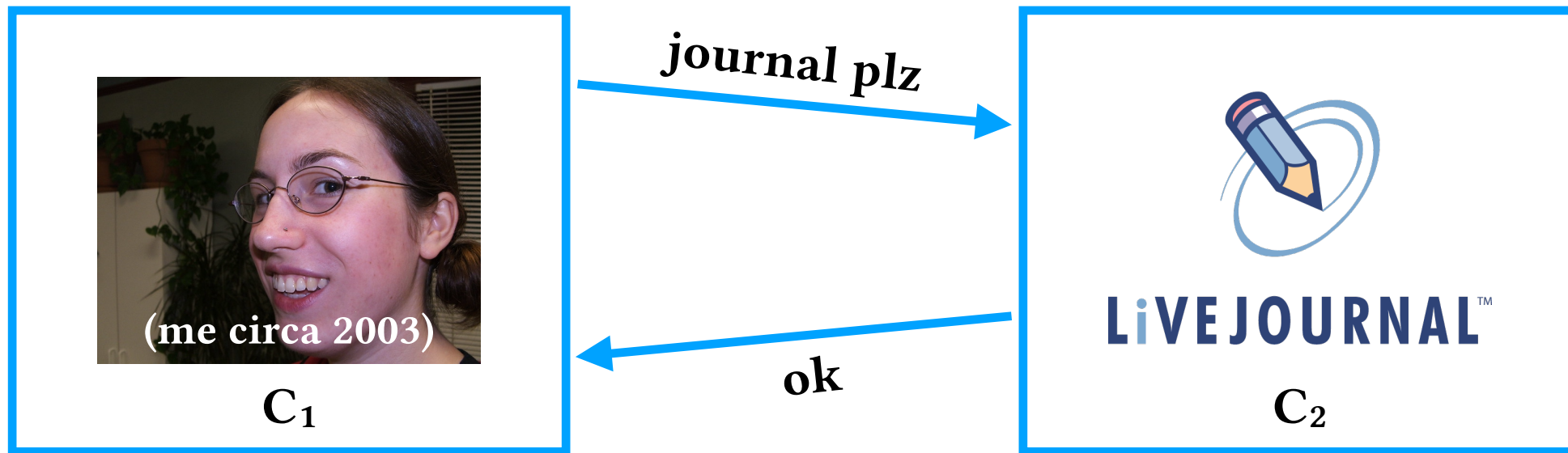
What could go wrong?

- Request from C_1 to C_2 could get lost
- Request from C_1 to C_2 could just be slow
- C_2 could crash



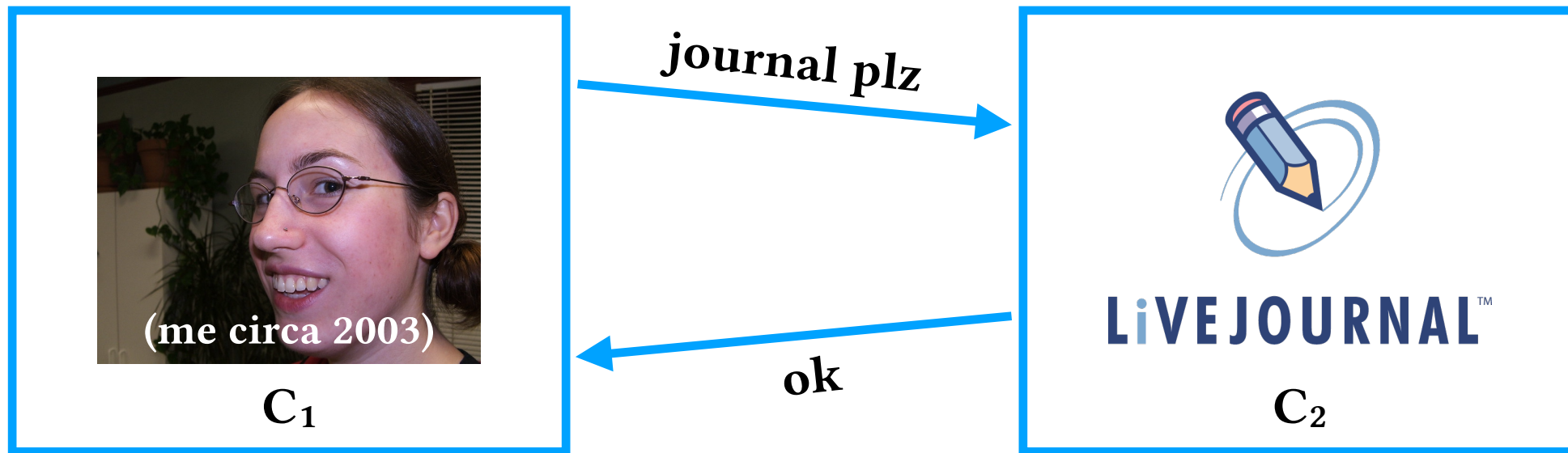
What could go wrong?

- Request from C_1 to C_2 could get lost
- Request from C_1 to C_2 could just be slow
- C_2 could crash
- C_2 could just be slow



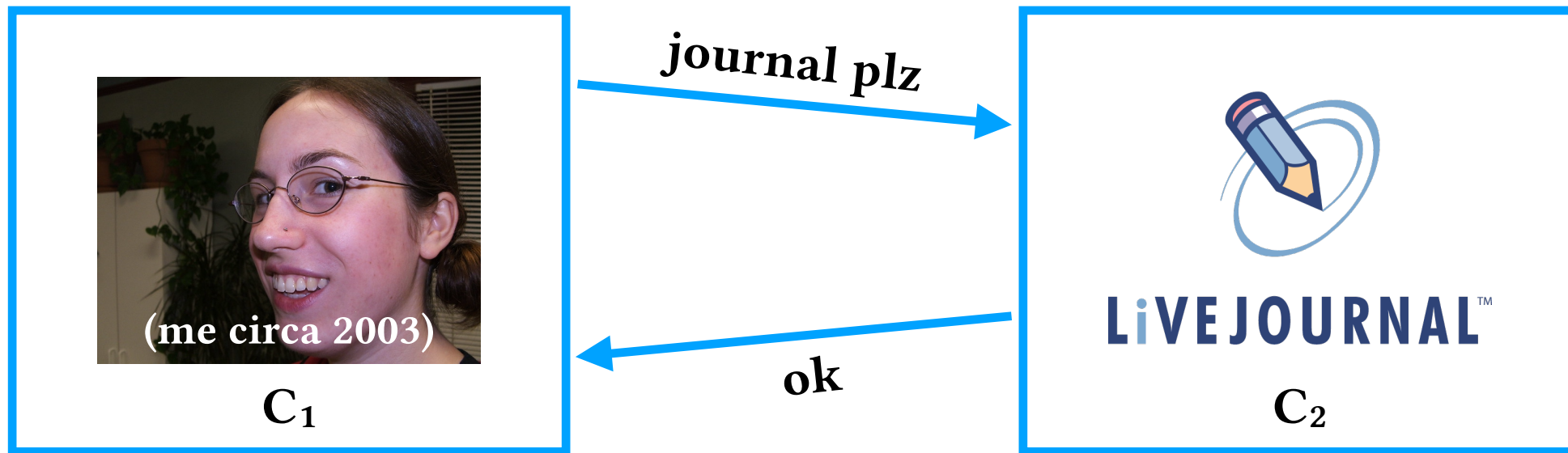
What could go wrong?

- Request from C₁ to C₂ could get lost
- Request from C₁ to C₂ could just be slow
- C₂ could crash
- C₂ could just be slow
- Response from C₂ to C₁ could get lost



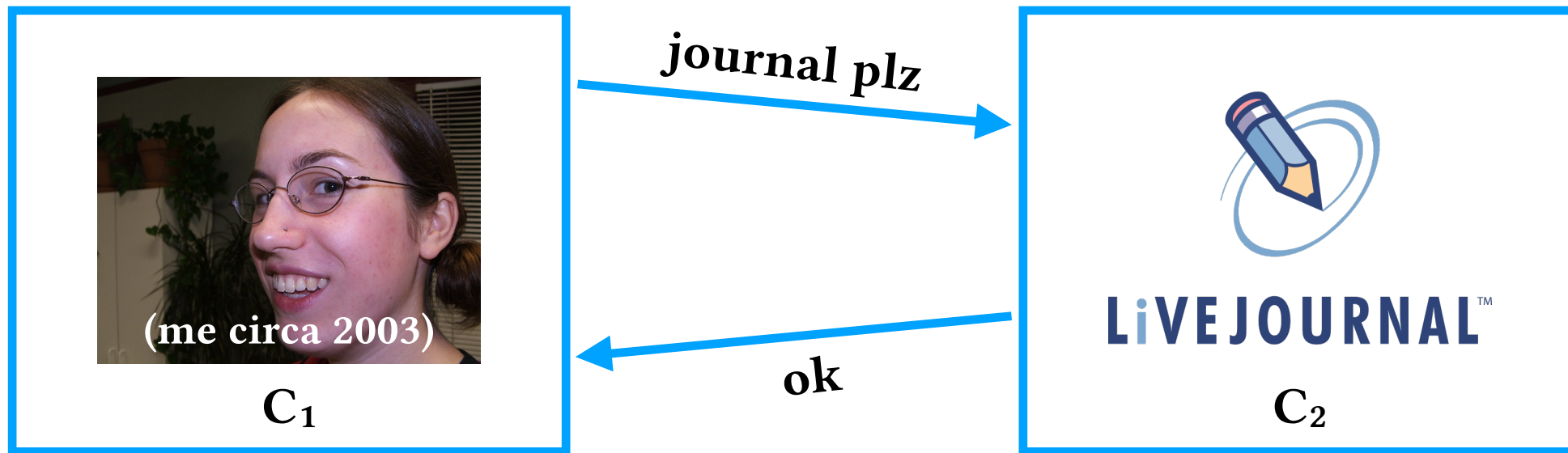
What could go wrong?

- Request from C₁ to C₂ could get lost
- Request from C₁ to C₂ could just be slow
- C₂ could crash
- C₂ could just be slow
- Response from C₂ to C₁ could get lost
- Response from C₂ to C₁ could just be slow



What could go wrong?

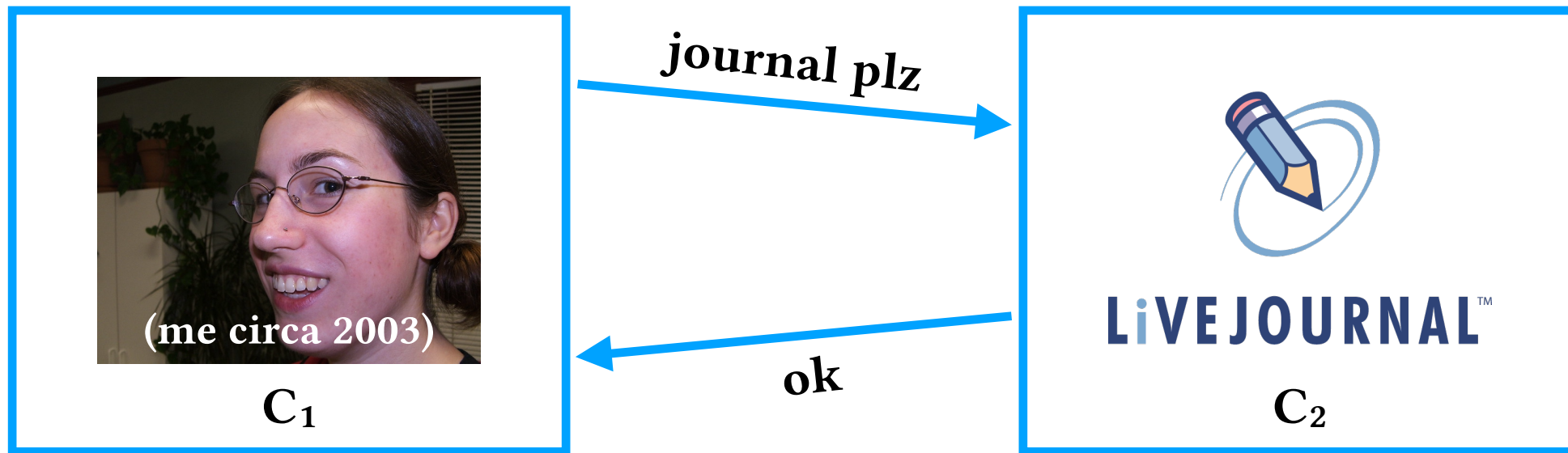
- Request from C_1 to C_2 could get lost
- Request from C_1 to C_2 could just be slow
- C_2 could crash
- C_2 could just be slow
- Response from C_2 to C_1 could get lost
- Response from C_2 to C_1 could just be slow



What could go wrong?

- Request from C₁ to C₂ could get lost
- Request from C₁ to C₂ could just be slow
- C₂ could crash
- C₂ could just be slow
- Response from C₂ to C₁ could get lost
- Response from C₂ to C₁ could just be slow

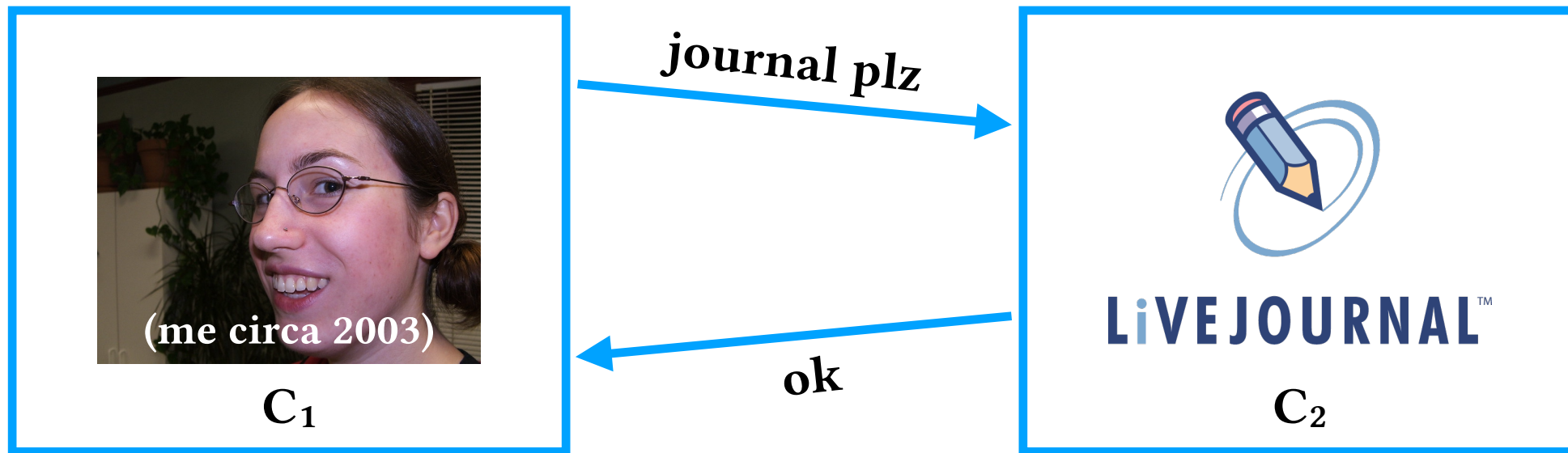
...not to mention that C₂ could *lie*,
or otherwise behave in an arbitrary or malicious way!



What could go wrong?

- Request from C₁ to C₂ could get lost
- Request from C₁ to C₂ could just be slow
- C₂ could crash
- C₂ could just be slow
- Response from C₂ to C₁ could get lost
- Response from C₂ to C₁ could just be slow

...not to mention that C₂ could *lie*,
or otherwise behave in an arbitrary or malicious way!
(**Byzantine** behavior)



A distributed system is:

a system made up of *independent* components

... that communicate by passing messages over a network

... and in which components or network connections may fail *independently*



C_1



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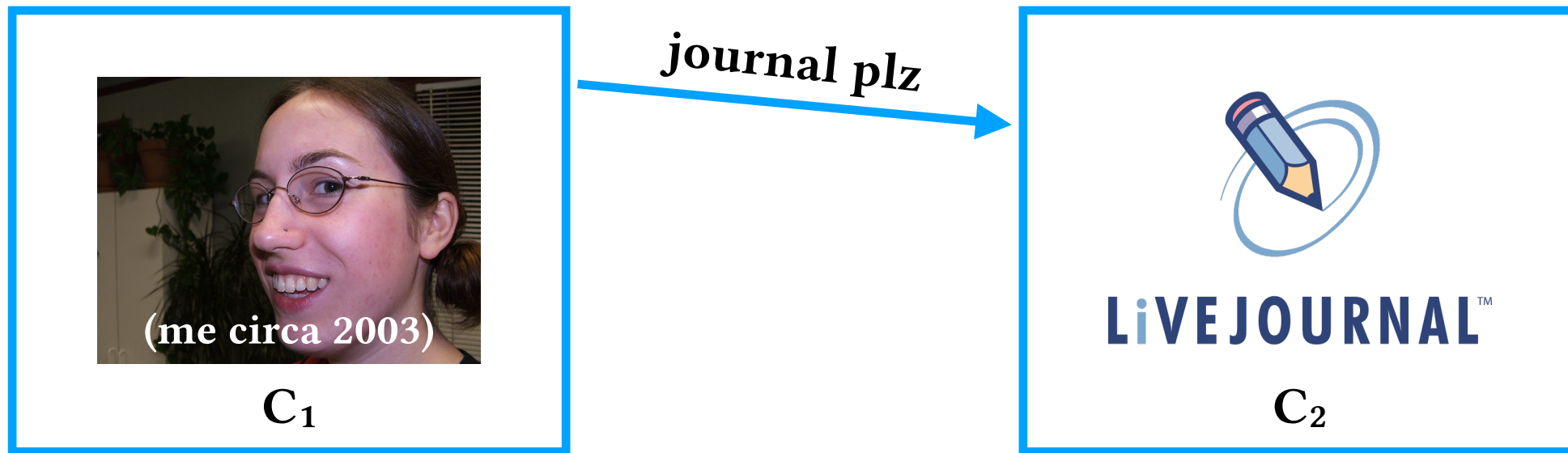
C_2

A distributed system is:

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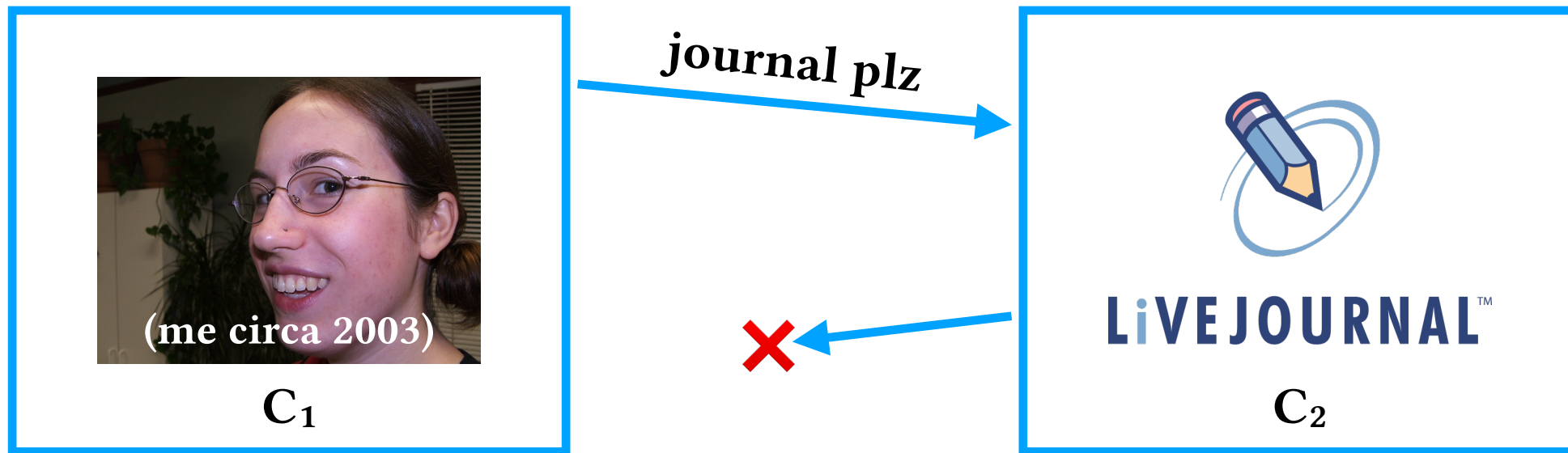


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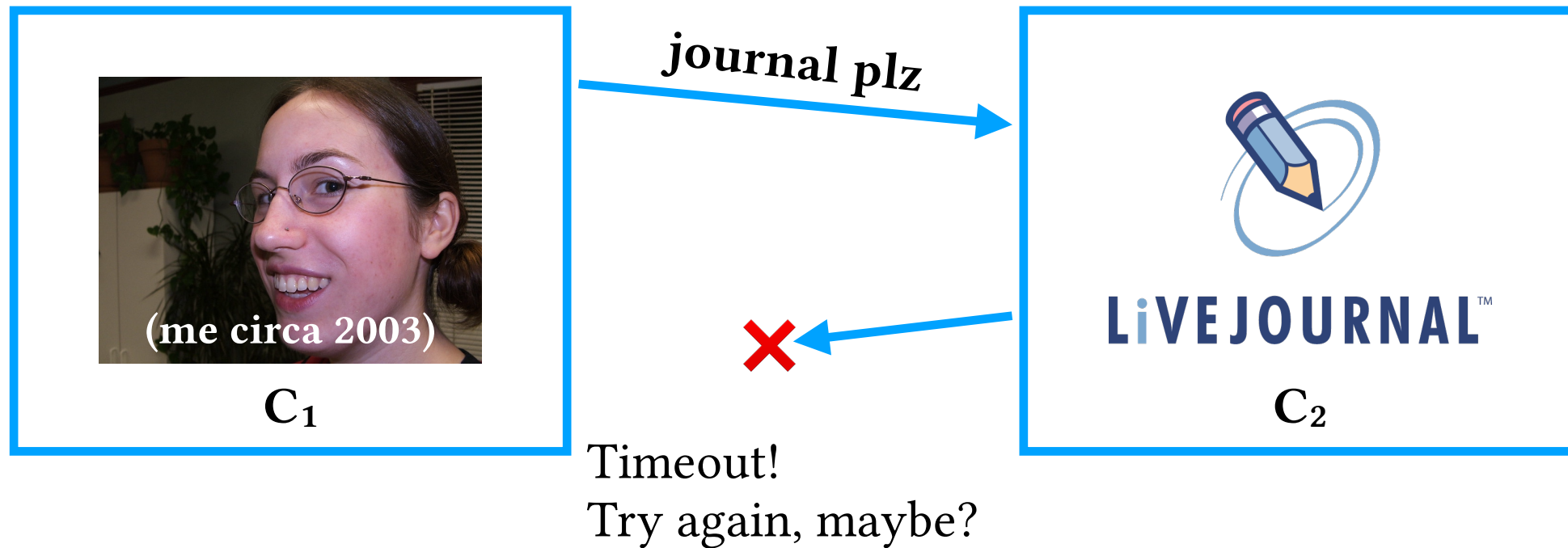


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C_1



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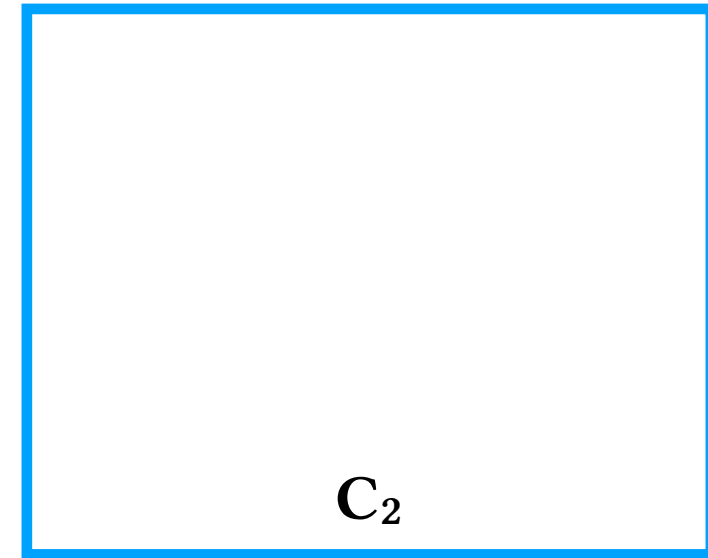
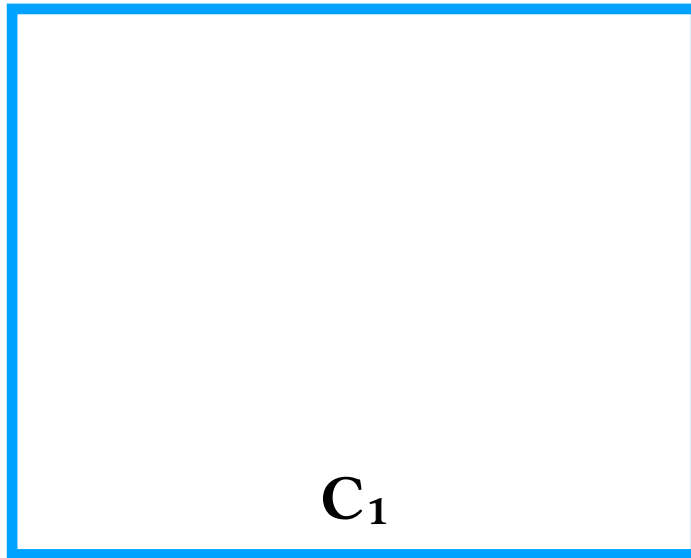
C_2

A distributed system is:

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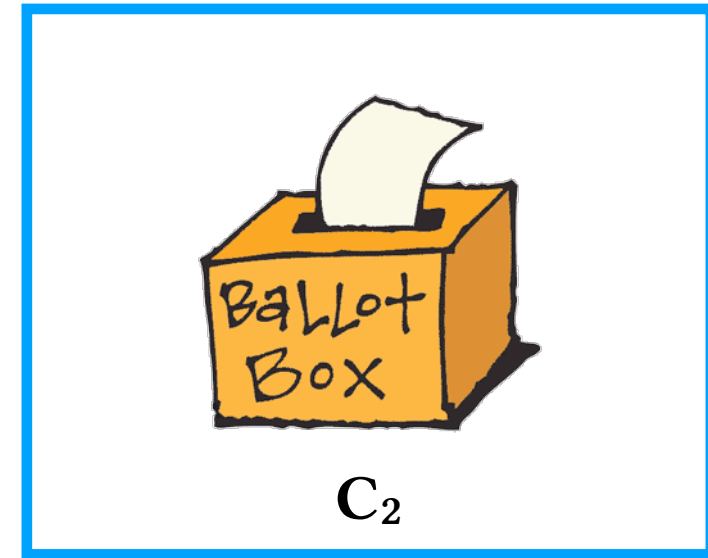
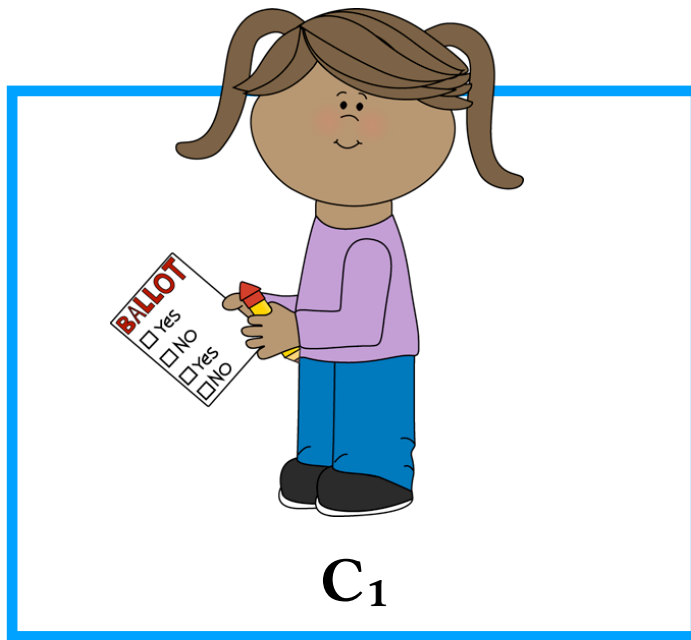


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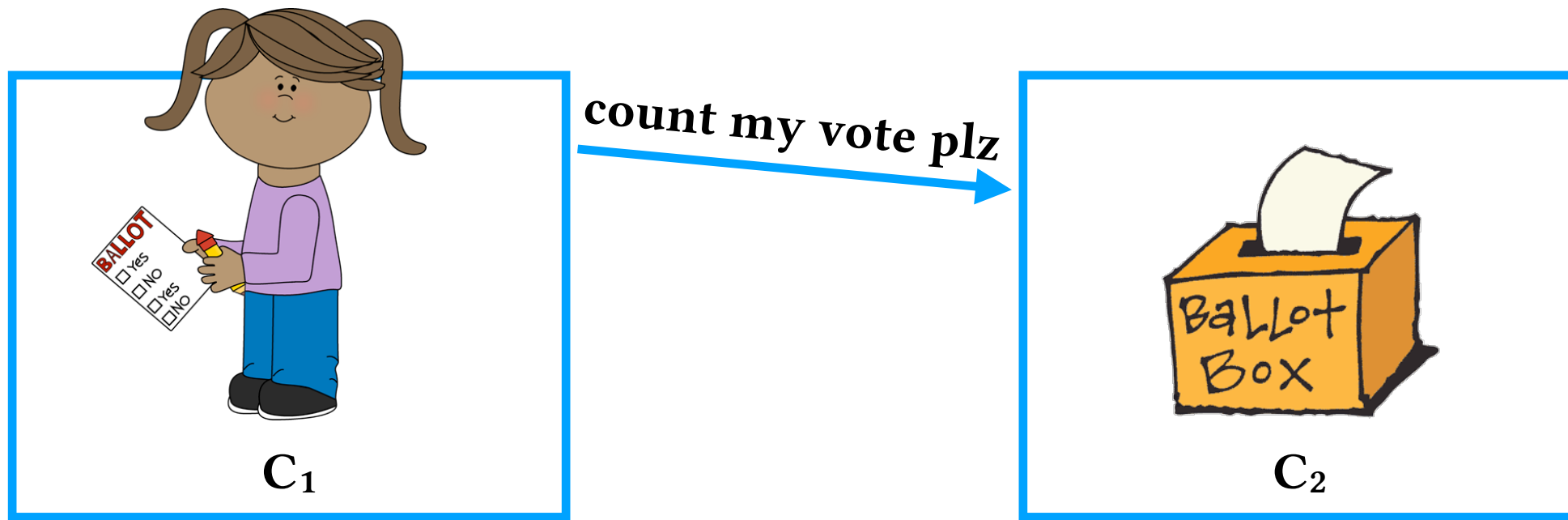


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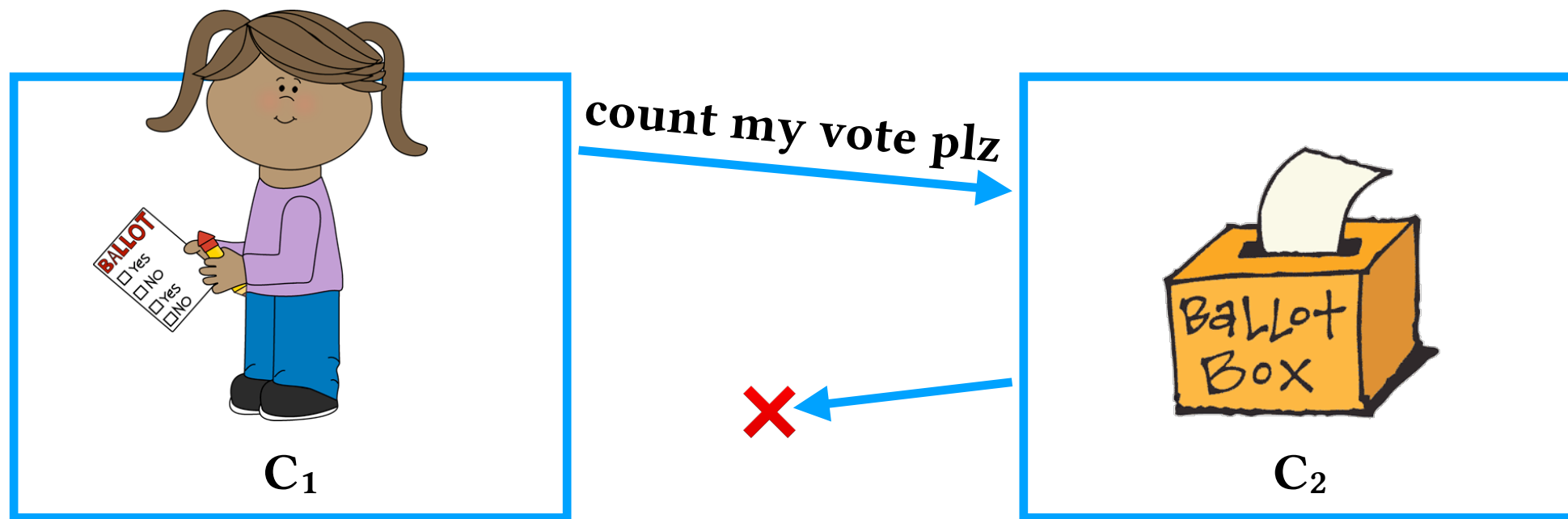


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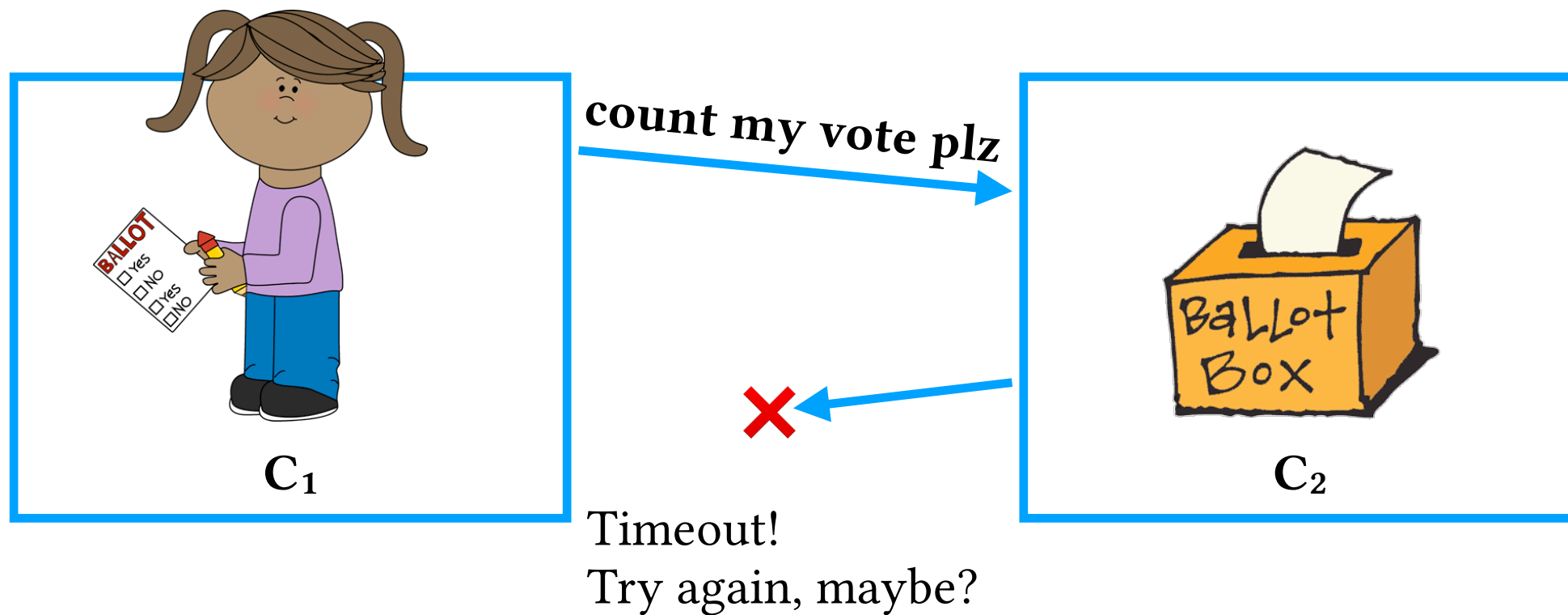


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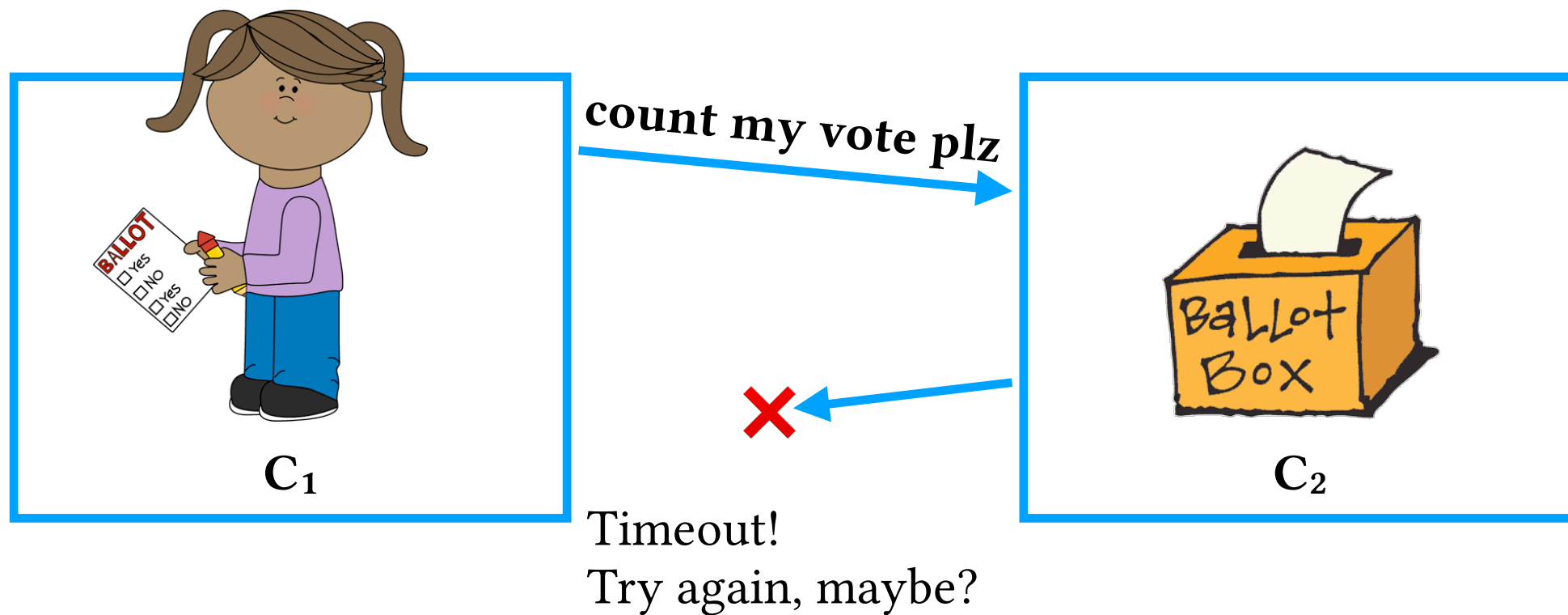


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What could go wrong?



Lindsey Kuper

@lindseykuperwithasharpie 4.22K subscribers 50 videos

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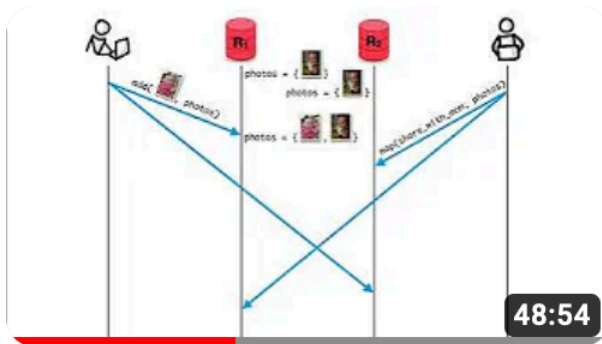
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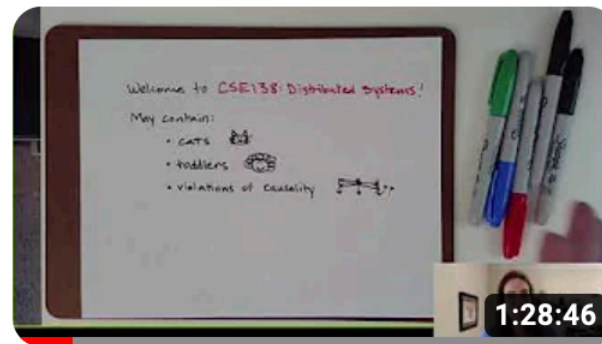
Oldest



48:54

Adventures in Building Reliable Distributed Systems with Liquid...

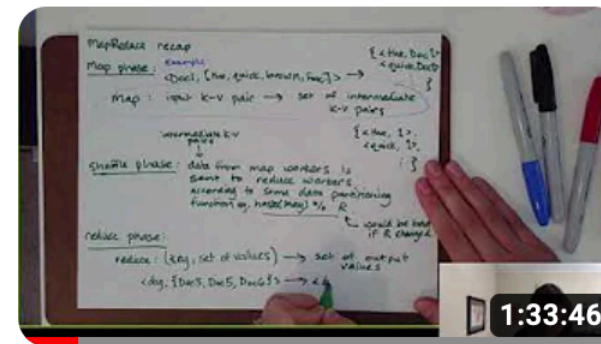
1.5K views • 1 year ago



1:28:46

CSE138 (Distributed Systems) L18: ask me anything

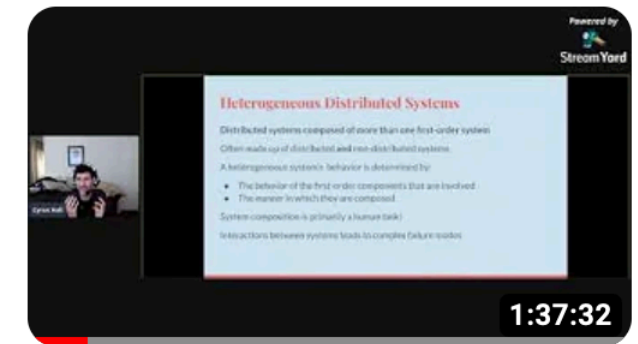
1.1K views • 2 years ago



1:33:46

CSE138 (Distributed Systems) L17: MapReduce wrap-up; the math...

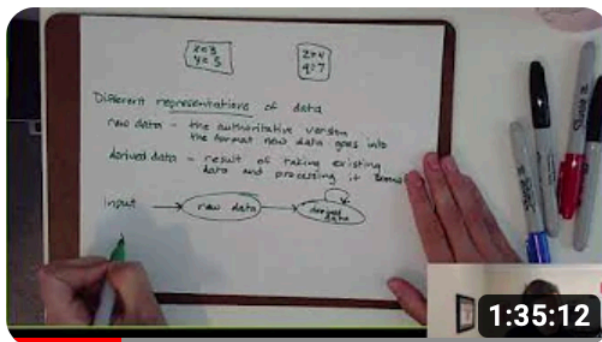
1K views • 2 years ago



1:37:32

CSE138 (Distributed Systems) guest lecture from Cyrus Hall:...

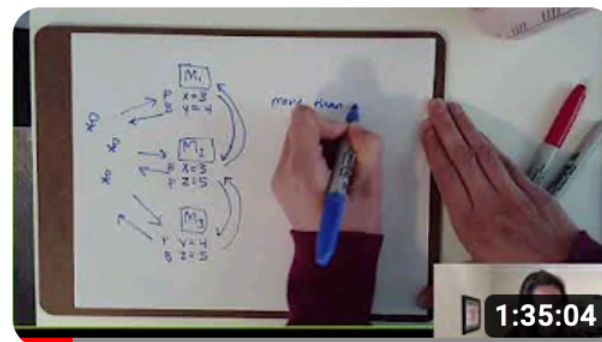
1.1K views • 2 years ago



1:35:12

CSE138 (Distributed Systems) L16: MapReduce

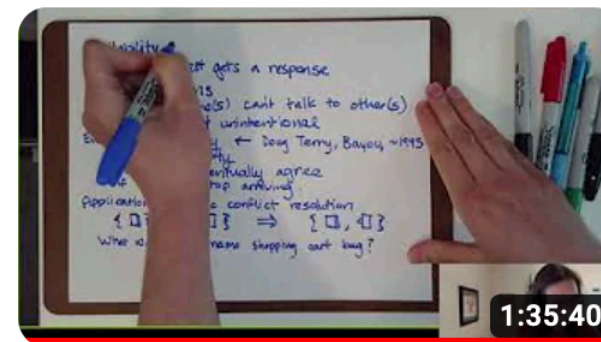
1.6K views • 2 years ago



1:35:04

CSE138 (Distributed Systems) L15: introduction to sharding; consistency...

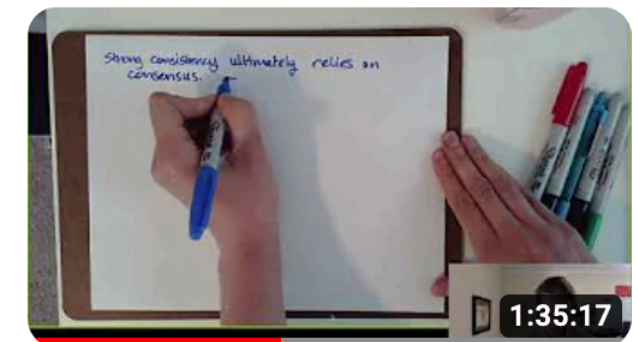
2.3K views • 2 years ago



1:35:40

CSE138 (Distributed Systems) L14: Dynamo: Merkle trees, quorum...

2.2K views • 2 years ago



1:35:17

CSE138 (Distributed Systems) L13: eventual consistency, availability,...

1.7K views • 2 years ago