L'emporal properties of social networks

<u>Team 18</u>

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Data

• Edge data from three social networks, connections between users

	Facebook	YouTube	Flickr
$\# ext{ edges}$	817.037	9.375.374	33.140.017
# vertices	63.731	3.223.589	2.302.925
Size	15,5 MB	257,1 MB	901,5 MB

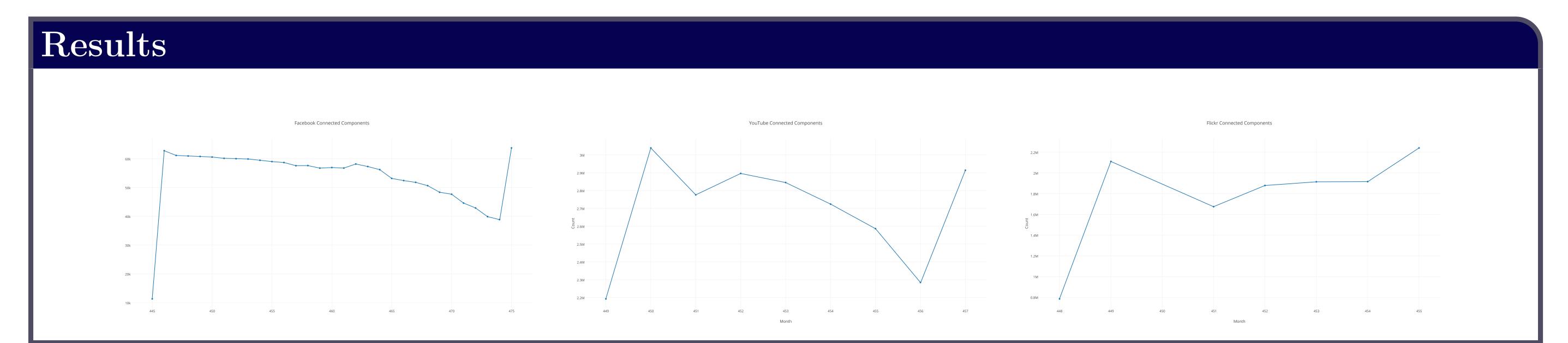
Programming setup

- Apache Flink
- Graph processing API and library: Gelly

Objectives

Temporal aspects

- How long does it take for a new user to achieve a certain number of connections?
- Degrees of separation, in how many steps can you go from one user to any other? How does this evolve over time?
- How "connected" is each of the graphs? How many connected components are there, and how does this change over time?



Conclusions

- Conclusion 1
- Conclusion 2
- Conclusion 3