# Reachability graph

This graph is based on Petri Net that our team member Alex drew. Reachability refers to the ability to get from one [vertex](https://en.wikipedia.org/wiki/Vertex_(graph_theory)) to another within a graph. It shows the sequence of the process. First, i develop the theoretical framework around temporal reachability graphs. Second, i harness our theoretical findings to propose an algorithm for their efficient computation. Finally, i demonstrate the analytic power of the temporal reachability graph concept by applying it to synthetic and real-life datasets. On top of defining clear upper bounds on communication capabilities, reachability graphs highlight asymmetric communication opportunities and offloading potential.

* 1. Clients reachability graph

Fill in request form

Submit request form

Check service information

Login/register

P4

Cancel request/ wait respond

Check website content

Browse homepage

end

P7

P6

P4+p5

P3

P2

P1

start

* 1. Volunteer reachability graph

Assign request

Respond to user

Check request list

Login/register

P6

Provide user’s detail information

Cancel assignation

Check homepage

end

P8

P7

P5+p6

P4

P3

P2

P1

start