



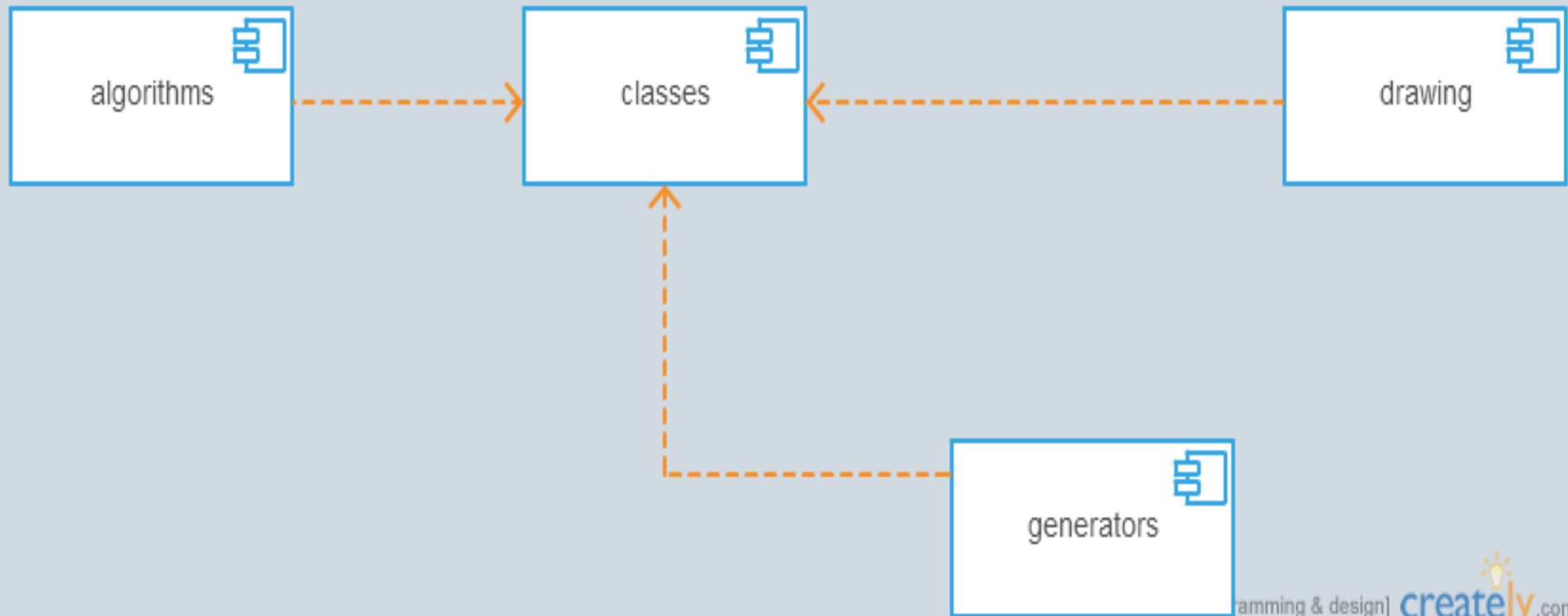
Advanced Topics In Software Engineering

NetworkX

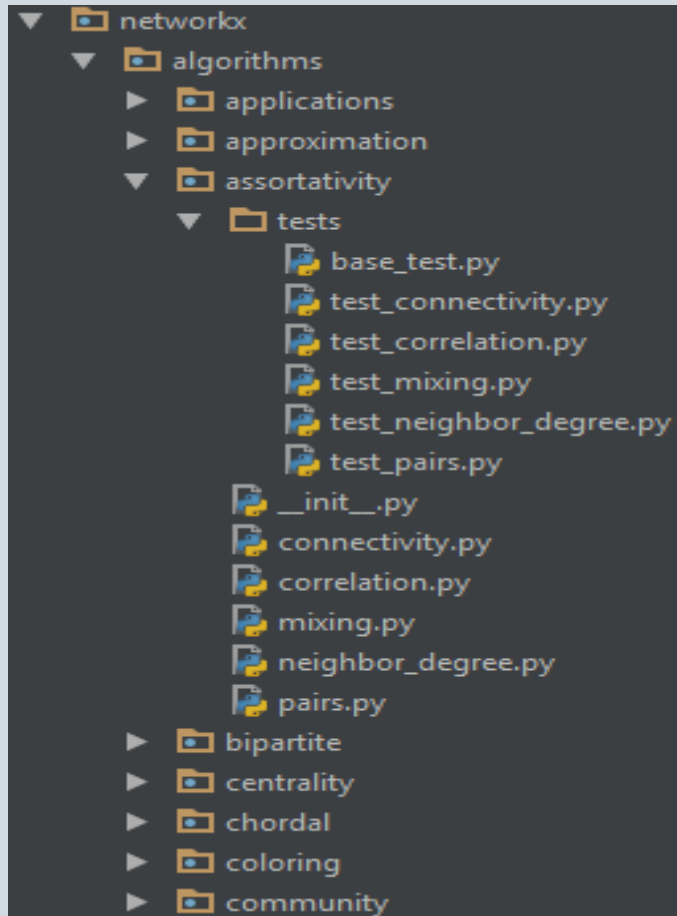
IMPLEMENTATION TEAM: OVERRIDERS

- KONSTANTINOS KARAKATSANIS
- THODORIS SOTIROPOULOS

NetworkX Anatomy (I)



NetworkX Anatomy (II)



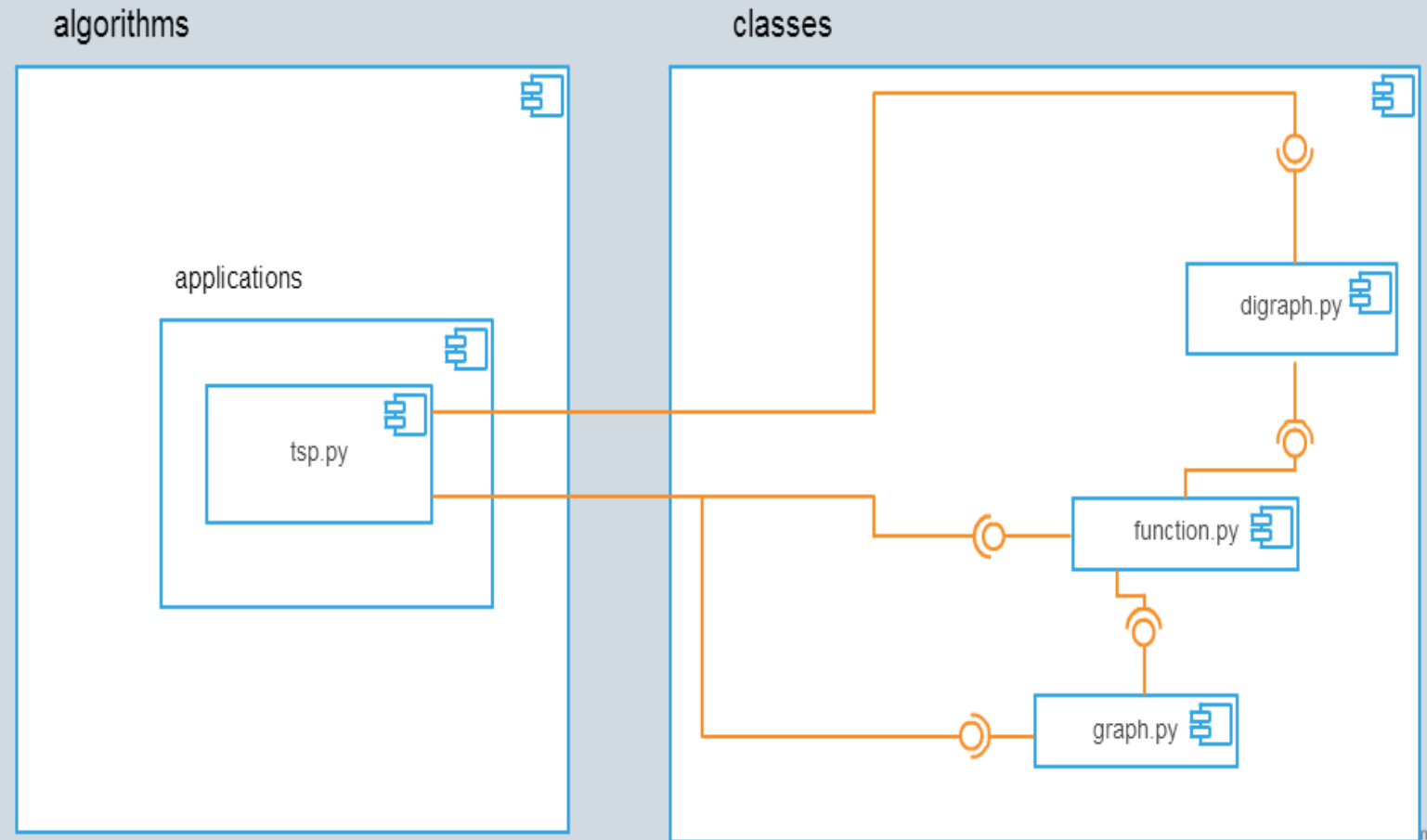
Combinatorial Optimization Problems (I)

TSP → NP-Hard

- Greedy
- Simulated Annealing
- Threshold Accepting
- Tabu Search
- Ant Colony Optimization



Combinatorial Optimization Problems (II)

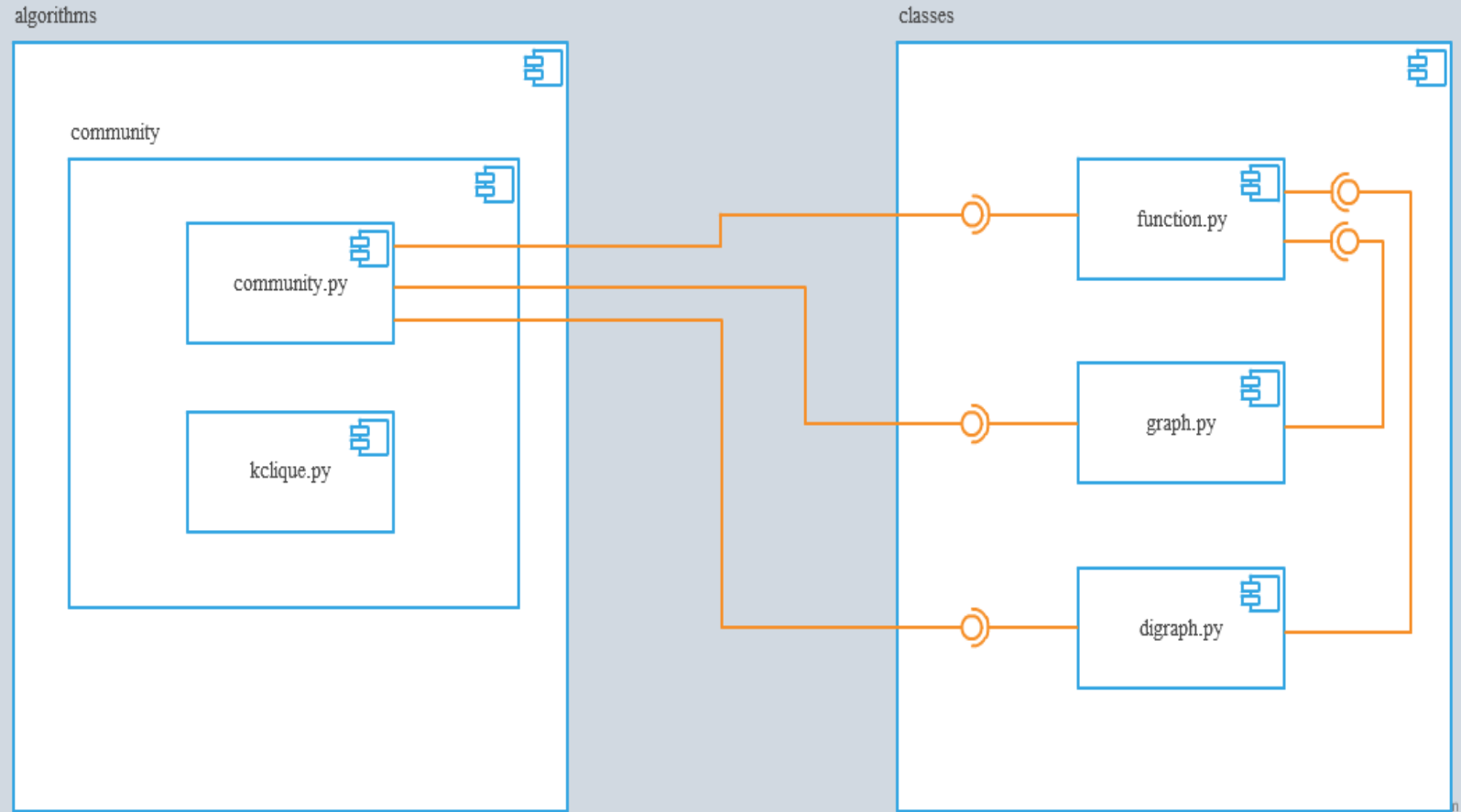


Community Detection (I)

- Girvan – Newman
- Louvain
- InfoMAP

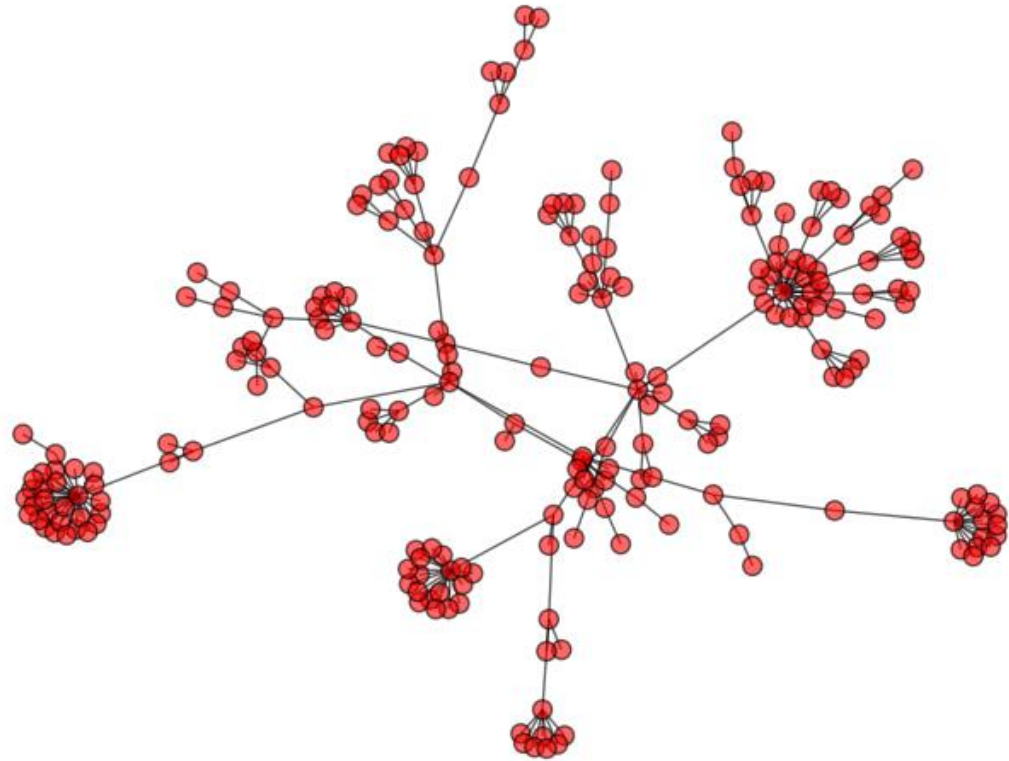


Community Detection (II)

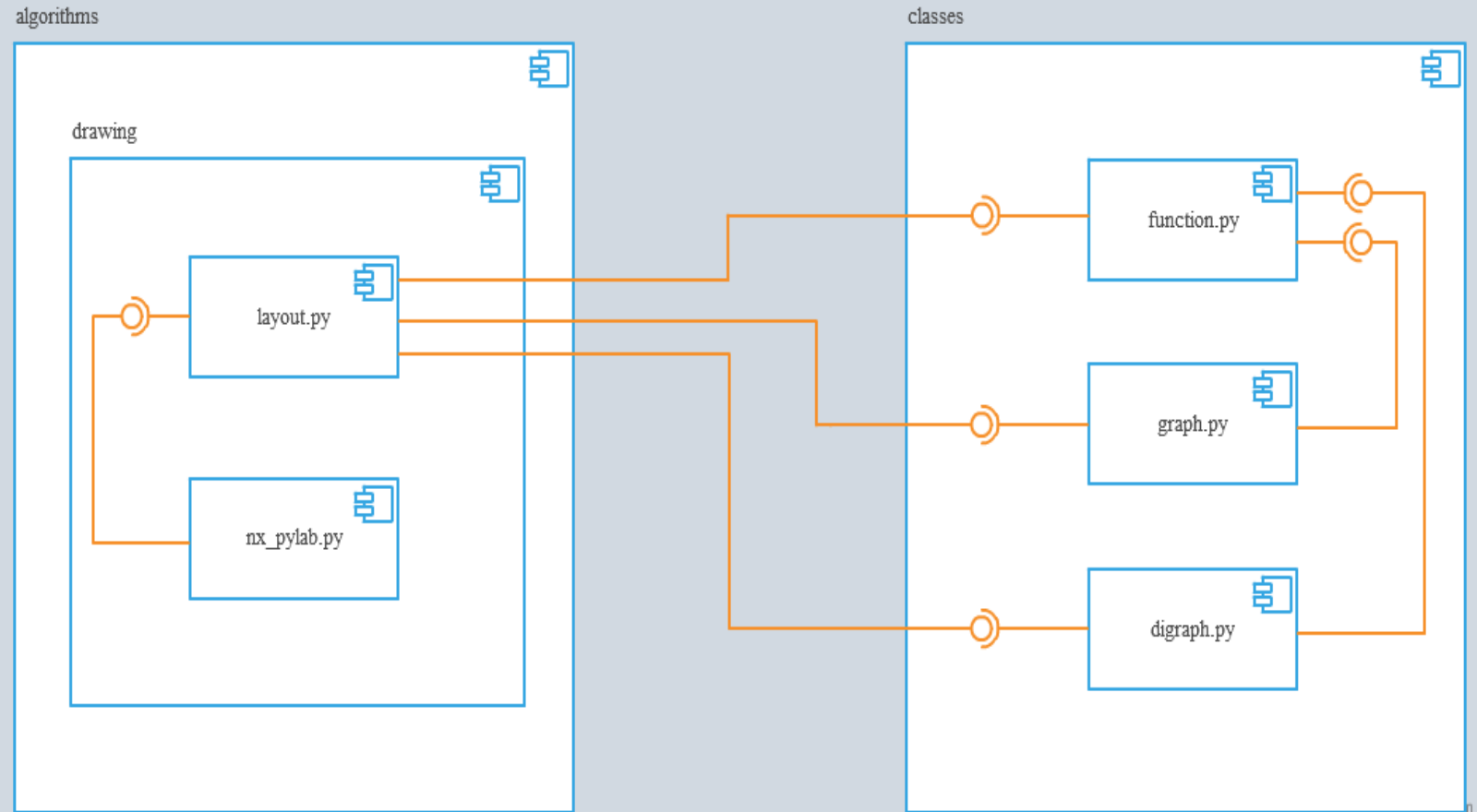


Force Directed Drawing (I)

- Kamada – Kawai
- Harel – Koren
- Tutte



Force Directed Drawing (II)



So far...(I)

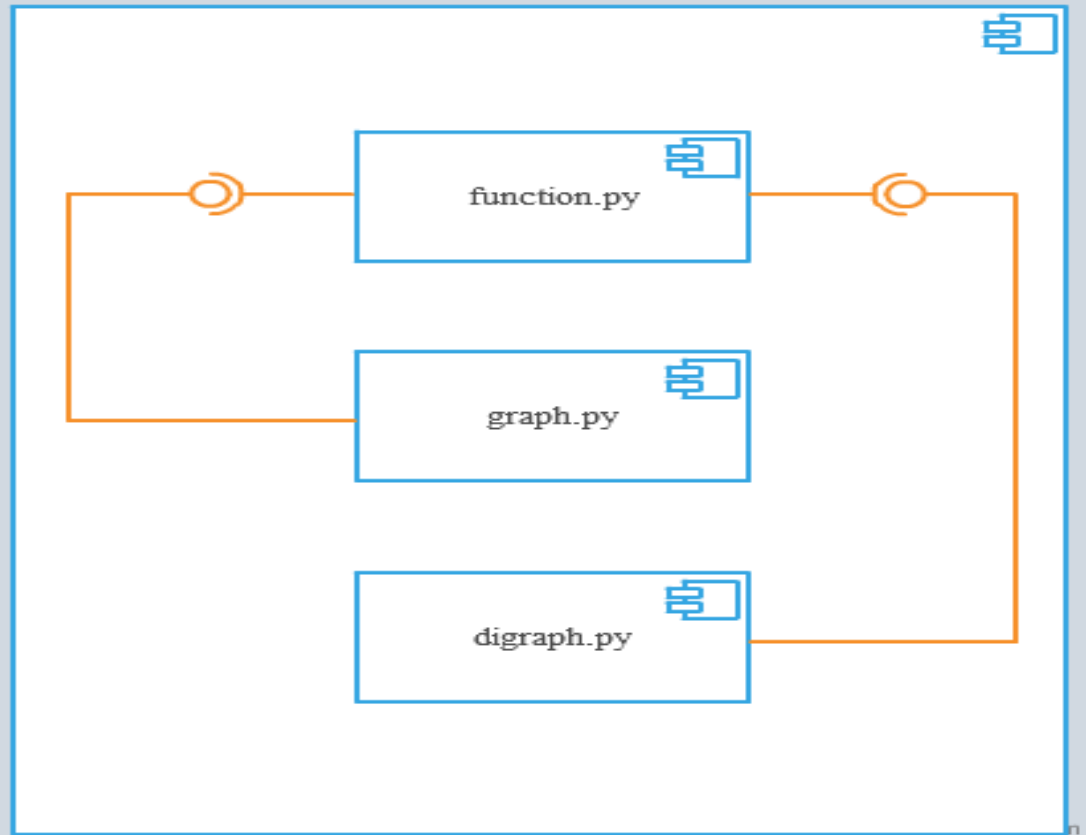
Checking weights

- Functions to test if a graph is weighted or negatively weighted.

Additions

- `is_weighted()`
- `is_negatively_weighted()`
- tests

classes



So far...(II)

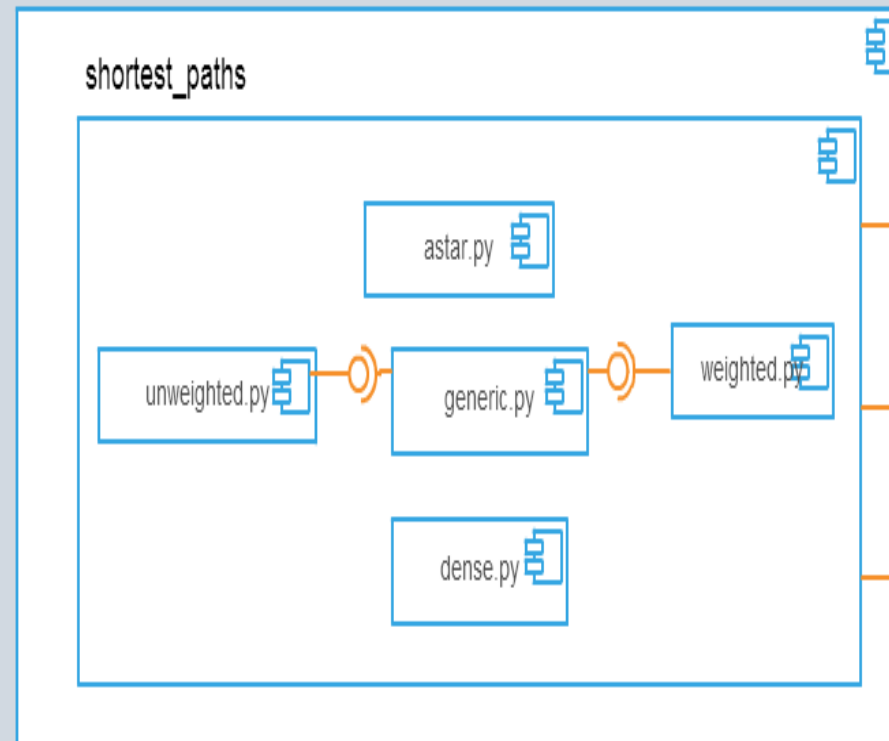
Johnson's Algorithm

- One more algorithm for shortest paths
- Solves all pairs shortest path problem

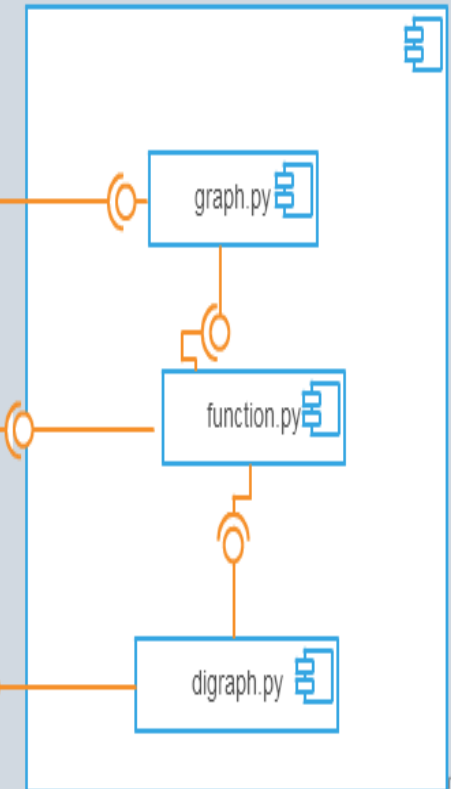
Additions:

- johnson()
- tests

algorithms



classes



Pull Requests

Open: 1

Closed: 1

