2020-05-20 [SD725994](SD725994)

Data

Rough sketch of project.

Assignment is to report the following:

- Node degree distribution.
- Number of components.
- Component size distribution.

Classes + methods:

- A file reader
- Tree
  - Build tree
  - Calculate node distribution
  - Calculate number of components
  - Calculate component size distribution
- (Node)
  - Attributes: neighbors

Problem list:

- Store nodes as `int`.
  - Use map?

Change log:

Added classes + methods:

- FileReader
  - allocateVertex
  - readFromFile
- Node
- Test
- Tree

Each vertex will be stored as an `Integer` using `HashMap`.

2020-05-23 SD728280

Data

Today's plan:

- Implement Graph class
  - ‹ Reuse old code from previous lab
- Plan Node class

Problems:

- Make old code dynamic instead of it having a set size
  - ‹ Use ArrayList of LinkedLists?

Change Log:

- Made function dynamic
- Removed decision of Node-class

Export date:2020-06-01 Exported by: Adriel Alander

2020-05-25 [SD735002](#)

Data

Problems:

- ArrayList does not support random access
  - Change to LinkedList and manually resize

Change Log:

- Changed ArrayList to LinkedList
- Added a resizer of LinkedLised
- Added a temporary main method in FileReader

2020-05-28 [SD740388](SD740388)

Data

Change Log:

- Added degreeDistribution
- Added vertexCount
- Added componentCount
    - uses: findFirstFalse and markComponent

Export date:2020-06-01 Exported by: Adriel Alander

2020-05-30 [SD740465](#)

Data

Problems:

- Heap space (manually set to 6 GB) is currently not enough.

Change Log:

- Switched to BufferedReader instead of Scanner

Export date:2020-06-01 Exported by: Adriel Alander

2020-05-31 [SD740878](#)

Data

Problem List:

- Unable to run code due to insufficient memory capacity
  - ○ Solution: Convert data to a file with only edge and node information where each vertex is represented by an Integer.

Change Log:

- Added `transformFile` which extracts the edge and vertex information.
- Fixed `componentDistribution` (formerly known as `componentCount`) so that it also yields information about the size of each component.

Export date:2020-06-01 Exported by: Adriel Alander

2020-06-01 SD741748

Data

Change Log:

- Added Python script that generates a histogram of the degree distribution.

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