Mindmap of DIS Project - Distributed network localization
Group 1

- **DIS Project**
  - **Problem description**
    - Aim: localizing sensor nodes without GPS nor external references
    - Data: noisy distances between neighbor nodes
    - Complexity: NP-Hard
    - Constraints
      - Energy
        - Low CPU power
        - Restrain communication => local view
      - Noise on measurements
  - **What do we want to do?**
    - Implement "Robust Distributed Network Localization..." (base version, without phase 2)
    - Should work because
      - Only require informations from neighbors
      - Should be resistant to noise (uses robust quadrilaterals)
      - Algorithm idea is relatively simple, and has a polynomial complexity, so it should be possible to implement on real devices
    - Experiment with different set of parameters
    - Try to implement an optimization (e.g. spring relaxation)
  - **Work distribution**
    - 1) Code sprint all team members together for base implementation
    - 2) Divide in 3
      - 1) Spring relaxation
      - 2) Writing explicit test cases (bad cases)
      - 3) Exploring parameter space