Seminar on Software Engineering

Software Metrics and Measurement
It is not easy to measure software
How Big is a Software System?
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- Count lines of code
  - How about empty lines? comment lines?
- Or count statements
  - Multiple statements per line / continuation across lines
- Only code files?
  - There are also header files, and they can have code
  - And what about documentation? (dynamic) linked libraries?
- Just use the size of the distribution in MB
- Actually maybe interested in functionality, not physical size
  - e.g. IBM's function points
Even Harder:

- Project complexity
  - Or just code complexity
  - e.g. MCC
- Team productivity
  - Or just programmer productivity
  - e.g. function points / hour
- Code quality
  - Reliability / stability
  - Performance
  - bug-freedom
Gilb's Law

Anything you need to quantify can be measured in some way that is superior to not measuring it at all
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- Not necessarily easy
- Not necessarily accurate
- But better than nothing
How would you measure progress of your project?