Class 3: Introduction to Representational Forms of Data

From Static to Dynamic – many stages

1. Fixed – permanent notation, e.g. black line master

2. Erasable

3. Annotatable

4. Multiple Integrated Static Representations, e.g. Excel

5. Parametric Variation, e.g. Sliders -> discrete actions via mouse click

6. Continuous Variation via mouse push, e.g. interactive environments
Fathom Terminology

CASE
Fundamental unit of data, represented as a gold ball

COLLECTION
Holder of cases – delete this and all data gone, cf. graphs
Representations vs. Data

ATTRIBUTE
Cases have attributes, e.g. gender, favorite game

VALUE
Attributes have values

CATEGORICAL (or NOMINAL)
Words not numbers
CONTINUOUS (or NUMERIC/MEASUREMENT)
e.g. height

MEASURE
Belongs to the whole collection
e.g. mean

ATTRIBUTE FORMULA
Computer values on Values, e.g. ration of height to weight

DERIVED COLLECTION
Samples from collections