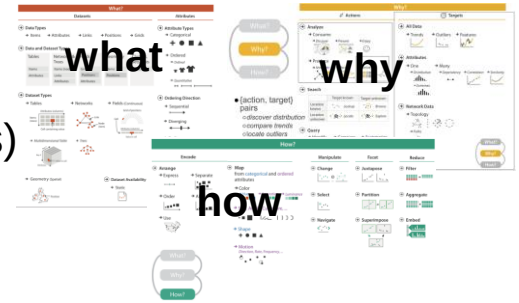
Mini-project / exam hand-in details

- Use a publicly available well documented data set e.g.
  - Covid-SSI or
  - Airline Safety, US Weather History, Study Drugs, Zika Virus, Firearm background checks , Political advertisements on Facebook, Hate crime news, Voting machine age, Workplace fatalities by US state, White House staff 2010 salaries
- On Overleaf use IEEE template
  Bare Advanced Demo of IEEEtran.cls forIEEE Computer Society Journals

the individual exam paper needs to address



- Explain the data set -
  What: what data are you showing (data (set) types, attributes)
- **why** is the task being performed (action/target combos)
- **how** is the vis idiom constructed in terms of design choices (encode, manipulate, facet, reduce)
- An explanation of the interaction design including the controls to illustrate at least each interaction design concept once (signifier, affordance, system state, feedback, feedforward)
- Discussion of the design (strengths/weaknesses) with at least two other visual designs explored and visually documented in the report
- The interaction needs to include at least two plots that are linked
- A description of the evaluation of the design with at least one participant explaining to what degree they were able to use the interface and answer the questions you set out to answer.
- A section discussing ethical concerns of the chosen visualization and interactions

See here for our class brainstorm/walk-through of these requirements

what, why, how example

What?

- Tree

Why?

- Actions
  - Present
  - Locate
  - Identify



- Targets
  - Path between two nodes

How?

- SpaceTree
  - Encode
  - Navigate
  - Select
  - Filter
  - Aggregate

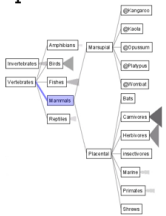




- TreeJuxtaposer
  - Encode
  - Navigate
  - Select
  - Arrange

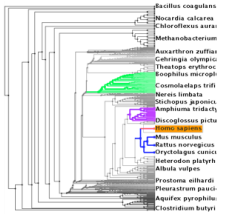



SpaceTree



[SpaceTree: Supporting Exploration in Large Node Link Tree, Design Evolution and Empirical Evaluation. Grosjean, Plaisant, and Bederson. Proc. InfoVis 2002, p 57–64.]

TreeJuxtaposer



[TreeJuxtaposer: Scalable Tree Comparison Using Focus+Context With Guaranteed Visibility. ACM Trans. on Graphics (Proc. SIGGRAPH) 22:453– 462, 2003.]

structure of exam hand-in

- title
- abstract (optional)
- introduction (why is this important)
- description of desired outcome
- explanation of design
- report on evaluation
- discussion of ethical concerns
- references