Game Based UI for Health Modeling

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Problem space & Project description

- Cold chain is key to success of vaccination programs. Vaccines a major focus of world health efforts.
- CCEM database used to model today – not intuitive or user-friendly
- HCD challenge: abstract the data into easily understandable and manipulable visualization
- Users: National-level health officials, public-health NGOs
- Solution will help national health ministries' logistics and planning staff
- Solution makes modeling more visual, easy to understand

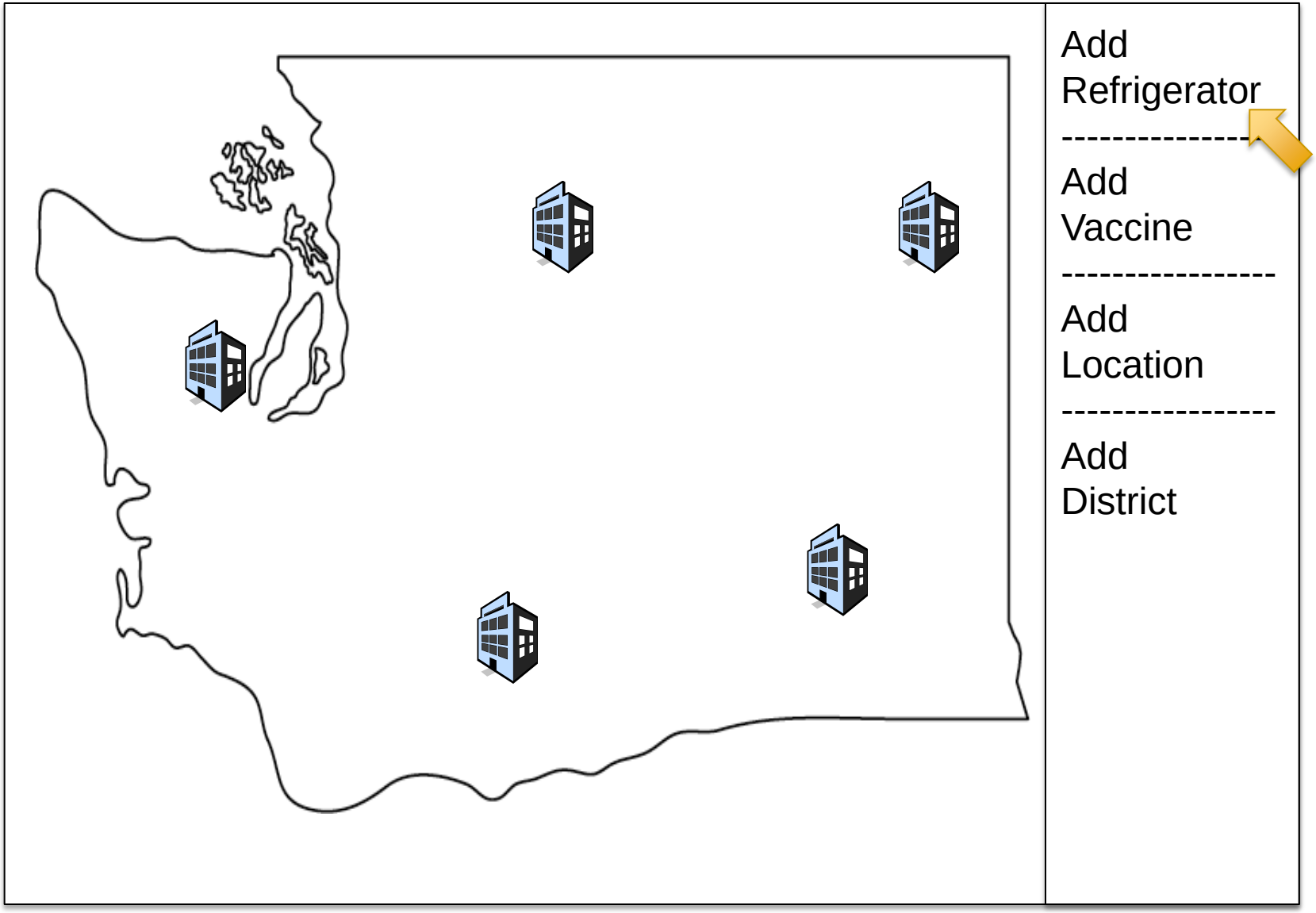
Related Work

- What other projects relate to this one?
  - Path CCEM
  - Vaccine Modeling Initiative
  - Palantir modeling software
- What ideas does it draw on and who has worked on them?

Civilization—Connections Between Locations

Fieldwork Findings

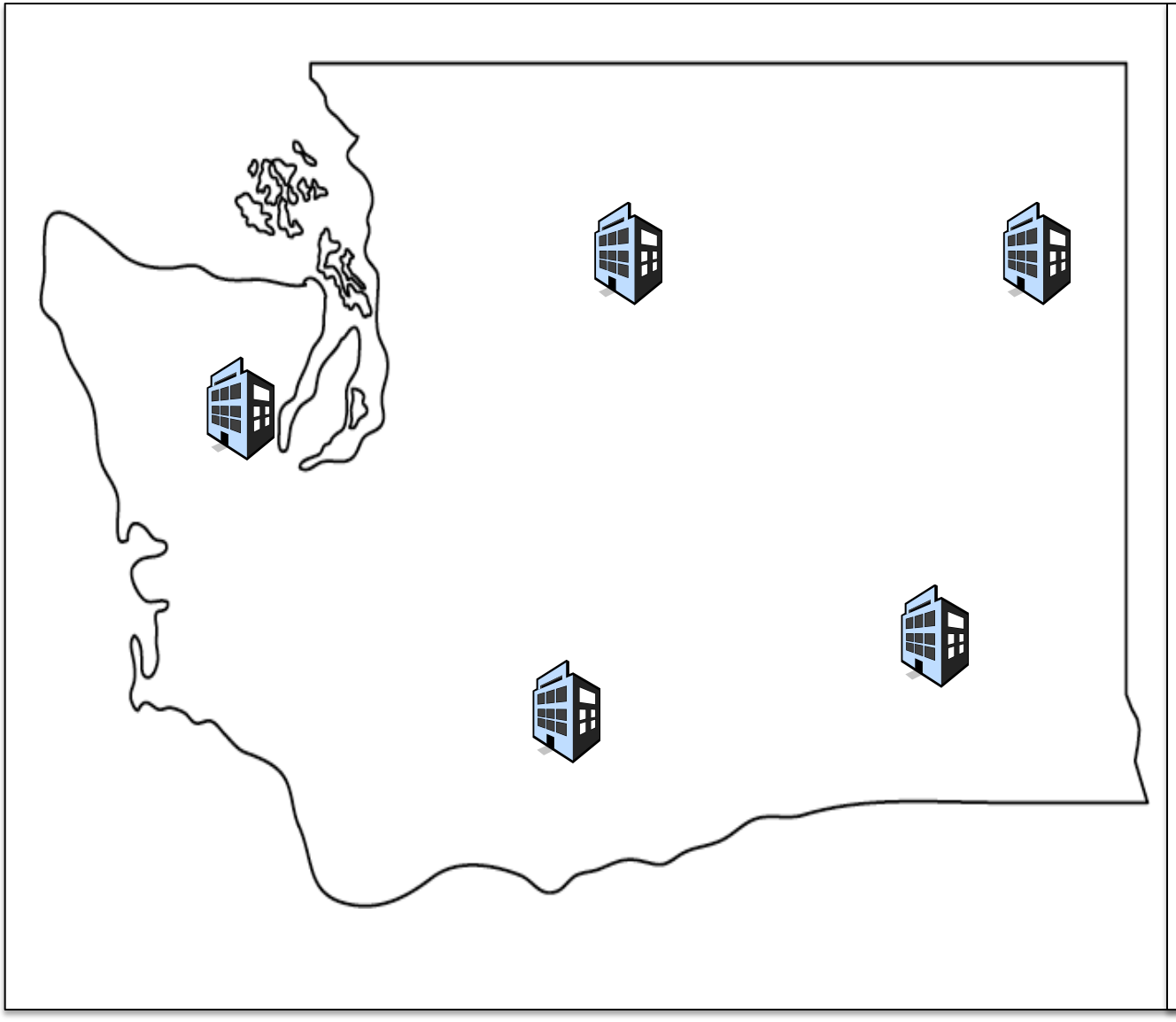
- Learned scope of project through conversation with field experts
  - Demonstration of transformative UI
  - Manipulating several parameters for modeling purposes
- Researched different game interfaces to identify strengths and weaknesses
  - Simplistic interfaces are easier to understand
  - Different plans for layout and patterns of interaction
  - Effective use of screen real estate
- What did you learn from your fieldwork?
  - We need to be really careful with what is displayed on the screen
- What further fieldwork is needed?
  - Make mock-up UI designs and test them with expert and regular people
  - Identify best UI aspects in use in other projects


Add
Refrigerator

Add
Vaccine

Add
Location

Add
District



Configure:
Quantity:
20

Dimensions:
48x48x72 in

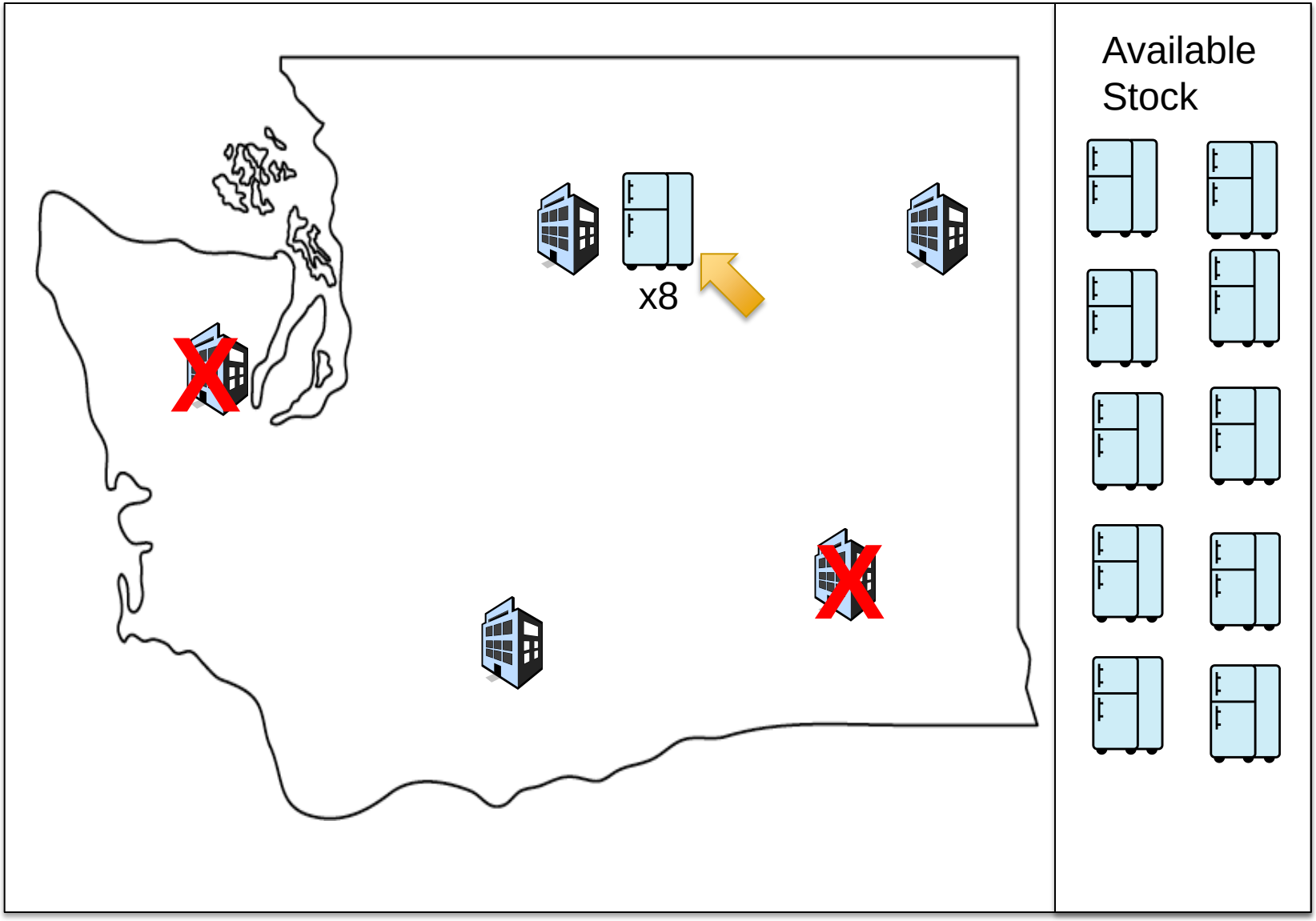
Volume:
48 gallon

Energy Type:
Electric

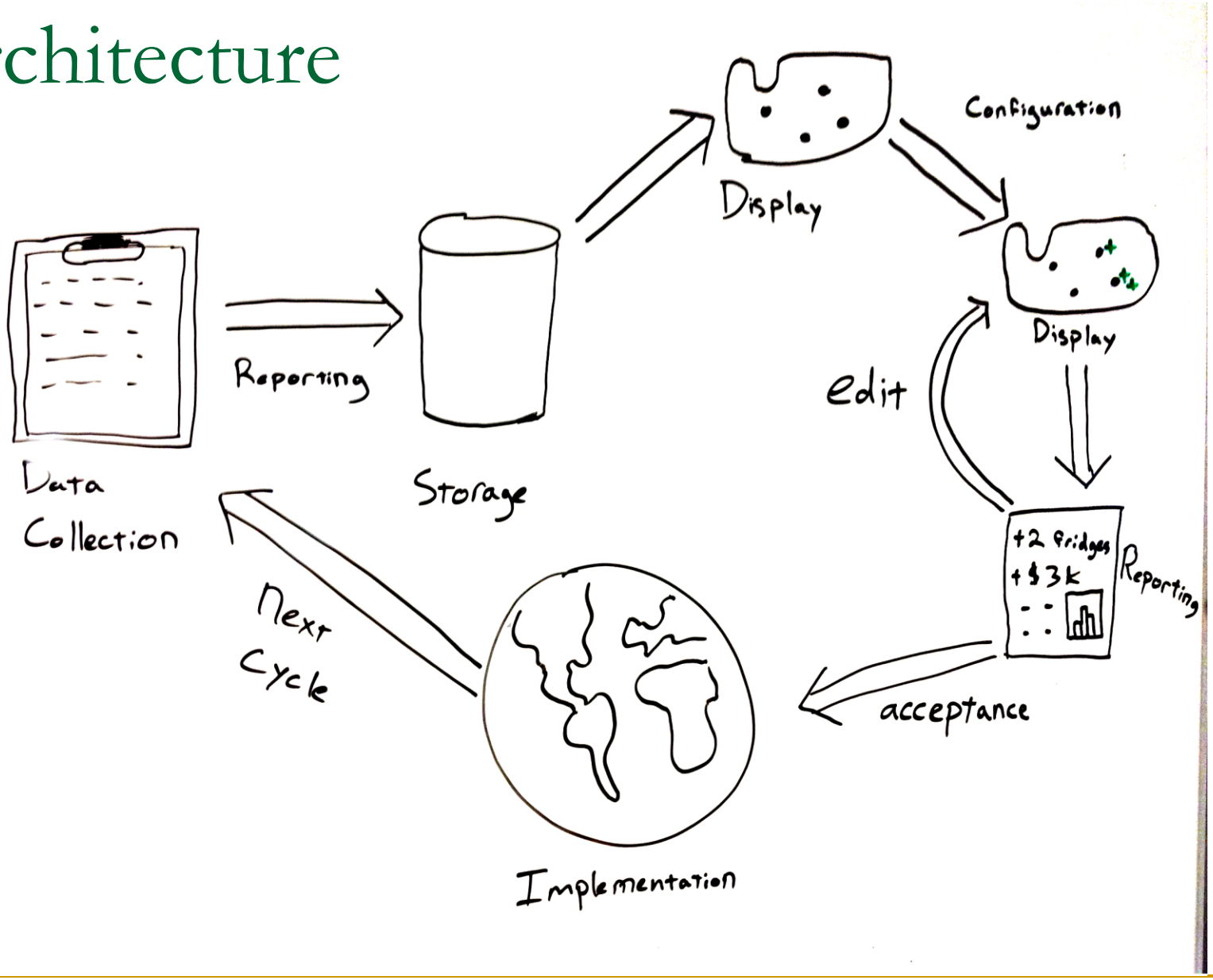
Cost:
$1000/unit

Energy Consumption:
484 kwh/year

DONE


x8
Available
Stock

Architecture



Next Steps (for solution sketch/prototype presentation scheduled for next week)

- Prototype Stages:
  - Low fidelity paper mockups
  - High fidelity Axure/PowerPoint mockups
- Review Process
  - Review design with experts for high-level feed back
  - Review with normal people for usability
  - Look to implement suggested changes to UI
- Planning for architecture
  - Windows based desktop applications
  - Need to identify file format/data input for new or existing data
  - Need to identify underlying database structure
  - Need to identify algorithms for balanced modeling based on input parameters