Lecture 13

Requirements Checklist

1. Is the Core Intention of your opportunity present?
   - The engineering opportunity should still reflect the experienced discomfort in the first place
   - You shouldn't make the thing so complicated that you lose your original intention
2. Have you determined your high-level and detailed objectives?
   - High-level objectives may not be directly measurable or contextualized; they sound like DfXes
     - They may simply be a value that you want to bring into the project
     - Kind of like stakeholder statements
     - Are our values in our high-level objectives?
   - Detailed objectives brings the design values into the context of the opportunity, specifying it with the language of the stakeholders
     - Detailed objectives make your high-level objectives: specific (to the context/your stakeholders), measurable (enable verification), and able to be connected to relevant research such as codes and standards
     - Use DfX literature (e.g. handbooks) to give you benchmarks and metrics
3. Have you checked the alignment of your objectives and metrics?
   - Do you metrics actually measure your objectives?
   - Does the metric actually measure the *core concept* in the detailed metric?
   - If it does not, then you haven't found the right metric, or you need to reframe the way you look at the detailed metric
   - If a proxy metric is used (e.g. hours required for training as a metric for "use without assistance"), you need to explain why
   - Keep in mind that the systems of measurement of the community may be different
4. Does your requirements visualization have everything connected with all the necessary elements?
   - Connect stakeholder interests to objectives, and then connect to metrics, and constraints and criteria
   - Make sure you don't have stakeholders that are not reflected, or objectives without metrics to measure them
   - Visualization includes detailed objectives; high-level objectives are like the stakeholders parts
   - The representation doesn't need to include details for the metrics; but those details need be to included elsewhere
   - Requiring cross-referencing is okay