

Class Designed Design Documentary Notation

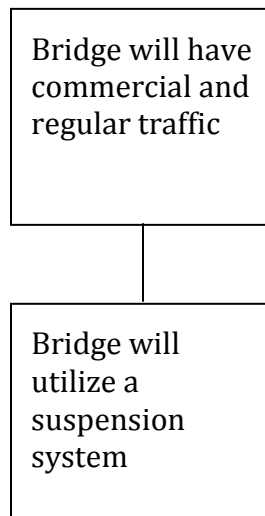
This design documentary notation will help you keep a record of the decisions and processes that you take while designing your project. As you create your design, you can record major decisions and have them as a record for a later date.

This notation was derived from the suggestions and discussions in class.

Summary: Three main points that form the basis of this: Design Decisions, Gates, and Concern Swim-Lanes. The sum of the parts will be similar to a workflow chart that can be followed chronologically (from top to bottom).

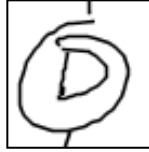
Design Decisions: Each major decision that is considered is recorded in a set of boxes arranged from top to bottom that reveal the story of your design process. Since this can become quite large, use a minimal amount of detail so that the recording process does not become an arduous task, but still allows you to trace the steps of your design. If a *design decision* is linked in some way to the next, a line is drawn between them so as to trace the flow of thought.

For example:



Example of Design Decisions

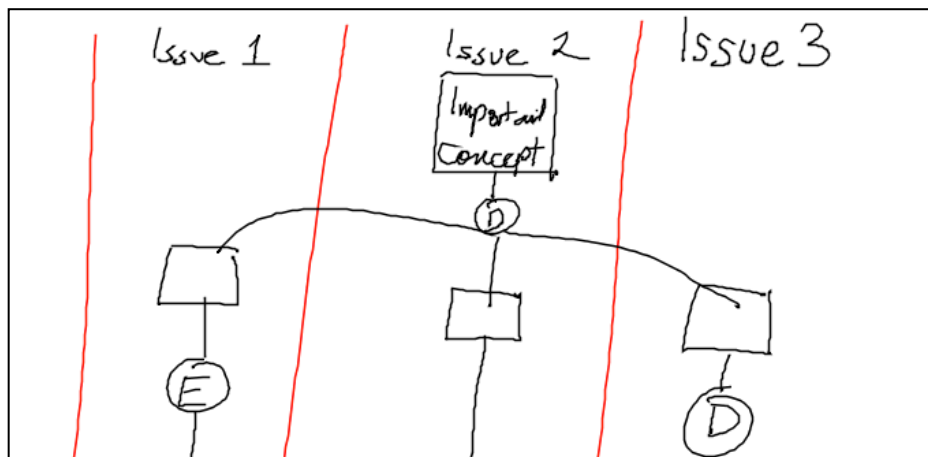
Gates: At several points in the process, conversation topics will diverge and/or converge into other design decisions. So that these moments of thought are not lost, *gates* are placed between *design decisions*. These gates are represented as circles with a large letter that signifies the process that occurs. For example, a large D represents divergence, and a large C represents convergence.



Example of a gate that represents divergence

The exact label of the process is up to you, and you may use additional labels other than divergence and convergence if you believe it better describes your process. For example, a design decision may *expand* a previous one (E), or be a *transformation* (as defined by J.C. Jones) of previous a previous design decision (T). Be sure to include a key so that we can identify your symbols.

Concern Swim-Lanes: Each design decision that is recorded pertains to a particular concern or issue. The emergence of concerns and how design decisions relate to each of those concerns is particularly interesting with respect to how we reached the final design. In order to track these, each design decision is to be placed within a vertical *swim-lane* for the concerns that it pertains to.

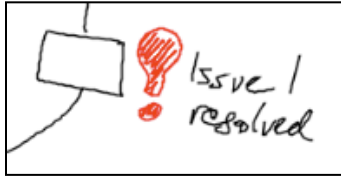


Example of Concern Swim-Lanes

In cases that a design decision relates to more than a single concern, draw a horizontal line out of the side of the box that extends out from the design decision, and mark a dot in each of the lanes that it relates to.

We do not expect you to know all swim lanes up front, so additional swim lanes may appear later on, or you may close a certain swim lane at some point.

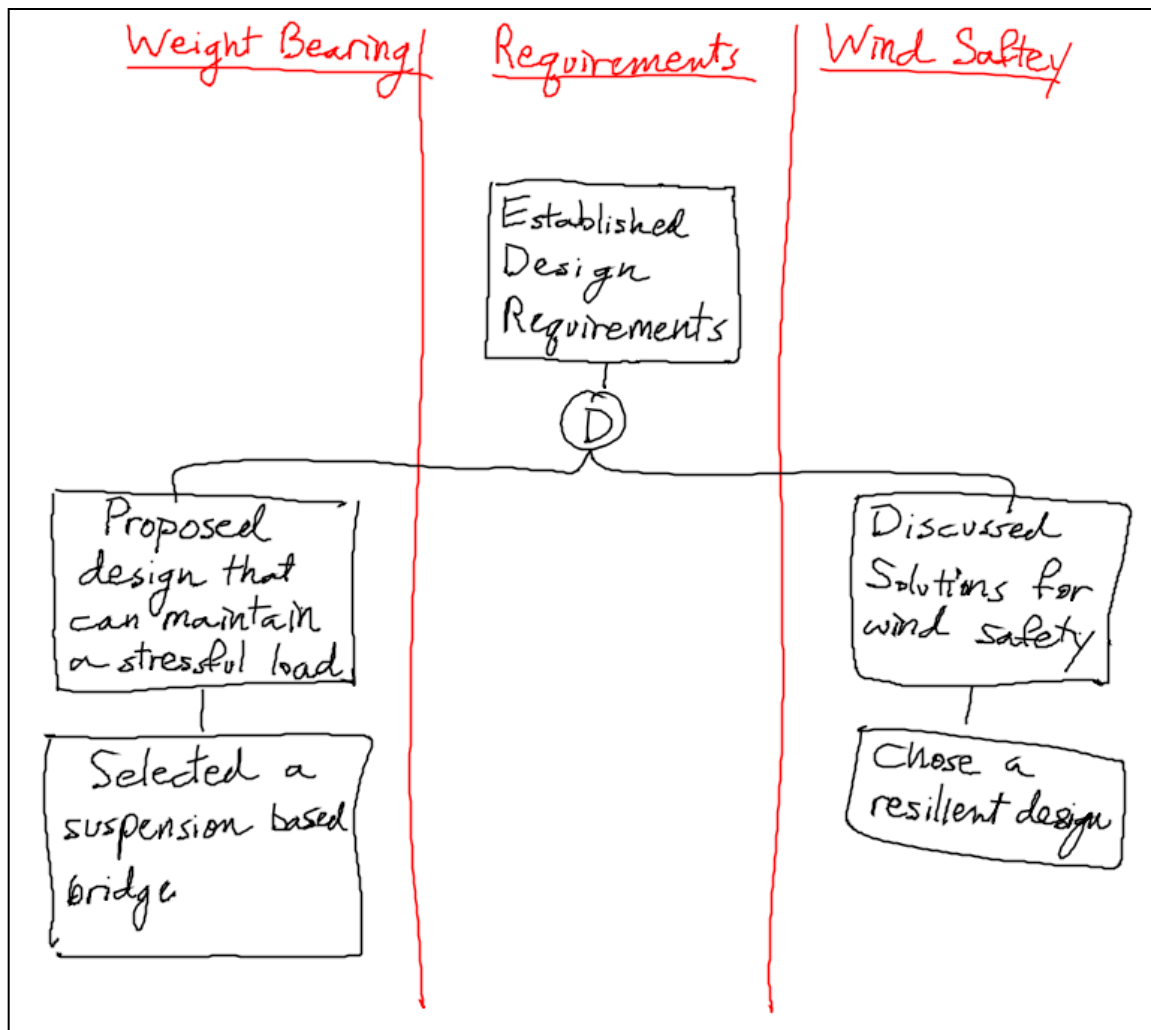
Additional Notation: Feel free to add additional markings to annotate each design decision, but be sure to record what that marking means. For example, you could mark pivotal decisions in your design with a red exclamation mark:



Example of an additional marking

Tying It All Together: With all things considered, you should end with a vertically driven box and arrow diagram that will appear similar to a workflow model. Each major event is recorded in a design decision box. Between those design decisions, gates reveal insight into the shift in process, such as diverging or converging ideas. Lastly, everything is organized into vertical concern swimlanes.

The following is an example of a brief recording from a bridge design session.



For Your Design: This notation should help you keep track of the overall process that you took to your final design. In previous assignments, we explicitly walked through design processes such as divergence of concerns and later convergence. This notation will give you a chance to see this happen in your own process.