Design Scenario

A design scenario builds upon a use scenario: re-examine the key interaction points in the story and think about what technology would help the user in that specific situation. In the beginning, this is a very bottom-up process, starting from the specific before moving to a general design. The design scenario should describe how the user or users in the story interact with the new technology that you are designing. Consider the effect of the technology: how does it change the user's behavior and what other effects (emotional? perceptual? other activities?) it may have. It is essential that $\$ the design scenario is based on real users and realistic situations, drawn from the user-based exercises in the beginning of the class. The more specific the better: detail in the story helps the designer identify problems and identify unrealistic solutions.

Design scenarios are text-based stories that form the foundation of a storyboard, which adds sketches to illustrate the text.

An individual design scenario need not be exhaustive: function-interaction tables and user guides provide a more systematic overview of the system. The goal of the scenario is to provide a realistic, incontext view of a specific use of the system, from the user's perspective. They should *not* act as idealized instruction manuals that describe how everything works in an ideal world. Instead, they are a design tool to help you think about the different ways in which real people will interact with your technology, including breakdowns and surprise adaptations. Including the context of use also helps generate new ideas.

Begin by reassessing the use scenario: do you have new interviews, observations or information about users that will cause you to adjust the personas, context or design space? Choose the key personas or characters, the specific context (place, time, current circumstances) and the motivation for the users: what do they want or need to do? Once you have established the starting point for the story, organize the action into a series of 'interaction points' in which you focus on the moments in which the user(s) interact with the technology. Give as much additional information as needed for others to understand the story, but no more. The goal is not to write a Hollywood screenplay, but rather to create a structure for envisioning how users will interact with your technology.

Note that you can begin with a fairly clear idea of the form and function of your technology, especially if there is an earlier version of it available that needs to be modified. However, you can also work entirely bottom-up, letting the scenario drive the design. If you do this, you will need to combine this technique with other top-down techniques to ensure that you do not settle on the first acceptable idea that arises. The process is highly iterative: as you work through the use scenario, you may want to modify it, adding additional interaction points to explore additional design possibilities or breakdowns that are suggested by the technology you are creating.

The design scenario clearly describes how users will interact with the new system during their activities and how the system will affect this activity. It is important that real users participate in the discussion to create the design scenario, as they are the best suited to identify problems or unrealistic uses of the new system.

Exercise: Design Scenario

- **Roles:** Appoint a moderator, to keep the discussion on topic. Although it is useful to have one scribe who records the basic structure of the story, once you have established the basic story, it is faster to work in parallel on subsets of the story, keeping each other informed as you go.
- **Preparation:** Bring the use scenario, including the personas, and the design space you developed.
- **Procedure:** Work at a table and consider placing the different incidents on separate index cards.
 - 1. Choose the key personas or characters in the scenario. Identify a time, place and starting situation. For example: Marie is student air traffic controller at the Paris air traffic control center. She just returned from two weeks of vacation and has started the 6am shift. Jean is an experienced controller who is currently on duty. Traffic is slow, but there is a storm coming and the rush hour traffic is just getting started.
 - 2. Choose the categories that you want to explore in the scenario. You may concentrate on a single theme, choosing all the incidents from a single category. Or, you may choose incidents from different categories. The group should discuss how to adapt the incidents to the current situation and set of personas and the most logical order.
 - 3. Group members should work in parallel to describe, in as much relevant detail as possible, each incident. Most incidents involve about a paragraph of text, and may include a series of actions and responses. Use clear, concise descriptions that emphasize the user's behavior. Everyone should try to add at one or two incidents that pose new design challenges, beyond the initial use scenario.
 - 4. Bring the incidents together and read them as a single story. Adjust the order and any details to make the story more compelling and coherent. Remember to look for problems, breakdowns, and situations in which things went wrong, as well as at least one positive example, a user innovation or simply when things worked as planned. Include both typical and unusual situations and examples of planned and unexpected activities. Make your choices based on what you think will offer the most interesting possibilities for design. The final use scenario should be 1-2 pages long. Keep in mind that while student projects usually concentrate on a single scenario, if you use this technique for a real product or research project, you should develop multiple scenarios that explore different aspects of the design problem. Do not be afraid to modify the use scenario as you discover more about users or to help create a more compelling design scenario.
- **Resource:** The final design resource is a concisely written story that illustrates how users in realistic settings would interact with the new technology being designed. Note that this is not a general 'how to' user guide, but rather a specific, individual case of one or more people using the system. The design scenario is the foundation for storyboards and video prototypes; it can be evaluated by other group members, users, and other stake-holders.

Exercise: Design Scenario

Group: _____

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Create a design scenario that includes the personas and basic story in the use scenario, modified stepby-step to illustrate how those users will interact with your new technology design. Be sure to emphasize the 'interaction points', either placing them on separate index cards or indenting the line for each. (Note: This handout is just a model. Please type your scenario.)

Persona name:

Characteristics:

Persona name:

Characteristics:

Persona name:

Characteristics:

Date: Setting:

Situation:

Scenario (organized into a series of **interaction points**):

time: