

Requirements & Models

COSC 480: User-Centered Design
Madeline E. Smith
September 28, 2016

Colgate LMS Design

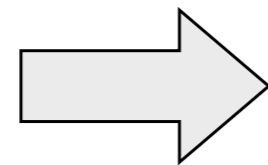
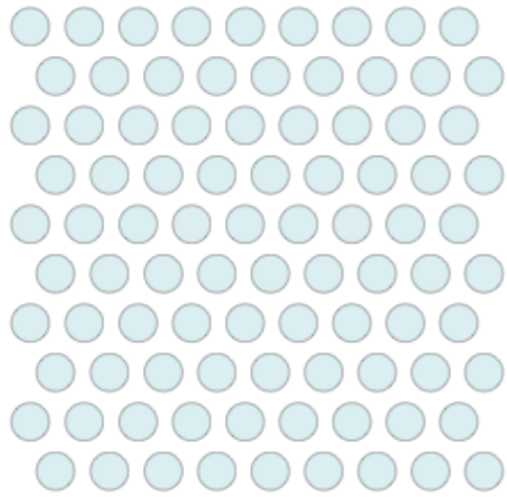
You have been hired to design a new Learning Management System for Colgate University. Use contextual inquiry and Contextual Analysis to understand your users.

Contextual Analysis

Stormboard

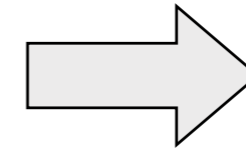
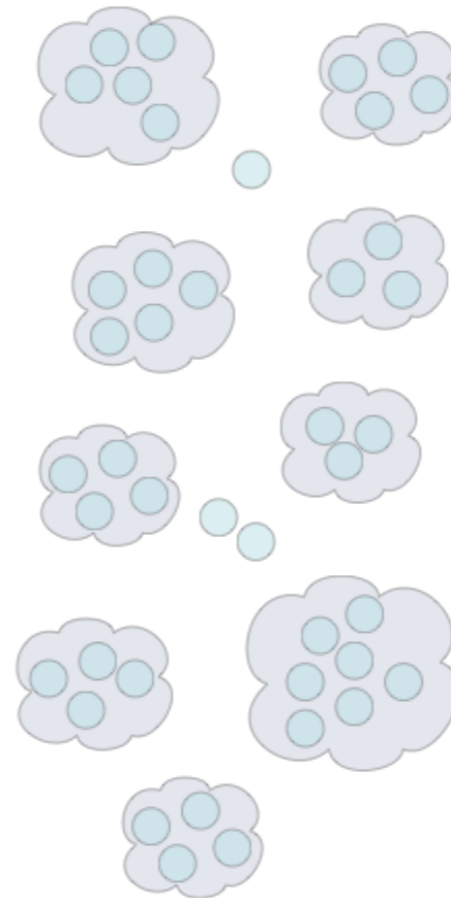
Collaborative Online Affinity Diagramming

Observations



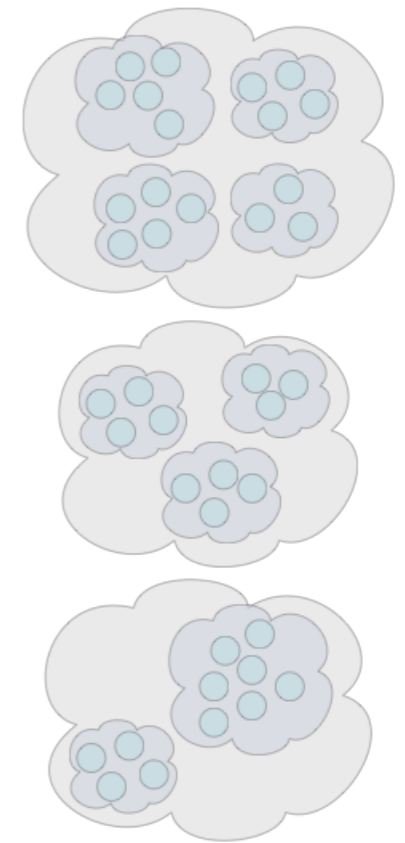
Lead to

Insights



Lead to

Insight Clusters



Example: Mobile phone users use Facebook, Twitter, Instagram

Example: Mobile phone users are active users of social media (+other insights)

Example: Mobile phone users use their phones as a means to build relationships with others

Observations

- The fundamental goal of conducting user research is to make observations and gather data
- Observations encompass both phenomena that you notice when watching users in context and the findings that emerge from interviews
- Be alert to ways to frame or organize your observations

Insights

- Insights are low-level observational patterns
- Insights explain and/or summarize the behavior being observed
- Organize observations and tag or code related ones
- Record insights as they occur, but don't anchor on them

Insight Clusters

- Cluster insights—high-level observational patterns
- A sufficient number of observations and resulting insights may reveal meaningful themes
- Identify these and describe them

Requirements

User Stories

User Stories

- User stories are very short narratives that describe how the user interacts with the system and the value that the user gains from it
- User stories take the form:
 - As a <user role>, I want/need <something> so that I can <benefit>
 - Example: As a frequent shopper, I want a way to buy with one click so that I can make a purchase quickly.
 - Alternative form: As a <role>, I can <something>
 - Example: As a frequent shopper, I can make purchases quickly with one click.
- User stories are also known as Point-Of-View (POV) statements

How to Write User Stories

- Give the story a short title for quick identification
- Indicate stakeholder priority for the story:
 - *Essential*: There's no point in building the product if this feature is not present
 - *Useful*: This is not essential, but it would significantly increase the value of the product if present
 - *Optional*: Neither essential nor useful, but would be nice to have
- Include an optional unique story identifier (serial number) for tracking the story—this can be appended to title

User Story Format

ID #

Title:

As a ...

I want/need to ...

So that I can ...

Priority: Essential / Useful / Optional

Journey Maps

Journey Maps

- A user journey map tells the story of a user's experience with a product or service from initial contact, through engagement, and into a long-term relationship
- Graphic: provides a visual representation of the journey
- Interpretation: draws upon both contextual inquiry and contextual analysis
- Tells the user's story over time and across channels
- Tells the story from the user's perspective.

Journey Map Elements

- **Personas.** Main characters that illustrate the needs, goals, thoughts, feelings, opinions, expectations, and pain points of the user
- **Timeline.** Finite amount of time (e.g., 1 week or 1 year) or variable phases (e.g., discovery, decision-making, research, activity experience, reflection)
- **Emotion.** Peaks and valleys illustrating frustration, anxiety, happiness etc.
- **Touchpoints.** User actions and interactions with the experience ecosystem—this is the what the customer is doing (e.g., ‘make a reservation’)
- **Channels.** Where interaction takes place and the context of use—where users are interacting with the experience ecosystem (e.g., ‘make a reservation online with a mobile phone’)

Domain Concept Maps

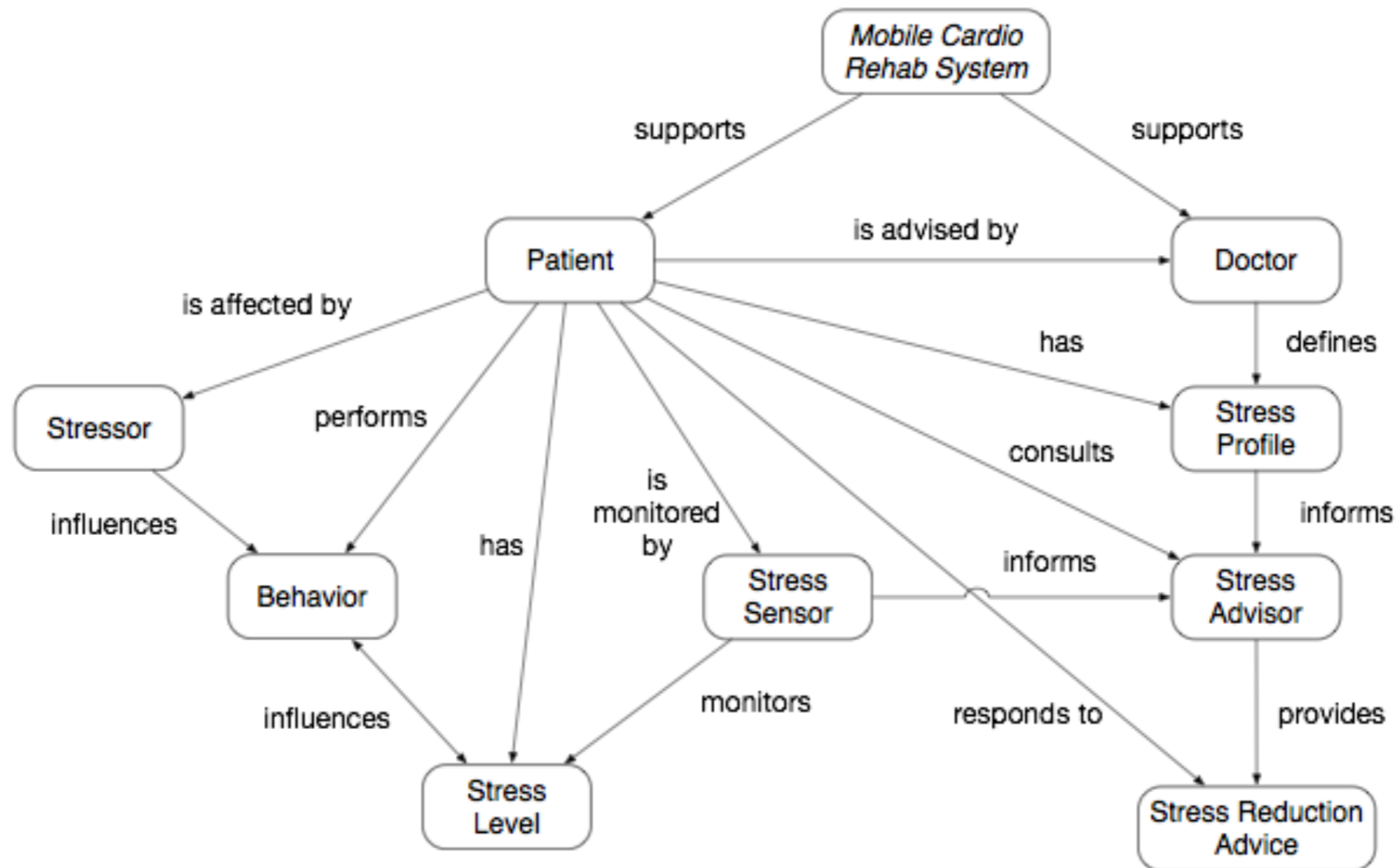
Concept Maps

- A domain is a specific area of activity or knowledge
- A concept map is a visual tool that connects a large number of ideas, objects, and events as they relate to a particular domain
- Concept maps allow the design team to establish a common vocabulary and a set of common concepts and relations for the product domain

Creating a Concept Map

- Understand the domain
- Articulate a focus question, in order to provide context and structure to the map
- Generate a list of ten to twenty-five concepts and place these in the map
- Link the concepts with directed arrows and identify the relationship between linked concepts

Example Concept Map



“What is a mobile cardiac rehabilitation system?”

Reading for Friday



Just Ask: Integrating
Accessibility Throughout Design
Shawn Henry (2007)

**Accessibility in the
UCD Process**
Analysis Phase

Guest Friday

Erin Brady

Prof @ IUPUI

HCI Researcher

Accessibility Expert

Post questions by
11:59pm Thursday

