

# Introduction

Lecture 1

## Objectives

- Introduce the Course
- Introduce the Goal Directed Design Method

## Exercise

- Put your name on the card
- Write 2-3 sentences answering the question

“What is design?”

(take 5 minutes)

## Design

- What is design?

## Design

- What is design?
  - Empirical observation

Graphic Design  
Interaction Design  
Workflow Design  
Activity Design  
Urban Design  
Interior Design

User Interface Design  
Organization Design  
Web Site Design  
Information Design  
User Centered Design  
Landscape Design

## Problems of Design

- If we think of design as a process ...
  - What are steps of the process?  
another way of asking that
  - What are problems that design should address?

## Problems of Design

1. Understanding the Customer/Context (Collecting Requirements)

## Problems of Design

1. Understanding the Customer/Context (Collecting Requirements)
2. Modeling the Work (Goals, Tasks, Activities)

## Problems of Design

1. Understanding the Customer/Context (Collecting Requirements)
2. Modeling the Work (Goals, Tasks, Activities)
3. Modeling the User (Roles, Responsibilities, Organization)

## Problems of Design

1. Understanding the Customer/Context (Collecting Requirements)
2. Modeling the Work (Goals, Tasks, Activities)
3. Modeling the User (Roles, Responsibilities, Organization)
4. Transfer Understanding to Artifacts (Designing/ Prototyping)

## Problems of Design

1. Understanding the Customer/Context (Collecting Requirements)
2. Modeling the Work (Goals, Tasks, Activities)
3. Modeling the User (Roles, Responsibilities, Organization)
4. Transfer Understanding to Artifacts (Designing/ Prototyping)
5. Address Flaws, Misconceptions (Testing, Redesigning)

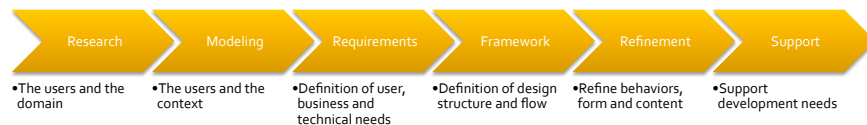
## Design Methods

- Method/Approach for this class
  - Goal Directed Design (Cooper)

## Design Methods

- Method/Approach for this class
  - Goal Directed Design (Cooper)
  - Scenario Based Design (Carroll & Rosson)
  - Participatory Design (“Scandinavian School”)
  - Emotional/Affective Design (Norman)
  - Values Sensitive Design (Friedman)

## Goal Directed Design Process



- Considering each step in the process

## Research Stage

- Defining Scope
  - Objectives, timelines, costs constraints
- Audit
  - Business plans and goals
  - Market research – competing, similar
- Interviews & Observations
  - Client (Stakeholders) – Visions, risks
  - Product users – goals, behaviors, motivations, tools

## Modeling Stage

- Personas
  - Archetype users
- Info Architectures
  - Relationships among key conceptual entities
- Workflow, Process Models
  - Understanding and representing key activities, individual and group

## Requirements Definition Stage

- Contextual Scenarios
  - How the product fits into the persona's life
  - How the product helps the persona to achieve goals
- Requirements
  - Functional and data requirements
  - Describe user mental models

## Design Framework Stage

- Elements
  - Informational and functional aspects
- Framework
  - Conceptual relations, navigation, grouping
- Key Path & Validation Scenarios
  - How the design fits into the likely and idealized uses

## Refinement Stage

- Produce a Detailed Design
  - Address specific appearance
  - Apply specific idioms
  - Interface implementation, widgets, behavior
  - Branding

## Design Support Stage

- Modify Design
  - Maintain the conceptual integrity of the design
  - Address changing technical and development needs

## Coda

- Note:
  - Lectures are not a substitute for the reading
- Chapter 2
  - Models - Mental Models, Implementation Models, Representational Models
- First Lab Session
  - Tuesday Oct 4, 11:30-12:30
  - Smith Hall 407