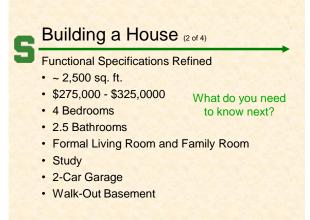


Initial Problem Statement

Usually Refined



# S

### Interactions With Your Client

**Functional Specifications** 

- · Derived With/From Client
- Documented For Client
- · Presented to Client
- · Agreed Upon With Client
- · Your Job to Capture the Client's Intent!

# Project Plan

√ Functional Specifications

- Design Specifications
- Technical Specifications
- Schedule
- Risks

## S

### **Design Specification**

- How does it look and feel?
- Includes
  - "Business" Process Flow
  - Use Cases
  - Screen Mockups
  - Data Flow Diagrams
  - Data Organization
  - Etc...
- · Identifies All the Parts and Their Interactions
- · (Mostly) Understandable by End User
- Usually Refined



### Building a House (3 of 4)

**Design Specifications** 

- · Mission Style, Stone Front
- · Lots of Light
- Kitchen Connected to Family Room
- · Master Bedroom on Main Floor
- Cathedral Ceilings

What else will you

Granite Counter Tops

need to know to

• Etc...

build the house?

(Note: Understandable by "User")



### Screen Mock-Ups

- User Interface Only
  - Shows Layout, Buttons, Pull-Downs, Etc...
  - Non-Functional
  - No Back End
- Helpful for Developing
  - Functional Specifications
  - Look-and-Feel
  - Use Cases
- · Can Create with...
  - Pencil and Paper
  - PowerPoint (Developer View)
  - Etc...



### Screen Mock-Ups

- · "Use" with Clients
  - Show to Clients
  - Go Through Use Cases with Clients
- "Cruder" may be better.
  - What?
  - Why?

# S

### Interactions With Your Client

**Design Specifications** 

- · Derived With/From Client
- · Documented For Client
- · Presented to Client
- · Agreed Upon With Client
- · Your Job to Capture the Client's Intent!

# Project Plan

- √ Functional Specifications
- √ Design Specifications
- > Technical Specifications
- Schedule
- Risks

## 5

### Technical Specification (1 of 2)

- · How does it do it?
- · Identifies All the Parts and Their Interactions
- Everything a Developer Needs to Write the Code
- Includes Things Like...
  - Machine Architectures
  - Software Technologies
  - Production Environments
  - Development Environments
  - SDK's (Software Development Kits)
  - Network Topology
  - Database Schema
  - Object Models and Class Diagrams
  - Continued...



### Technical Specification (2 of 2)

- Includes Things Like...
  - UML Diagrams
  - Pseudo Code
  - Function Prototypes
  - Schedule
  - Test Plan
  - Risk Analysis
  - Etc...
- Probably Not Understandable by End User
- · Possibly Not Understandable by Client
- Usually Refined



### Building a House (4 of 4)

**Technical Specifications** 

- · 20 lb Asphalt Roof Shingles
- · 2" x 6" Outside Walls
- R48 Blown Attic Insulation
- Cat5E Wiring
- Pre-Made Roof Trusses
- 12" Poured Concrete Foundation
- Etc...

(Note: Probably Not Understandable by "User")

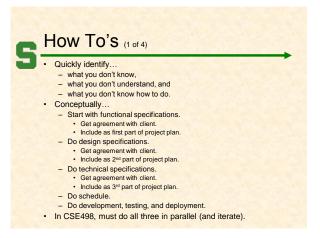


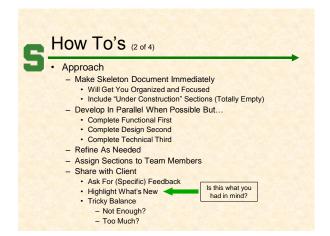
### Approach

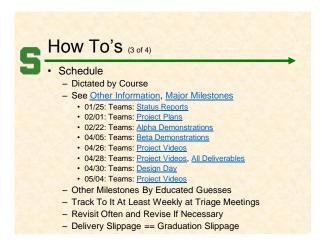
- Break Big Problems Into Smaller Problems
- Identify Constraints
- · Identify "Risks"—Things You Don't...
  - ...Know
  - ...Understand
  - ...Know How To Do
- Consider Tradeoffs
- Select Appropriate Technologies
- Identify Core Features for a Prototype

# Interactions With Your Client Technical Specifications • Derived With/From Client • Documented For Client • Presented to Client • Agreed Upon With Client • Your Job to Capture the Client's Intent!

Cannot be emphasized enough!











# Nota Bene: Project Plan • How many... - ...drafts will you write? Many. - ...drafts will you share with your client? A Couple. - ...final documents will you submit for CSE498? One • Due Date - February 1 - About 2.5 Weeks

In Class Formal Presentations

February 1 – February 10PowerPoint Template Provided



