Requirements Gathering

Requirements are like water. They're easier to build on when they're frozen

-- anon

- In Scrum, the ..
  is responsible for client interactions.

- For CMPT 373
  - everyone must..

  - product owner in charge of collecting these requirements into a backlog.

- Requirements change
  - During project, expect requirements to change as..

Capture Requirements

- **..**
  - Note what customer wants
  - Note hints about priorities
  - Note hints about future directions
  - Pay attention to surprises -- Dig into these

- Infer High-level Architecture
  - Web client-server?
  - Mobile app?
  - Cloud?

Collecting Requirements

- Identify..
  - Who uses the system
  - What are the big interactions

- Create very rough..
  - Concretes discussion of req's

- Identify..
  - What are the big ideas being stored

- Draw..
  - See the sequence of steps in a complex process

Collecting Requirements (2)

- Interactively ask client to explain
  - ..
    Ex: module, battery, pack, bank, cell
  - processes or current system
  - goals / desires
- Ask customer to..
  - Minimum viable product
  - Very useful
  - Future feature

Later, think through requirements

- **Describe users and actions**
  - List user roles
  - Important actions per role

- **Describe data**
  - List big data "things"
  - Identify some info about each

- **Create mock UI**
  - Shows data and interactions
  - Concrete discussion of req's

- **Flow "chart" of complex process**
  - Identify actions and stages/states

Project Time with Customer

- **Pre-Tutorial 1**
  - Get to know your team (meet Friday after class?)
- **Tutorial 1**
  - Client will discuss their requirements
  - 2+ people (Product Owner + 1) record req's
  - Everyone must fight to understand req's
- **Tutorial 2**
  - Client returns to clarify requirements
- **Iteration End**
  - Client suggests changes and new requirements
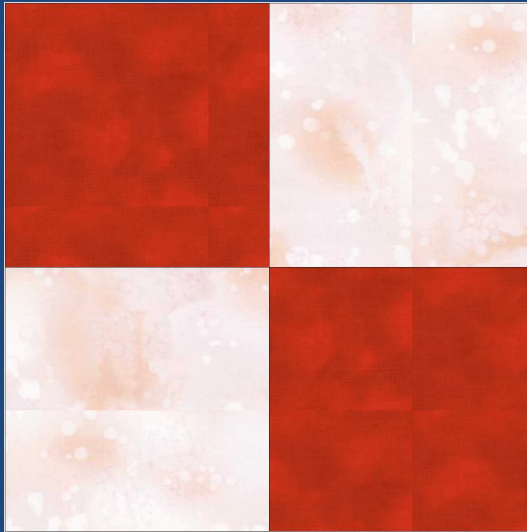
In-Class Example
Quilting!

Quilt Example

- Making a tile quilt of 6" x 6" block (see image).

- Quilt made up of 5 blocks by 6 blocks.

- Each block uses two fabrics twice:
  once each in opposite corners.

- The fabric comes from a charm pack of 40 squares, featuring 6 different patterns and 4 colours.

- Program generates an optimal pairings of fabrics for squares arranged on the quilt such no two touching fabrics are too similar.

- Compute how much fabric to buy to make a 2" border.

Images

Single block

Charm Pack Fabrics

Summary

- Fight to capture the requirements
  - Carefully listen to the customer
  - Ask about anything you don't understand
  - Work through details
- Clarify terminology
- Write them down;
you won't remember them all!