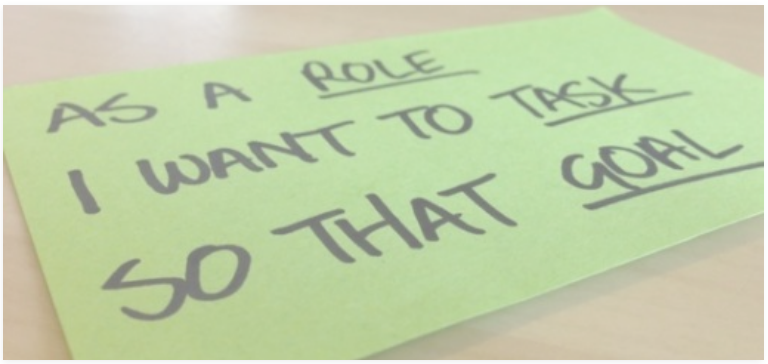
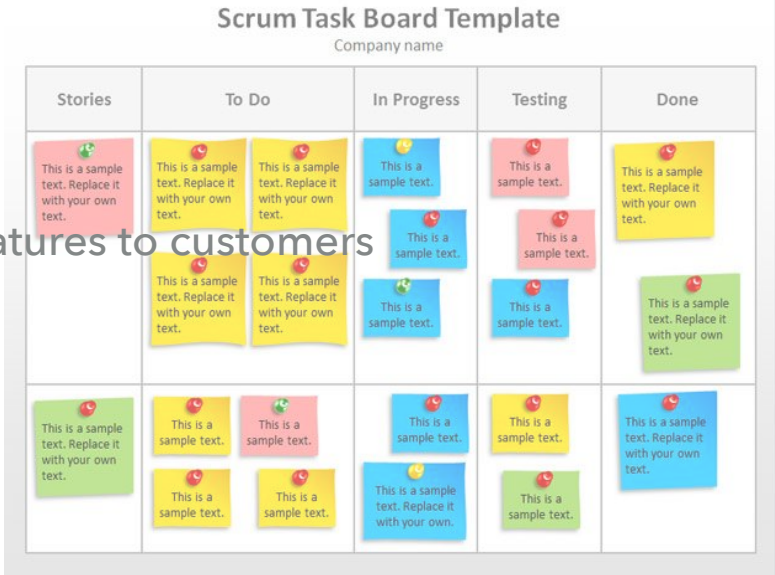
FROM THEORY TO PRACTICE

UCD AND AGILE

DEFINITIONS



- User-centered Design
  - a framework of processes
  - encourages extensive user-research and analysis prior to development
  - e.g. user stories, prototypes
- Agile programming
  - deliver small sets of software features to customers
  - quickly and with short iterations
  - e.g. Scrum, eXtreme



OVERVIEW

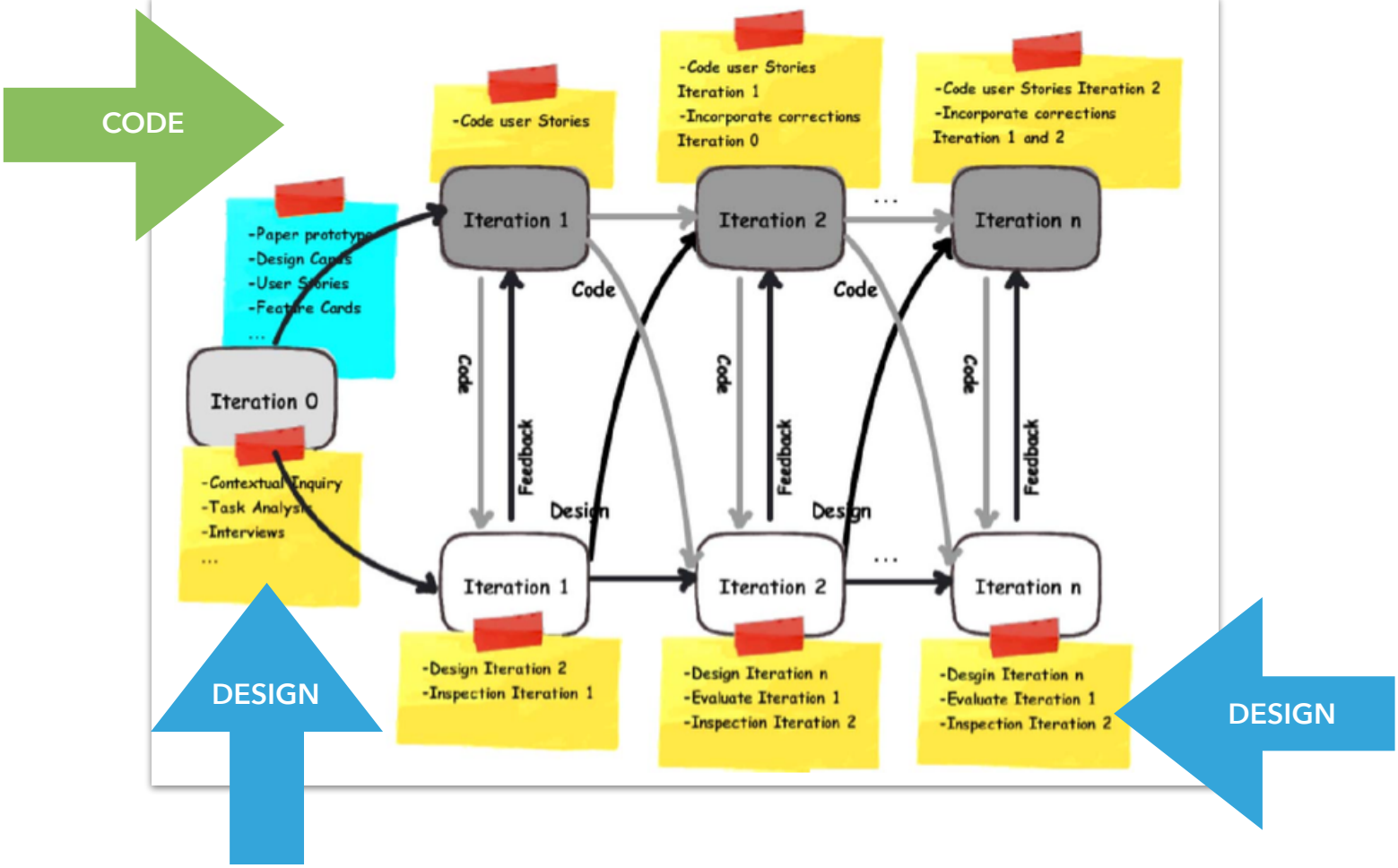
- User-centered Design (UCD) and Agile Project Management are ***perceived to be*** counterintuitive
- There are models in the literature for integrating the two
- da Silva et al developed a modified framework and…
  - applied it to an SE shop
  - discussed results

UCD STRATEGIES AND TOOLS

- Subset of socio-technical systems design (STSD)
- Interdisciplinary
- Learning and change management
- Multiple levels
- Discount usability
- Prototyping, contextual analysis/inquiry,

AGILE STRATEGIES AND TOOLS

- Scrum
- eXtreme Programming
- Rational Unified Framework


CODE
-Code user Stories
-Code user Stories
Iteration 1
-Incorporate corrections
Iteration 0
-Code user Stories Iteration 2
-Incorporate corrections
Iteration 1 and 2
-Paper prototypes
-Design Cards
-User Stories
-Feature Cards
...
Iteration 1
Iteration 2
...
Iteration n
Code
Code
Iteration 0
Code
Feedback
Code
Feedback
Code
Feedback
Design
Design
-Contextual Inquiry
-Task Analysis
-Interviews
...
Iteration 1
Iteration 2
...
Iteration n
DESIGN
-Design Iteration 2
-Inspection Iteration 1
-Design Iteration n
-Evaluate Iteration 1
-Inspection Iteration 2
-Desgin Iteration n
-Evaluate Iteration 1
-Inspection Iteration 2
DESIGN

CASE

- “World leading tech company” that manufactures collaboration products
  - PM, PO, Tech lead, Developer*2, Tester*2
  - 2 projects, 3 iterations (2 wks)

MODIFIED FRAMEWORK

- Little Design Up Front (LDUF)
- Prototyping
- User Testing
- User Stories
- Usability Inspection
- One Sprint Ahead
- Close Collaboration
- Big Picture

SUMMARY

- User-centered Design (UCD) and Agile Project Management are ***sometimes*** counterintuitive (**more below**)
- There are frameworks in the literature (**need validation!**)
- da Silva et al developed a modified framework and…
  - applied it to an SE shop (**generalizable**?)
  - discussed results
    1. Design/Dev collaboration is key!
    2. Design needs time to work up front.