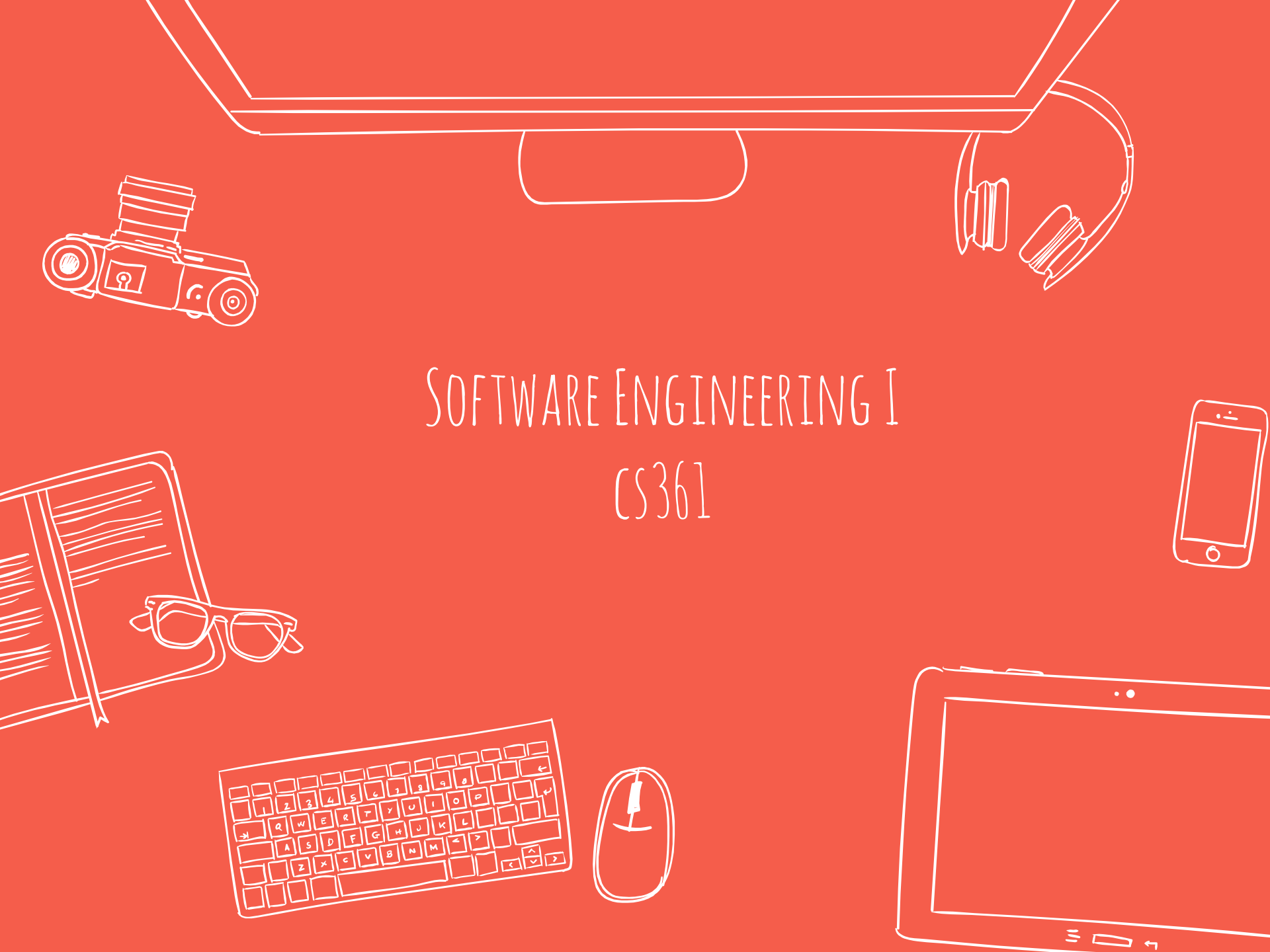


SOFTWARE ENGINEERING I

CS361



TEST DRIVEN DEVELOPMENT



The background features a light blue line-art illustration of various items: a keyboard in the top left, a USB drive in the top center, a pen and a notepad with a drawing in the top right, a smartphone on the right side, a cup of coffee on the bottom left, a spoon below the coffee, a pair of glasses at the bottom center, and a pair of earbuds with a cable on the bottom right.

WHAT IS TEST DRIVEN DEVELOPMENT (TDD)

Test-driven development (TDD) is a **software development process** based on three simple rules



TDD RULES (FROM UNCLE BOB MARTIN)

1. You are not allowed to write any production code unless it is to make a failing unit test pass



TDD RULES (FROM UNCLE BOB MARTIN)

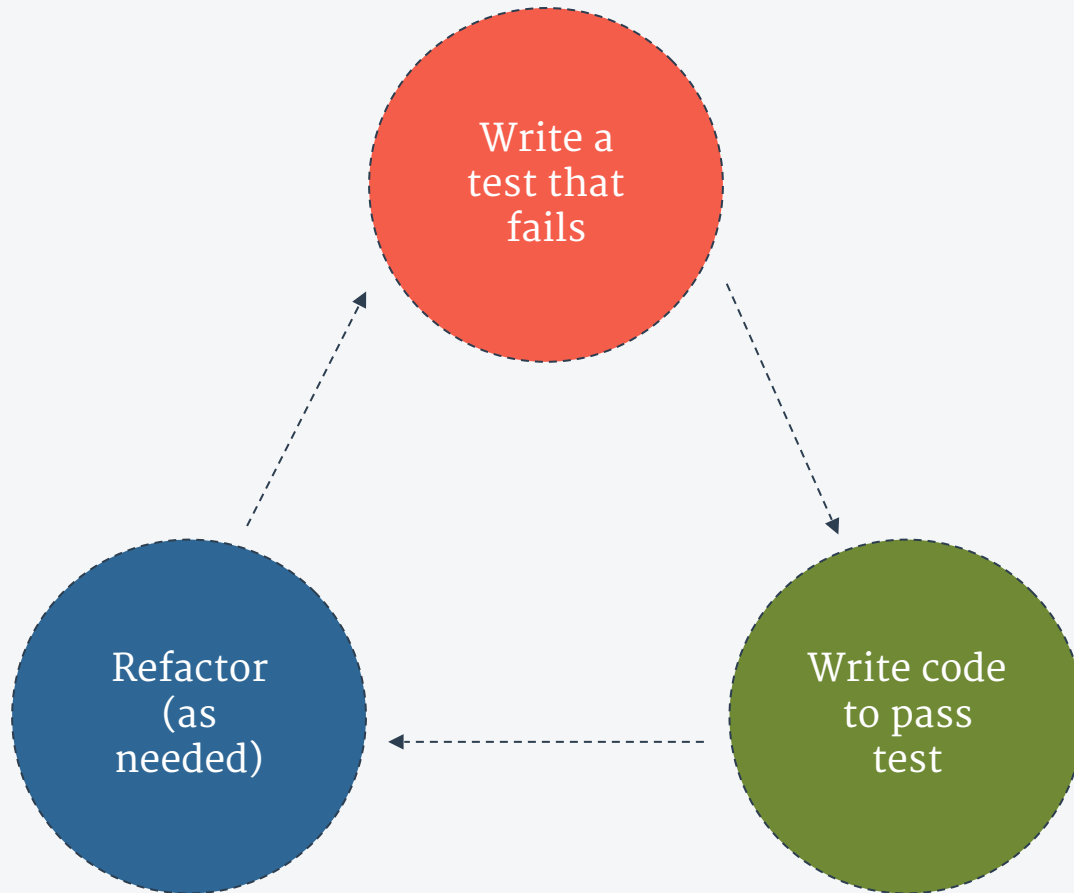
1. You are not allowed to write any production code unless it is to make a failing unit test pass
2. You are not allowed to write any more of a unit test than is sufficient to fail; and any compilation failures are failures



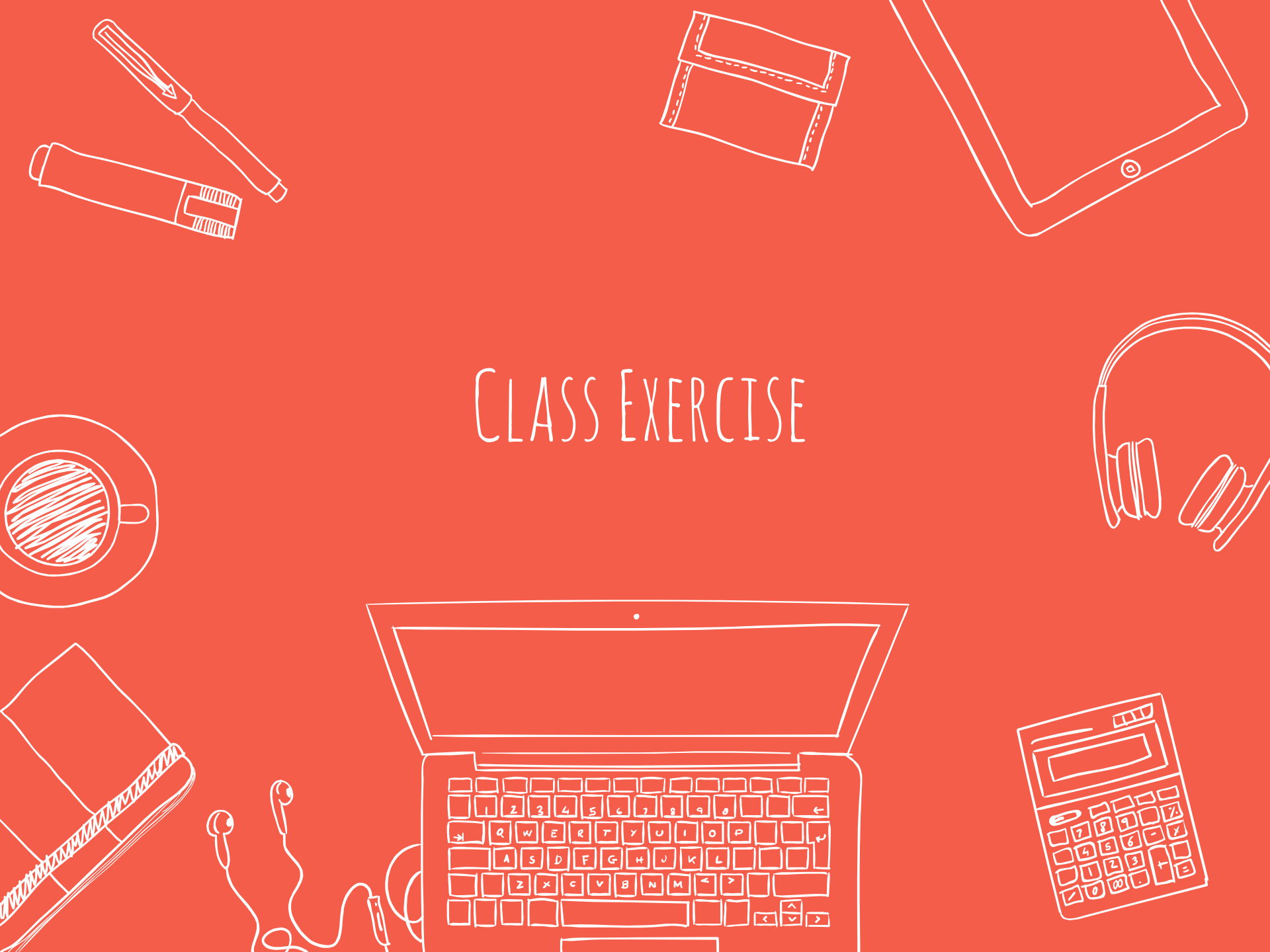
TDD RULES (FROM UNCLE BOB MARTIN)

1. You are not allowed to write any production code unless it is to make a failing unit test pass
2. You are not allowed to write any more of a unit test than is sufficient to fail; and any compilation failures are failures
3. You are not allowed to write any more production code than is sufficient to pass the one failing unit test

TDD CYCLE



CLASS EXERCISE





FIZZBUZZ

- ✖ If number is divisible by 3,
print Fizz
- ✖ If number is divisible by 5
print Buzz
- ✖ if number is neither, print
number

ASSIGNMENTS





WRITING ASSIGNMENT 1

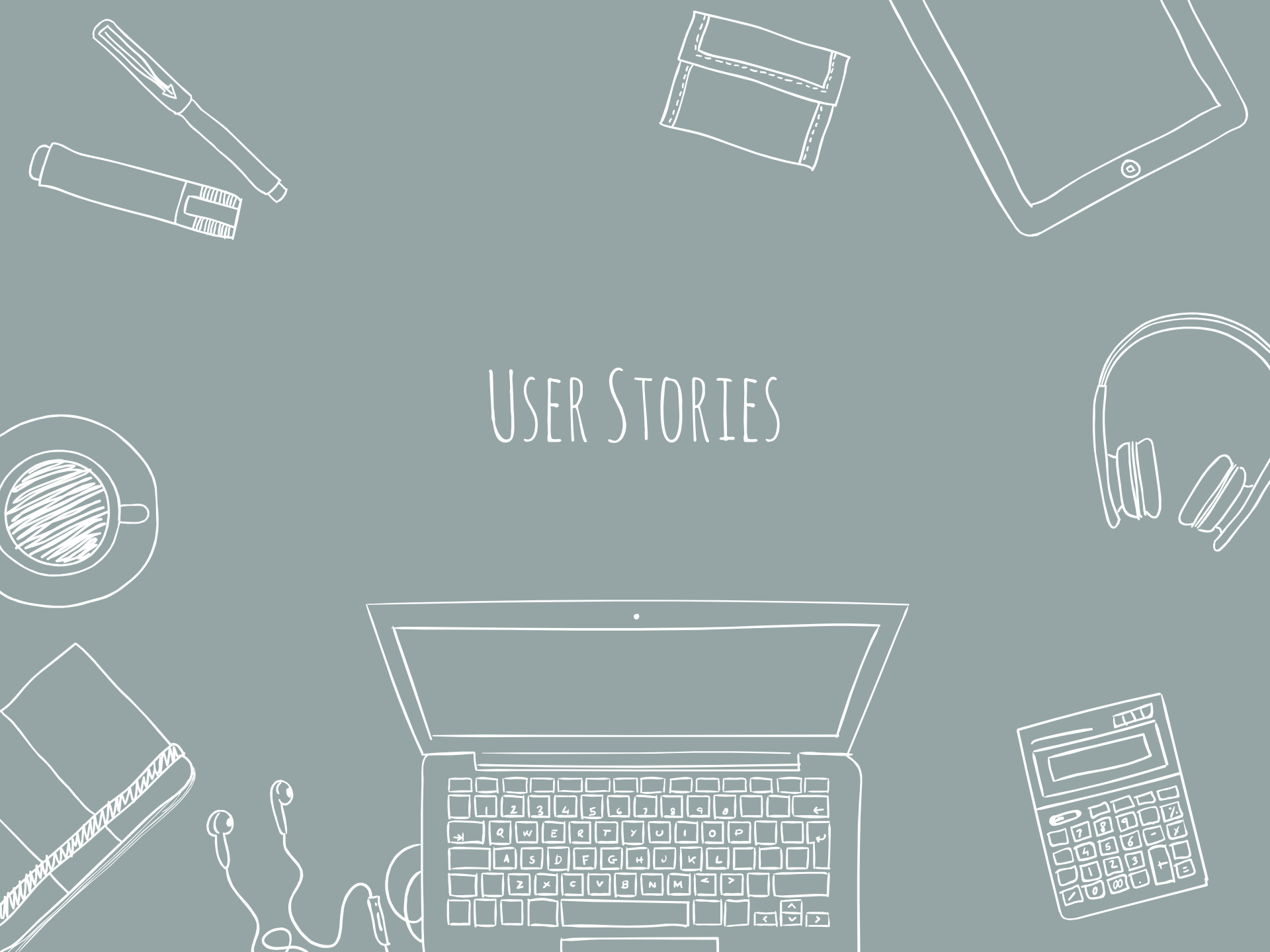
✕ <http://web.engr.oregonstate.edu/~hiltonm/classes/cs361/assignment0.html>



TEAM PROJECT ASSIGNMENT 1

✖ <http://web.engr.oregonstate.edu/~hiltonm/classes/cs361/assignment1.html>

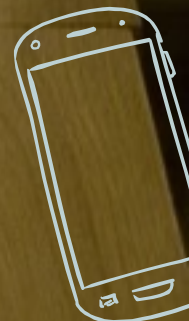
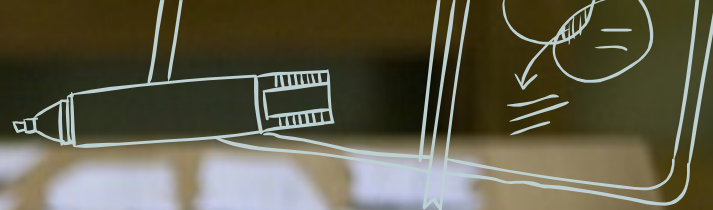
USER STORIES





USER STORIES

- ✖ The Card
- ✖ The Conversation
- ✖ The Confirmation





THE CARD

“As a [role], I want [function],
so that [value]”

Often written on 3x5 card

Examples:



THE CONVERSATION

An open dialog between
everyone working on the project
and the client

Split up Epic Stories if Needed



THE CONFIRMATION

A test that will show when task
is completed

Could be automated, or a script



CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- ✖ Presentation template by [SlidesCarnival](#)
- ✖ Photographs by [Unsplash](#)