Test Driven Development in C#

GETTING STARTED WITH TEST DRIVEN DEVELOPMENT

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Module Outline

What is Test Driven Development?

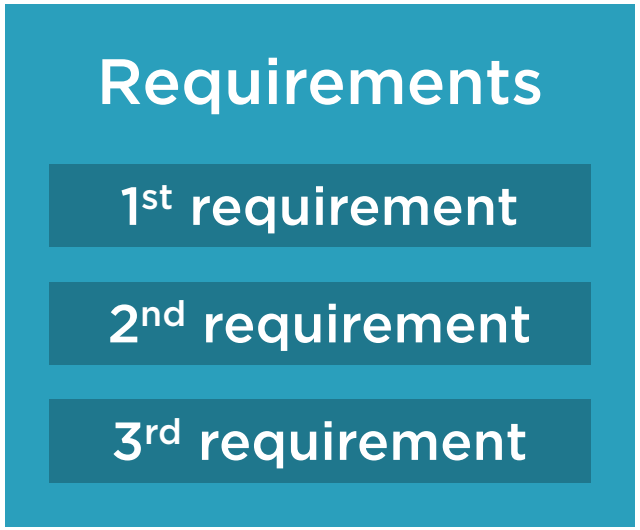
The Wired Brain Coffee scenario

How this course is structured

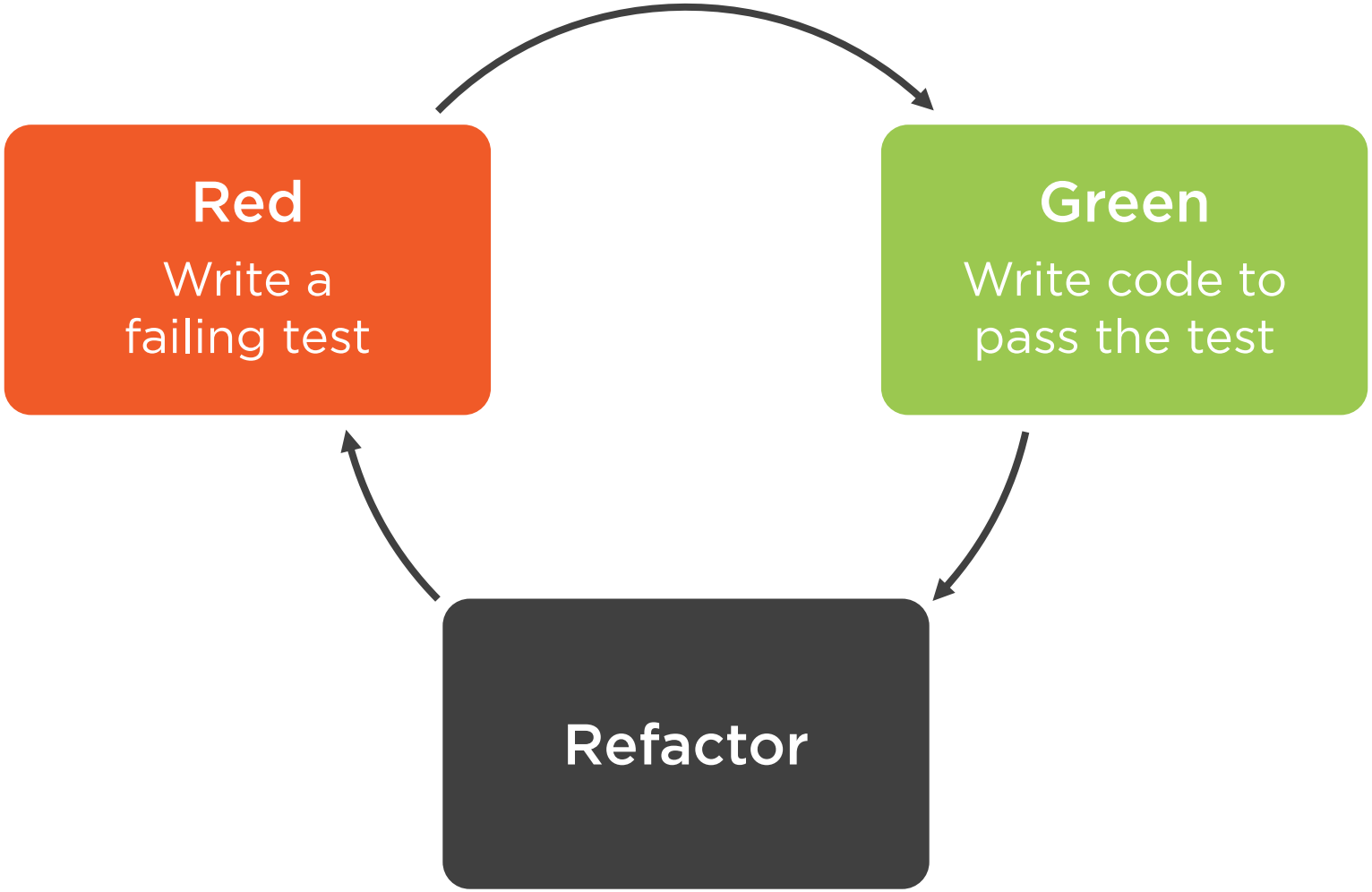
The first requirement

- Test
- Implement
- Refactor

What Is Test Driven Development (TDD)?

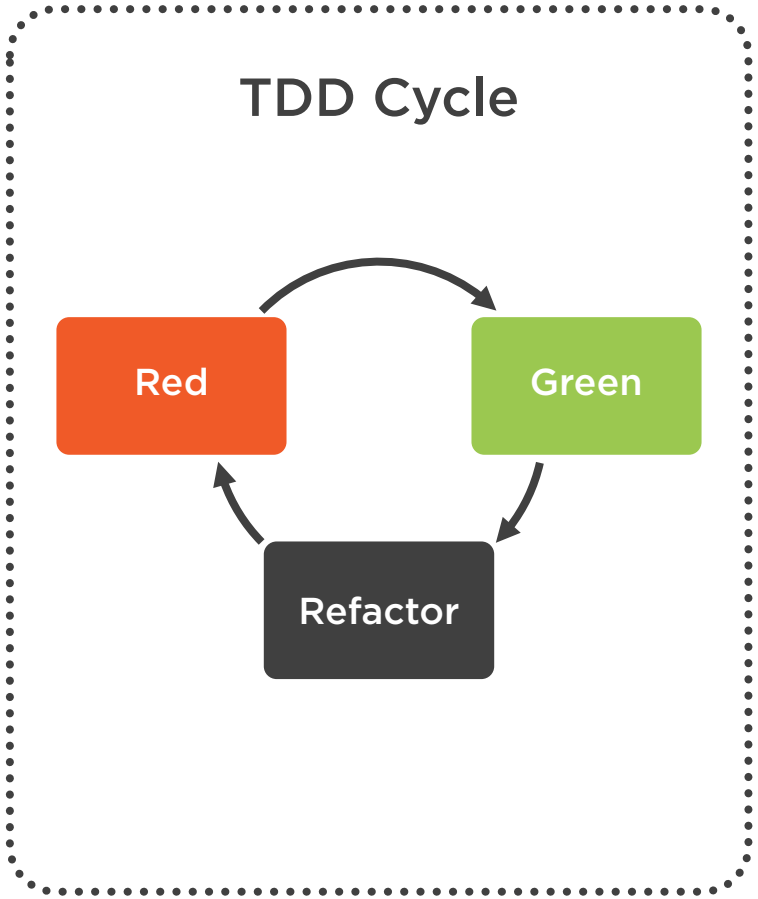


What Is Test Driven Development (TDD)?

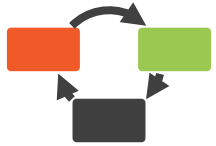


Tests are driving
your implementation

What Is Test Driven Development (TDD)?



Advantages of Test Driven Development



Think about the APIs

Think about what the code should do

Get fast feedback

Create modular code

Write maintainable code

Tests are documentation

Not so easy
to start with a test

TDD is a skill
every developer
should have

The Wired Brain Coffee Scenario

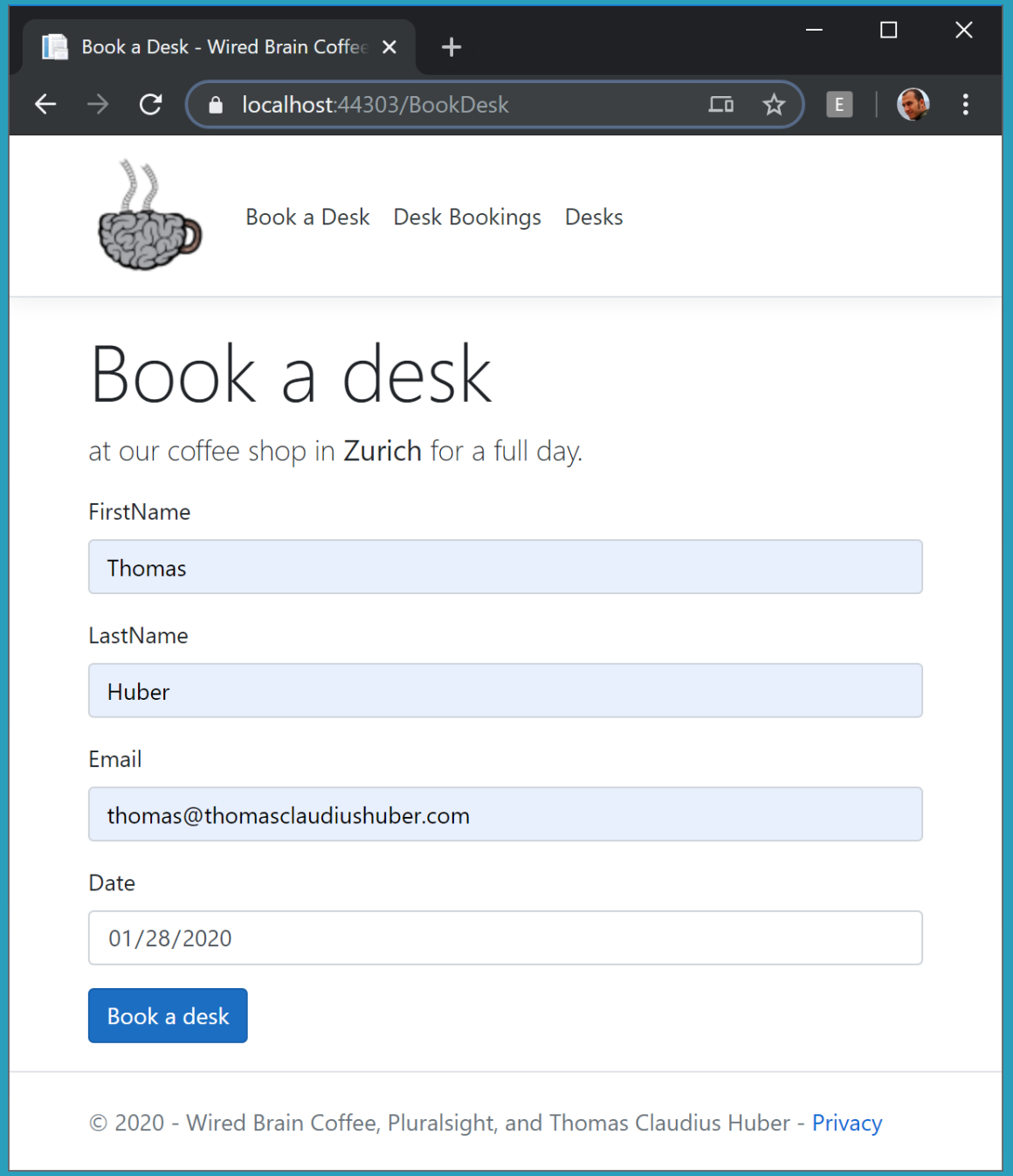
WIRED BRAIN
COFFEE

A company that runs several coffee shops

In their shop in Zurich they have desks for customers

They want a web application where customers can book a desk for a full day

They ask you to build the business logic and parts of the web application


Book a Desk - Wired Brain Coffee
localhost:44303/BookDesk
Book a Desk
Desk Bookings
Desks
Book a desk
at our coffee shop in Zurich for a full day.
FirstName
Thomas
LastName
Huber
Email
thomas@thomasclaudiushuber.com
Date
01/28/2020
Book a desk
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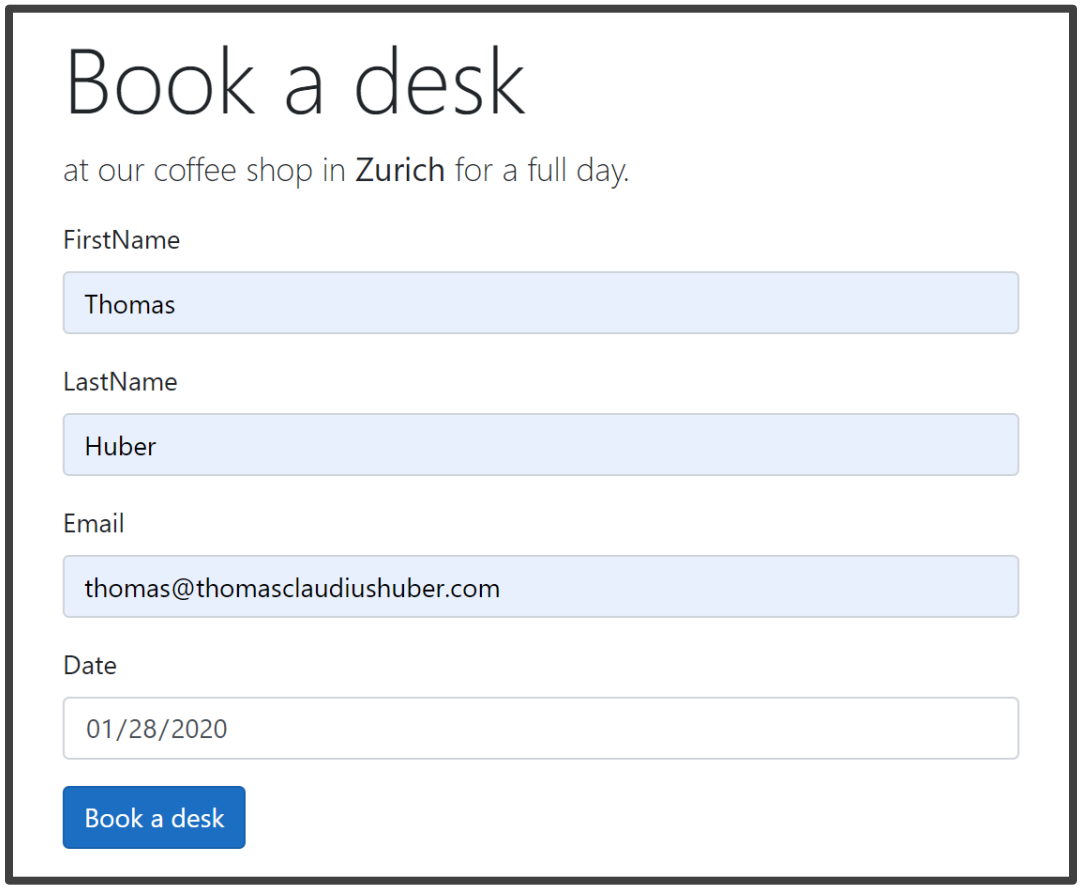
The Planned Architecture

How This Course Is Structured

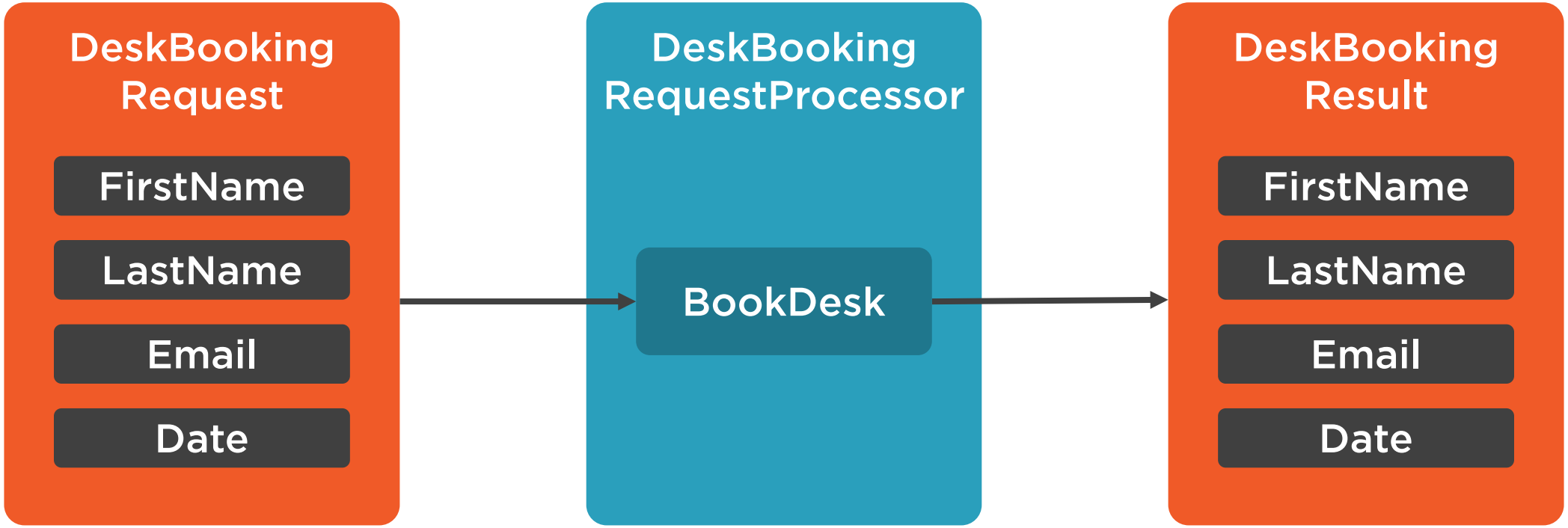
- Getting Started with Test Driven Development
- Testing and Implementing Business Logic
- Adding Features in an ASP.NET Core App

Understand the First Requirement

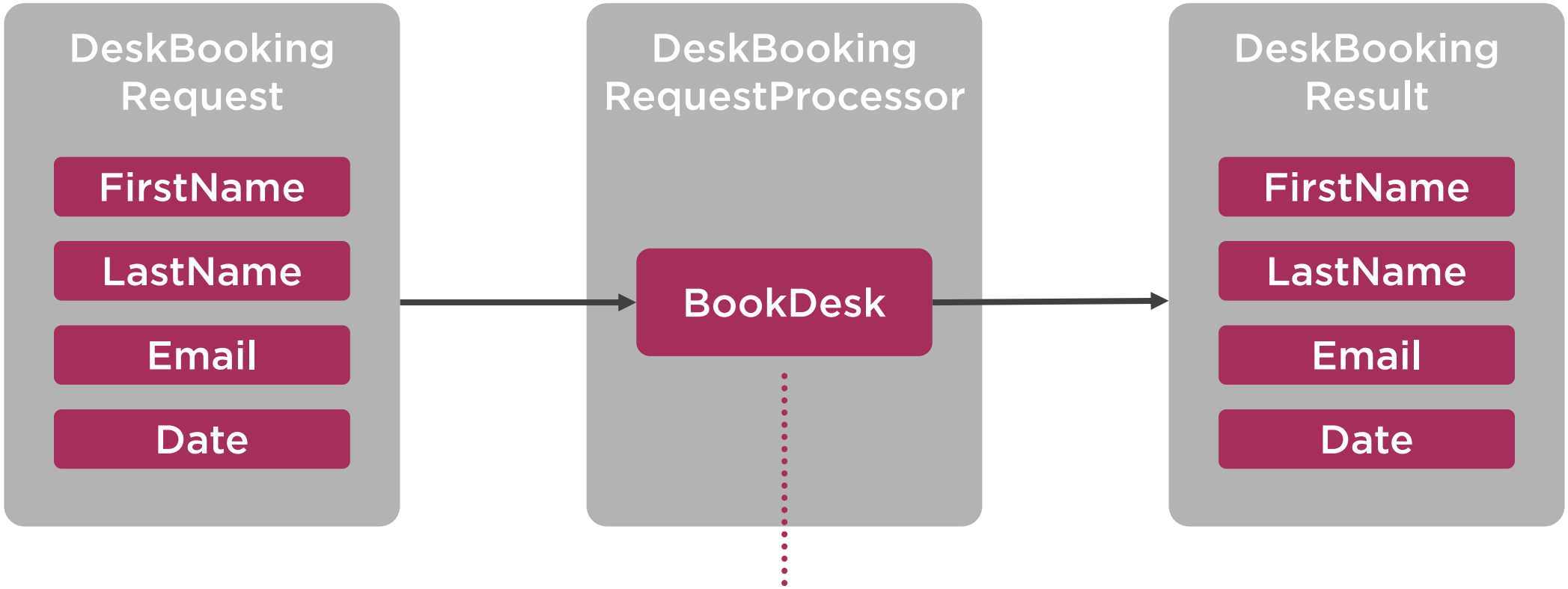
DeskBooking RequestProcessor



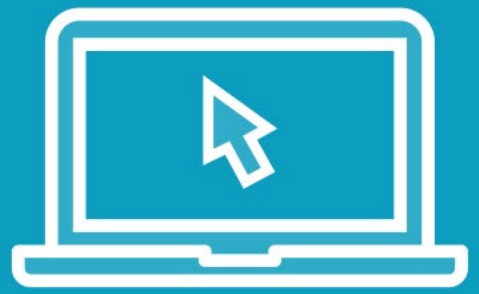
Understand the First Requirement



Understand the First Requirement



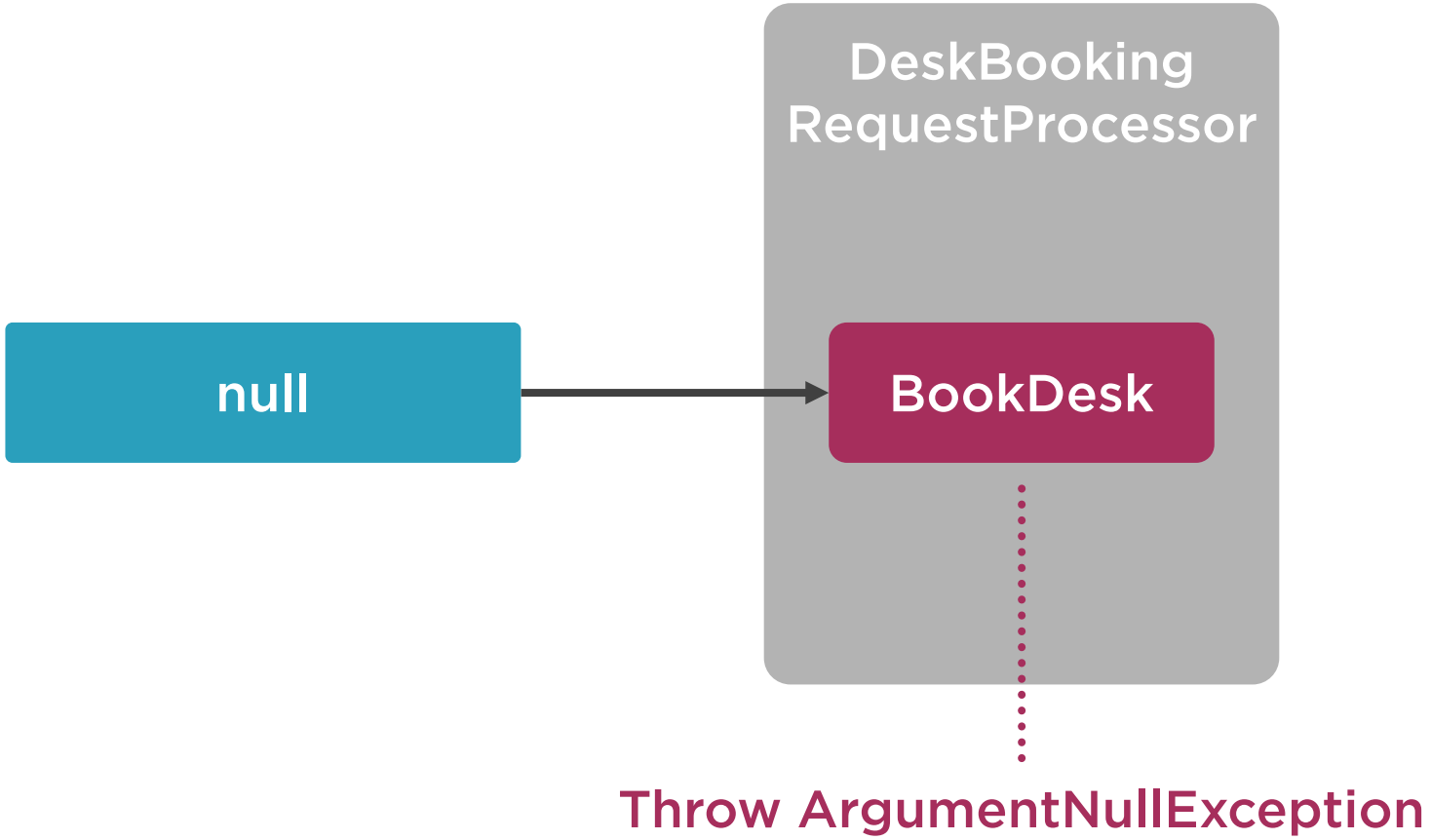
Demo



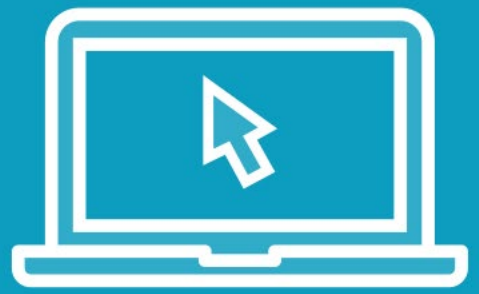
Implement the requirement with TDD

- Create a red unit test
- Write code to make the test green
- Refactor the code

Test and Implement the Next Requirement



Demo



Implement the requirement with TDD

- Test if Exception is thrown
- Throw the Exception
- Refactor the code

Summary

Test Driven Development

- Red
- Green
- Refactor

Advantages of TDD

- Get fast feedback
- Write modular and maintainable code

The Wired Brain Coffee scenario

- DeskBookingRequestProcessor class