Day 15

The one link you need to remember
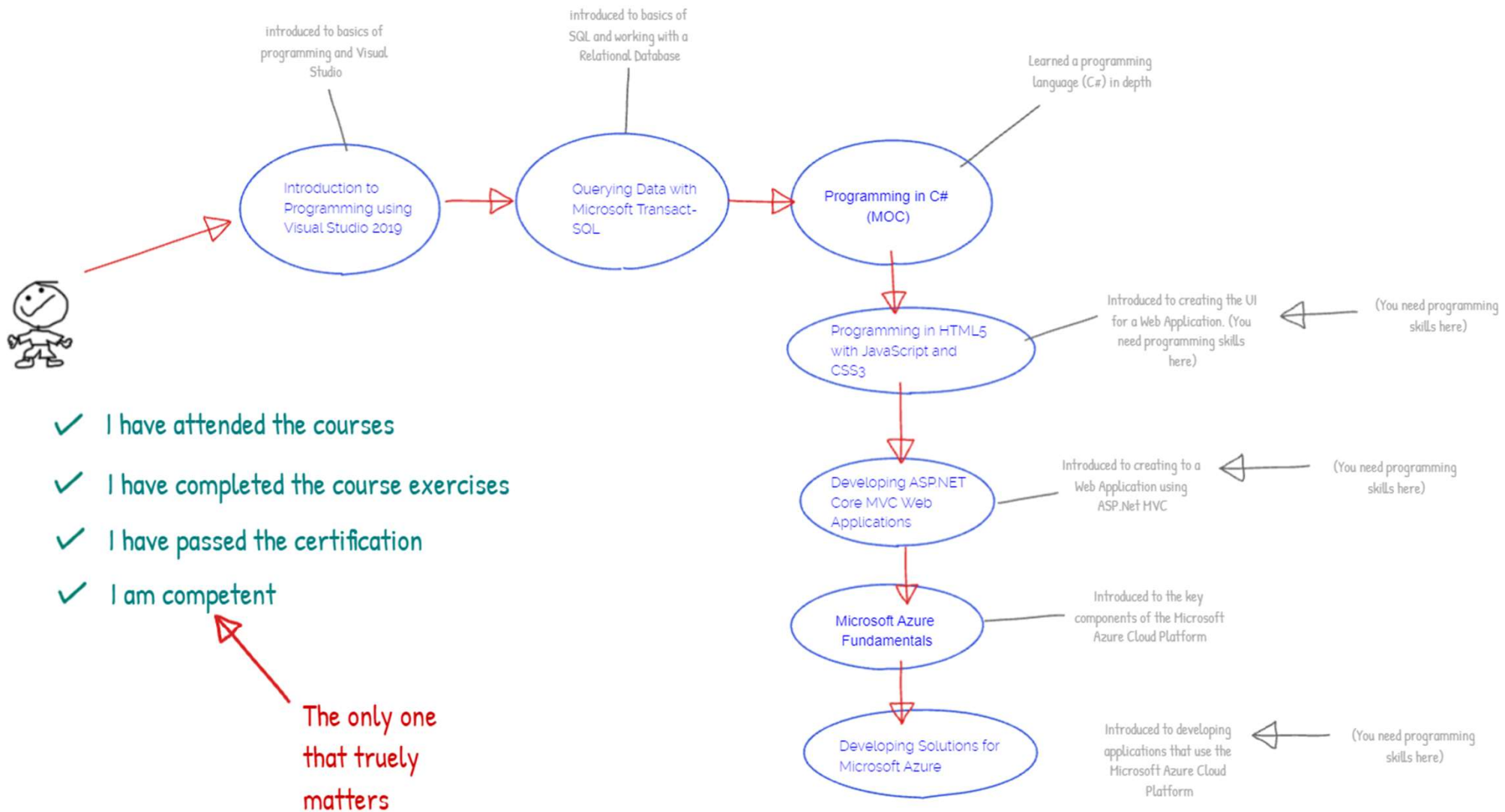
https://ddls.to/20483

Ready?

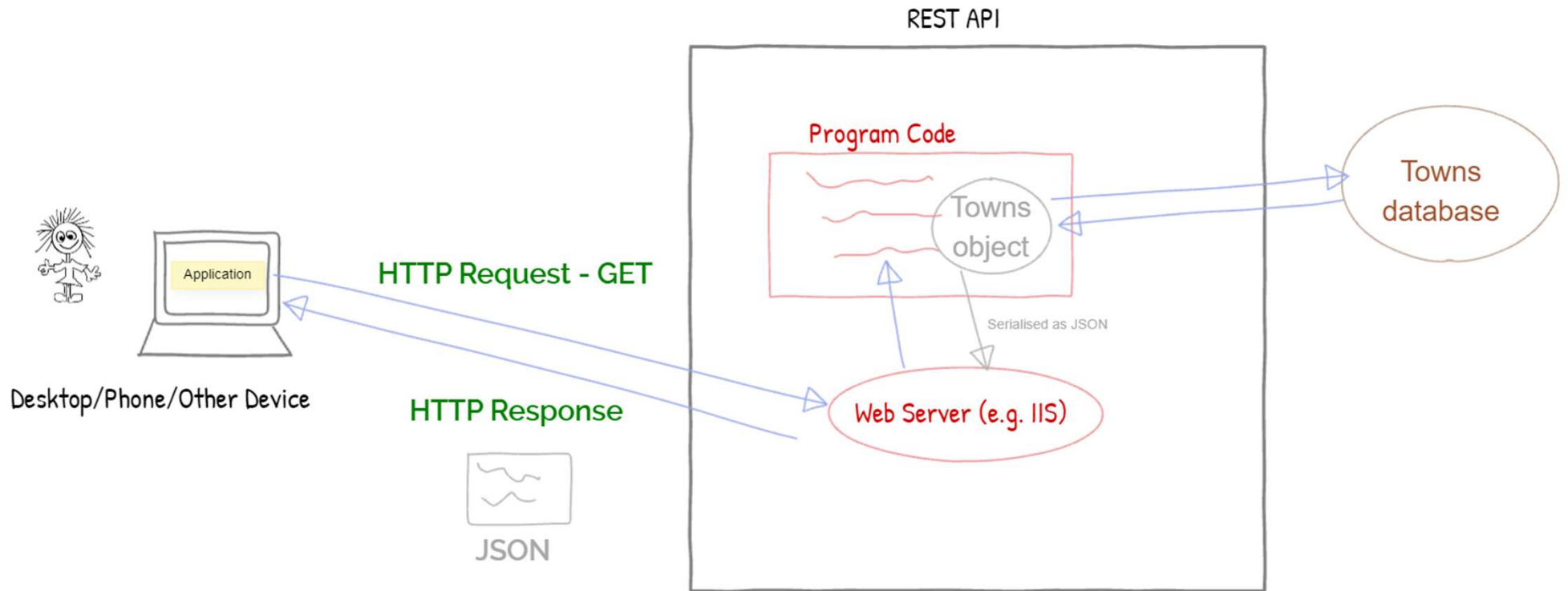# Do this every day BEFORE the class starts (takes about 15 minutes) (http://ddls.to/everyday)

1. Launch Lab01.
2. Login to Lab01 as **Admin.**
3. While in the Lab01 environment,
   i. run **cmd.exe** from the Windows Start button.
   ii. Run the command **git clone --depth 1** https://github.com/Mark-AIICT/CAD-2.git **C:\Users\Admin\Desktop\MarksFiles**
   iii. Navigate to **C:\Users\Admin\Desktop\MarksFiles\setups**, then right-mouse click **bootstrap.cmd** and run as administrator
   iv. While it's running, Sign in to Visual Studio on the Lab Environment. You can use any Microsoft account.
   v. When the script end it reboots the Virtual Machine. That's necessary.
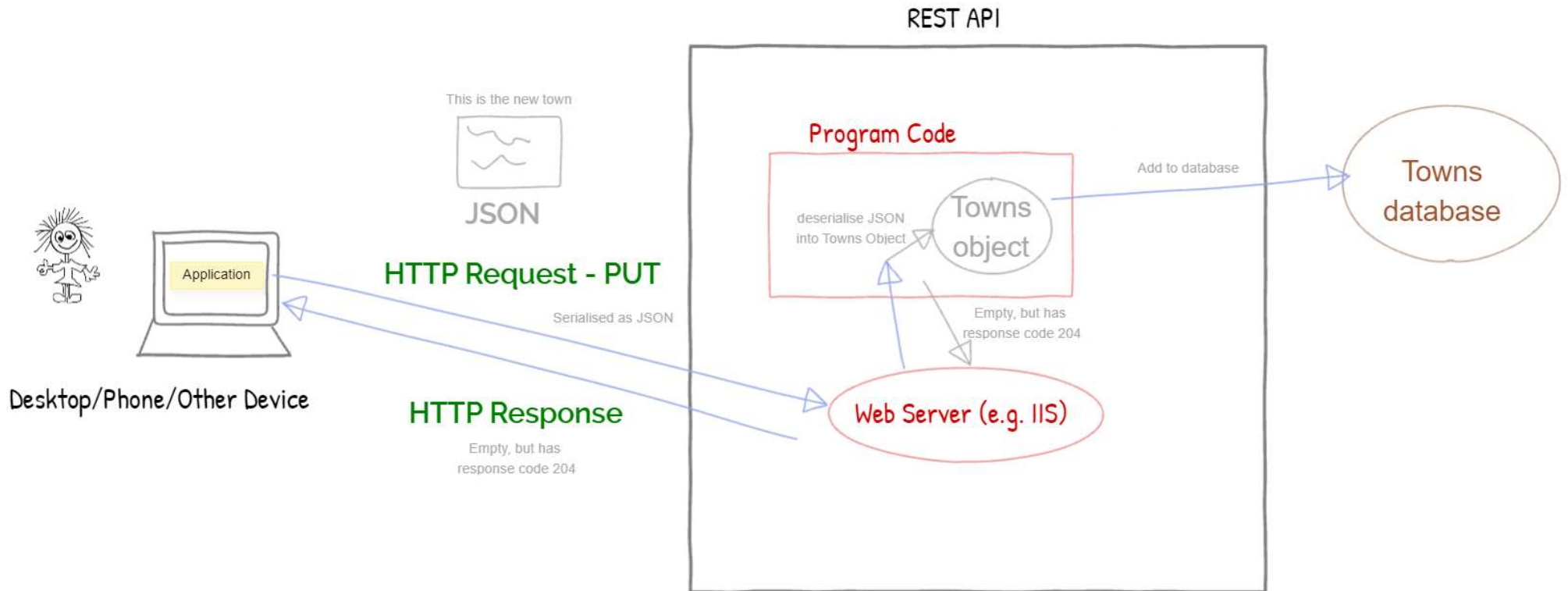   vi. Save the lab. (the save link is at the top right of the screen in the dropdown menu)

introduced to basics of programming and Visual Studio

introduced to basics of SQL and working with a Relational Database

Learned a programming language (C#) in depth

Introduction to Programming using Visual Studio 2019

Querying Data with Microsoft Transact-SQL

Programming in C# (MOC)

Programming in HTML5 with JavaScript and CSS3

Introduced to creating the UI for a Web Application. (You need programming skills here)

(You need programming skills here)

Developing ASP.NET Core MVC Web Applications

Introduced to creating to a Web Application using ASP.Net MVC

(You need programming skills here)

Microsoft Azure Fundamentals

Introduced to the key components of the Microsoft Azure Cloud Platform

Developing Solutions for Microsoft Azure

Introduced to developing applications that use the Microsoft Azure Cloud Platform

(You need programming skills here)

✓ I have attended the courses

✓ I have completed the course exercises

✓ I have passed the certification

✓ I am competent

The only one that truely matters

Key Recollections from earlier

Class
Inheritance
Method
Property
Field
Public
Private
Protected
Internal
Interface
Delegate
Event
Lambda
Task

What is REST?

REST API

Program Code

Towns object

Serialised as JSON

Towns database

HTTP Request - GET

HTTP Response

JSON

Desktop/Phone/Other Device

Application

Web Server (e.g. IIS)

REST PUT Example

Desktop/Phone/Other Device

Application

This is the new town

JSON

HTTP Request - PUT

Serialised as JSON

HTTP Response

Empty, but has
response code 204

REST API

Program Code

deserialise JSON
into Towns Object

Towns
object

Add to database

Empty, but has
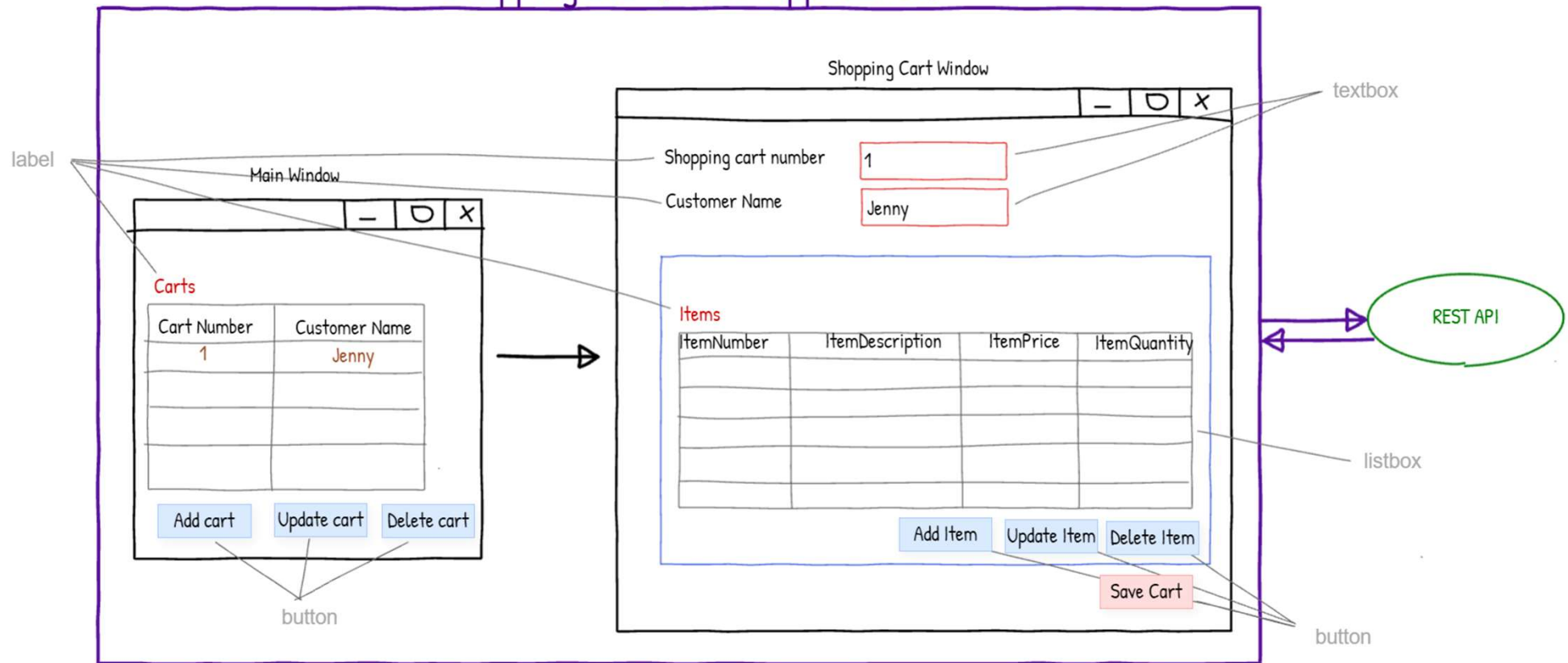response code 204
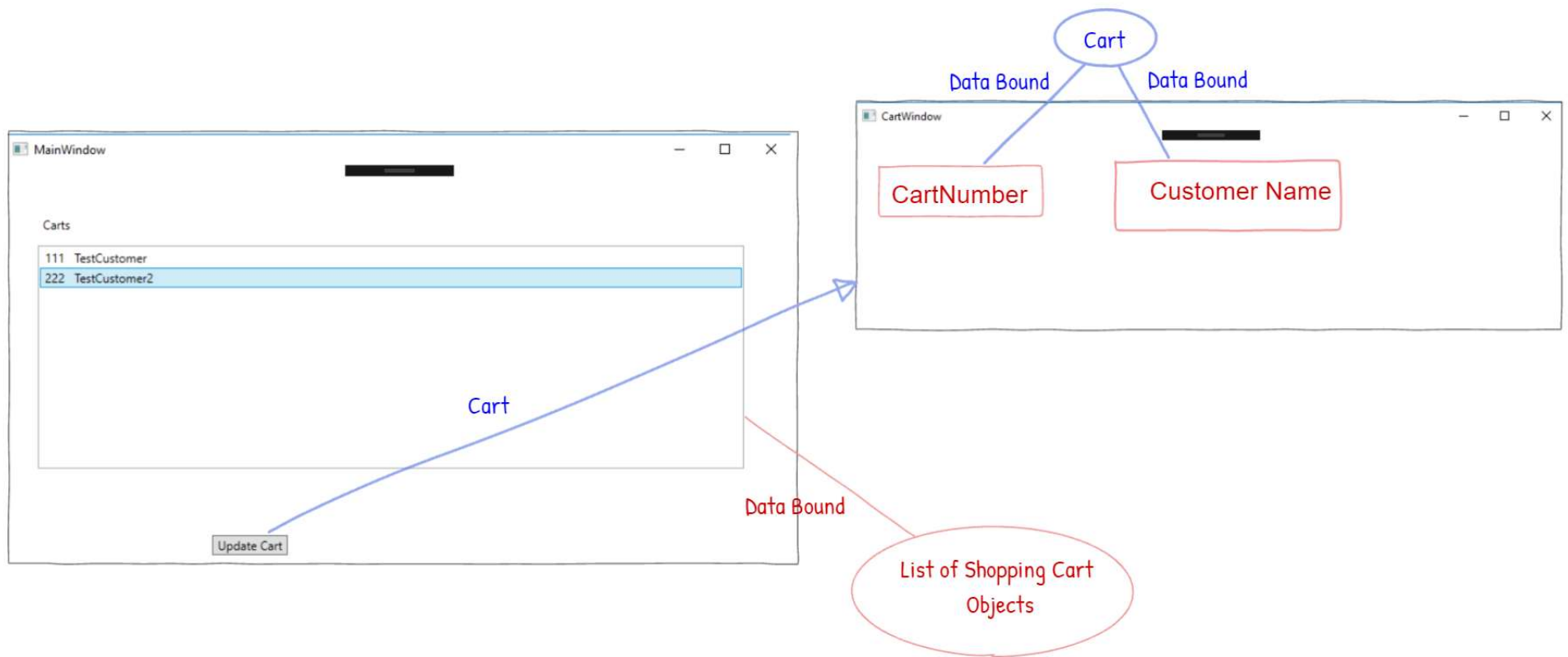
Web Server (e.g. IIS)

Towns
database

Yesterday

- We completed the code that,
  - Adds a new cart
  - Deletes a cart
  - Updates a cart
  - Displays a list of carts in a WPF Window

Shopping.exe (A WPF Application)

label

textbox

Main Window

Shopping Cart Window

Shopping cart number | 1

Customer Name | Jenny

Carts

Cart Number	Customer Name
1	Jenny

Items

ItemNumber	ItemDescription	ItemPrice	ItemQuantity

listbox

Add cart   Update cart   Delete cart

Add Item   Update Item   Delete Item

Save Cart

button

button

REST API

MainWindow

Carts

| 111 | TestCustomer |
| 222 | TestCustomer2 |

Update Cart

Cart

CartWindow

Cart

Data Bound   Data Bound

CartNumber   Customer Name

Data Bound

List of Shopping Cart Objects

- To do on your lab01 VM
  - Set git global config

    git config --global user.name "fred"
    git config --global user.email fred@work.com

  - Clone the exercises repo

Course Outline

- Module 1: Review of Visual C# Syntax

- Module 2: Creating Methods, Handling Exceptions, and Monitoring Applications

- Module 3: Basic Types and Constructs of Visual C#

- Module 4: Creating Classes and Implementing Type-Safe Collections

- Module 5: Creating a Class Hierarchy by Using Inheritance

- Module 6: Reading and Writing Local Data

- Module 7: Accessing a Database

- Module 8: Accessing Remote Data (I'm replacing this with a better module)

- Module 9: Designing the User Interface for a Graphical Application

- Module 10: Improving Application Performance and Responsiveness

- GIT

- REST + WPF + Sharpen C# Skills

- Config Files

- .Net Framework Vs .Net Core Vs .net standard Vs .Net

- VSCode Vs Visual Studio

- Nuget

- Module 11: Integrating with Unmanaged Code?

- Module 12: Creating Reusable Types and Assemblies?

- Module 13: Encrypting and Decrypting Data?