

Windows Presentation Foundation

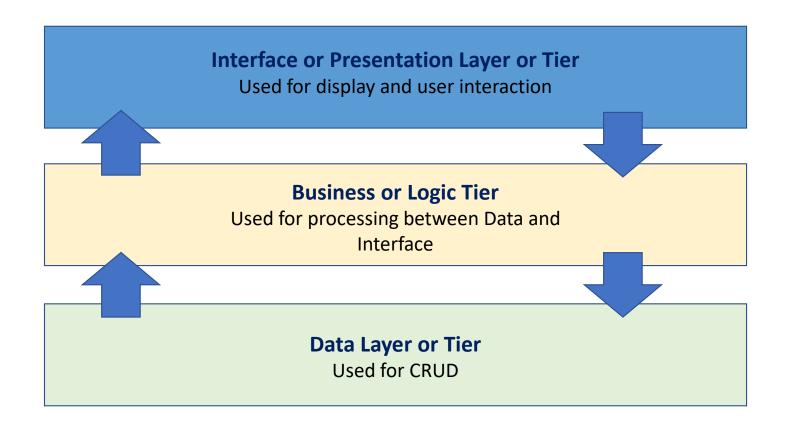
Structures and elements



# Effective development approaches

- Separate concerns
  - Interface Layer
  - Logic Layer
  - Data Layer







#### Data layer

- For our application
  - A simple text file
  - Classes to access the data
  - Methods to return items and lists



#### Logic layer

- Classes have methods we need
- These do work for us
  - Eg manipulate strings
  - Calculate values
- Highly effective for extension
- Highly effective for maintenance



### Interface layer

- Windows Presentation Foundation (WPF)
  - Has its own interface layer file
  - Has its own logic layer file
  - Logic is implemented as C#



## WPF Interface layer

- Controls are defined using markup
  - A system of tagging like HTML
- Positions should be relative not absolute
- Gives us systems for responsive design



#### WPF Markup

- Written in
  - eXtensible
  - Application
  - Markup
  - Language





### Markup language

- Interpreted by the interface
- Layout is 'constructed' from components
- The components live in containers
  - Think of <div> in HTML5
- Much, much more on this later



#### Styles

- Central definition: Write once, use many
  - Think CSS
- Allows for coherent testing
- Allows application of standards
- Allows for re-use
- Allows for 'override' when required



# Application of styles

- Controls have properties
- Background, Margins, Fonts in Text Boxes etc.
- Styles are applied to the properties
  - At Container Level
  - At Control Level



#### Highly relevant

- Microsoft is committed
- Around for a long time
- Ported into .NET Core
- Used in product development
- Community development through Open Sourcing
- Thinking processes link to others

