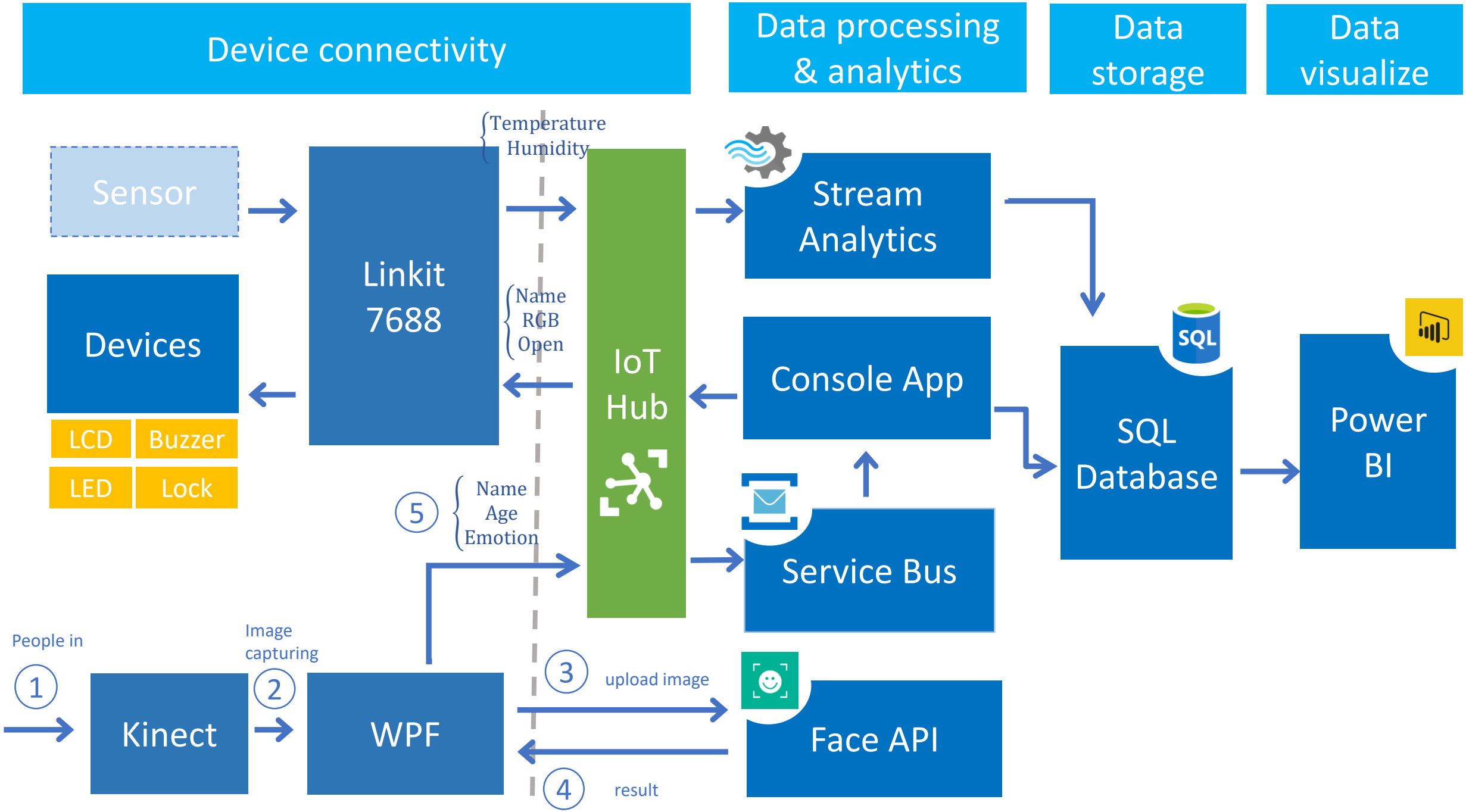
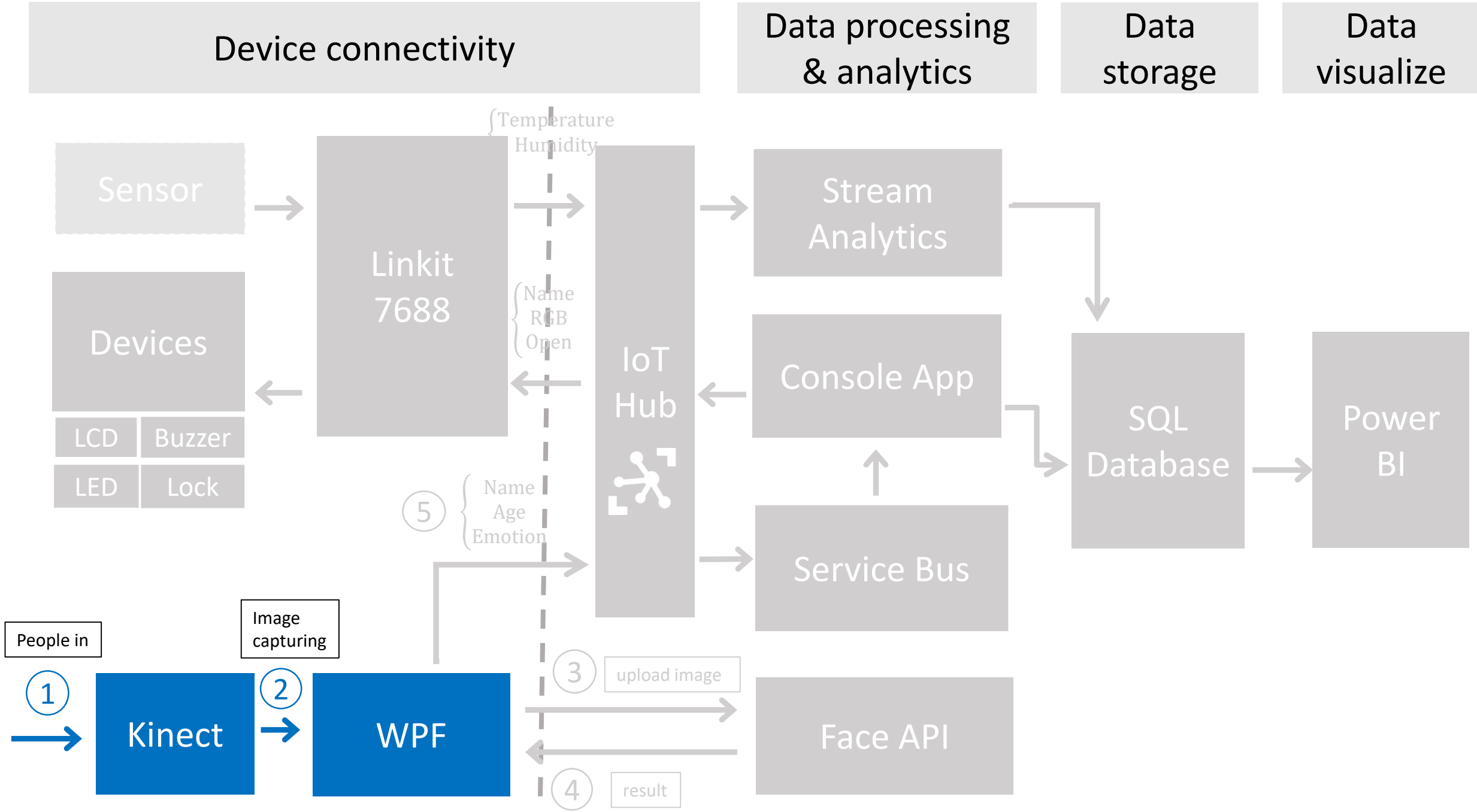

Device connectivity
Data processing & analytics
Data storage
Data visualize
Sensor
Linkit 7688
Temperature
Humidity
IoT Hub
Stream Analytics
Devices
LCD
Buzzer
LED
Lock
Name
RGB
Open
Console App
SQL
SQL Database
Power BI
5
Name
Age
Emotion
Service Bus
People in
1
Kinect
Image capturing
2
WPF
3
upload image
4
result
Face API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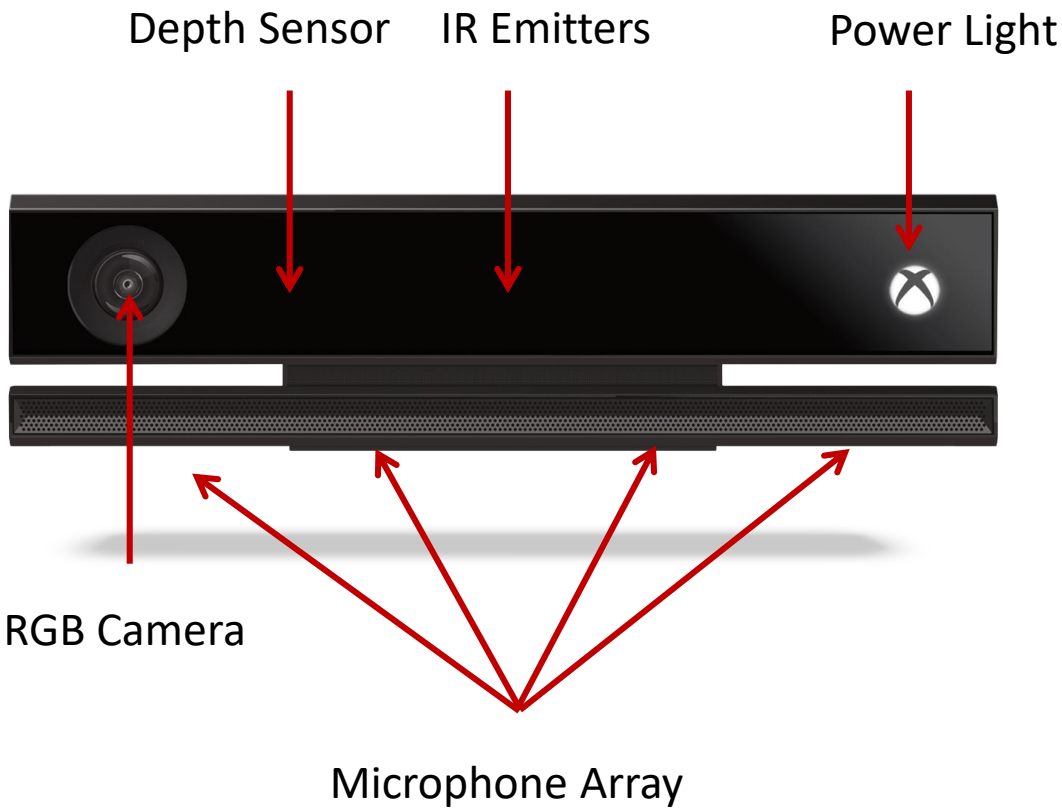
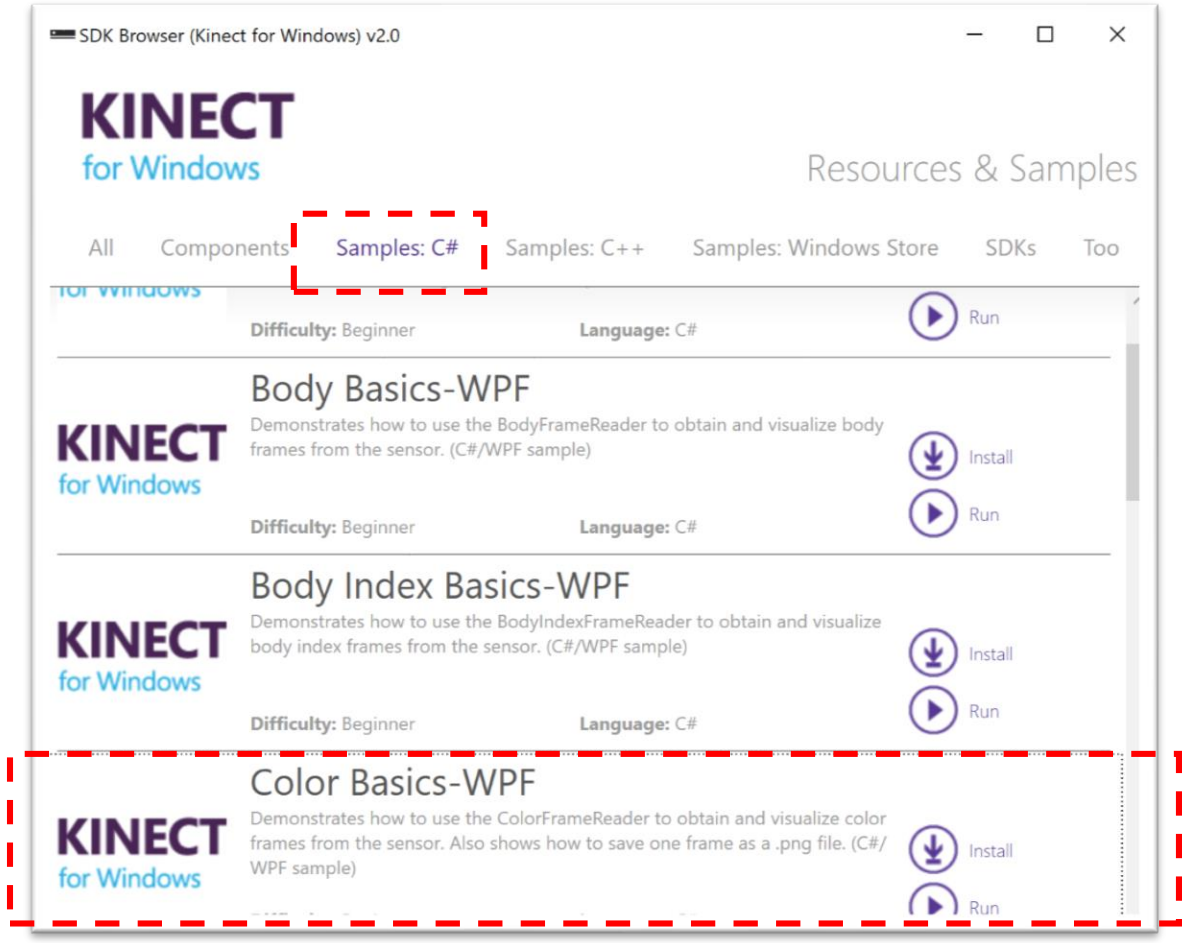
Sensor Component



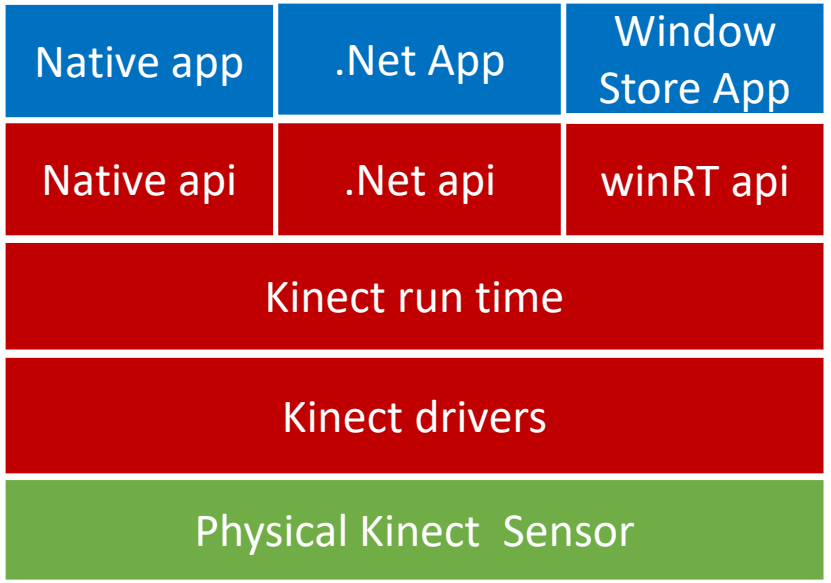
data from SDK

- Color frame： 1920 x 1080
  30 / 15 FPS
- Depth frame： 512 x 424
  30 FPS
  Range : 0.5 ~ 8 M
- Body frame
- Infrared frame：512 x 424
  30 FPS、16bit 強度值
- Audio



- Provide C# 、C++ 、and Windows Store 3 kinds of example
- Use C# to develop in .Net framework

[K4W v2 SDK High Level Architecture]



SDK Browser (Kinect for Windows) v2.

- **Polling Mode Structure**
  - ✓Open Kinect sensor

```
// open the sensor
this.kinectSensor.Open();
```

  - ✓Initialize Components get data source

```
// initialize the components (controls) of the window
this.InitializeComponent();
```

  - ✓Open Frame Reader

```
this.bodyFrameReader = this.kinectSensor.BodyFrameSource.OpenReader();
this.bodyFrameReader.FrameArrived += this.Reader_FrameArrived;
```

  - ✓Event loop – get frame reference by frame reader 30 frame per second

```
private  async void Reader_FrameArrived(object sender, BodyFrameArrivedEventArgs e)
```

- **See Detail Code at :**
  https://github.com/yunyuntsai/Kinect-FaceRecognition/blob/master/Kinect-FaceRecognition/MainWindow.xaml.cs

Basic structure to Access data

WPF

window presentation foundation

- An application with Windows UI
- Base On XML & .Net Framework 3
- **Markup**
  - create windows, dialog boxes, pages, and user controls
- **Code-Behind**
  - implement the functionality that responds to user interactions

MainWindow.xaml

MainWindow.xaml.cs