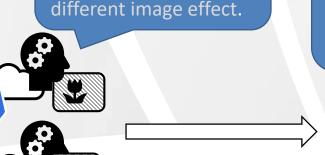
## Exercise

Start by designing the public API (DI style)

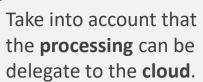
Download images from web (limit the download rate, don't download more than you can process)



Transform each image on multiple channels, each channel for different image effect.



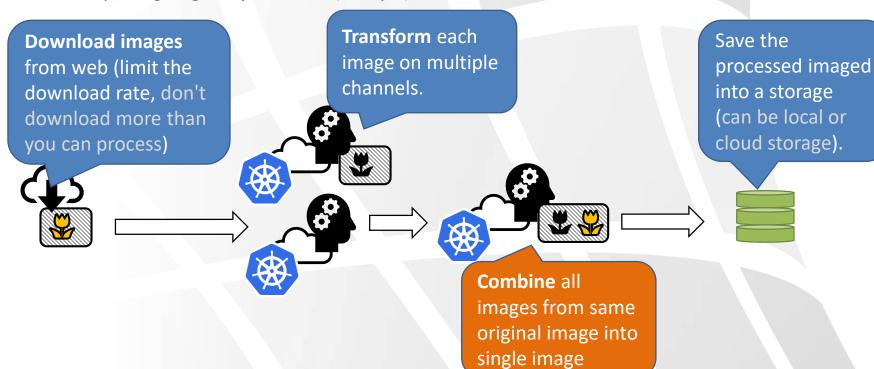
Save the processed imaged into a storage (can be local or cloud storage).



- Image processing libraries: see on the next pages
- Image sources:
  - https://source.unsplash.com/random/1200x1200
  - https://dog.ceo/api/breeds/image/random

## Exercise (Bonus)

• Start by **designing the public API** (DI style)



- Image processing libraries: see on the next pages
- Image sources:
  - https://source.unsplash.com/random/1200x1200
  - https://dog.ceo/api/breeds/image/random

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## Exercise (image providers)

```
Sample for SkiaSharp API
NuGet: SkiaSharp
Doc: <a href="https://developer.xamarin.com/api/namespace/SkiaSharp/">https://developer.xamarin.com/api/namespace/SkiaSharp/</a>
using(var fs = File.OpenRead(path))
using (var stream = new SKManagedStream(fs))
using (var dest = File.OpenWrite("target.jpg"))
using (var bitmap = SKBitmap.Decode(stream))
using (var filter = SKImageFilter.CreateBlur(50, 50))
using (var surface = SKSurface.Create(bitmap.Info))
using (var paint = new SKPaint())
    paint.ImageFilter = filter;
    SKCanvas canvas = surface.Canvas;
    canvas.DrawBitmap(bitmap, SKRect.Create(bitmap.Width, bitmap.Height), paint);
    SKData data = surface.Snapshot().Encode(SKEncodedImageFormat.Jpeg, 80);
    data.SaveTo(dest);
```

Sample: 101 ImageManipServices