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# VSS02 – HOL Xamarin Mobile First Architecture

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*The Ultimate Education Destination*

2018  
**Orlando**



Level: Introductory - Intermediate

X Xpirit

# Railroad Case Study



# Requirements



- Frontliner reports for duty every morning to start their shift
- Get an overview of their shift for the day
  - Which train to drive
  - Which stations
  - Construction activities to take into account
- During the shift
  - Any obstacles or delays have to be signaled immediately

# There's more...

- It must run on smartphones!
- Bring Your Own Device
- Secure access to enterprise backoffice systems
- Backoffice exposes SOAP/XML webservices
- Single Sign On across all apps

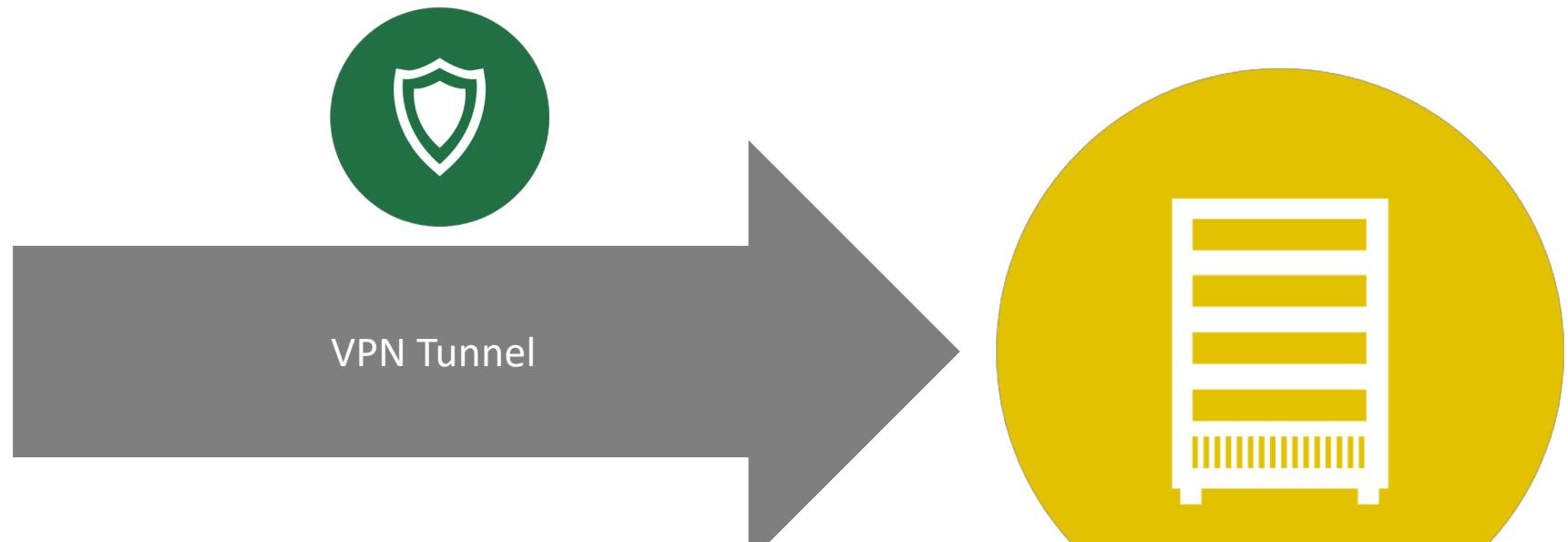
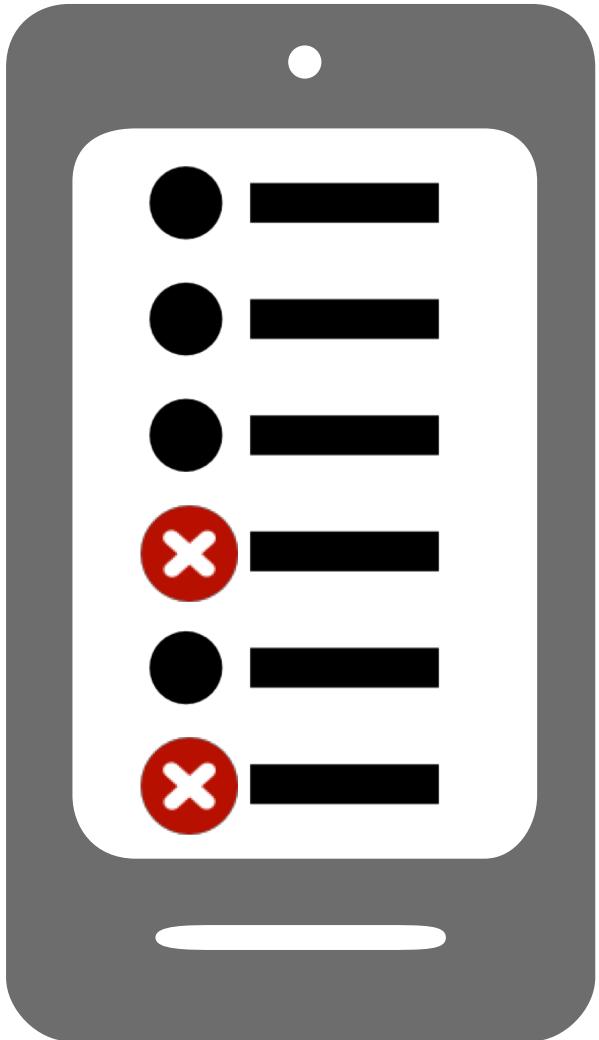


A close-up photograph of Jim Halpert from the TV show "The Office". He has dark hair and is wearing a dark suit jacket over a white shirt. His mouth is wide open in a shocked or surprised expression, and his eyes are wide. The background is slightly blurred, showing what appears to be a office environment.

**BUT HOW???**

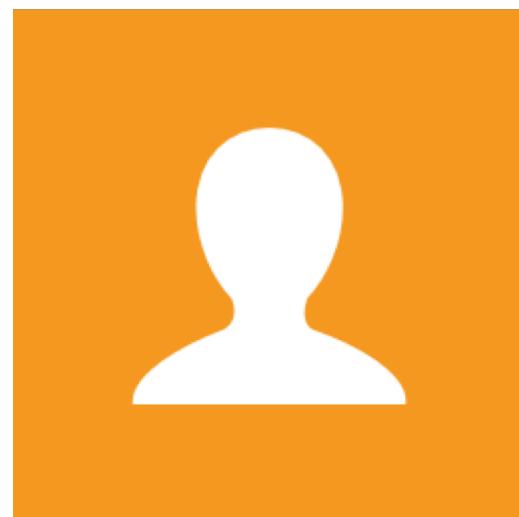
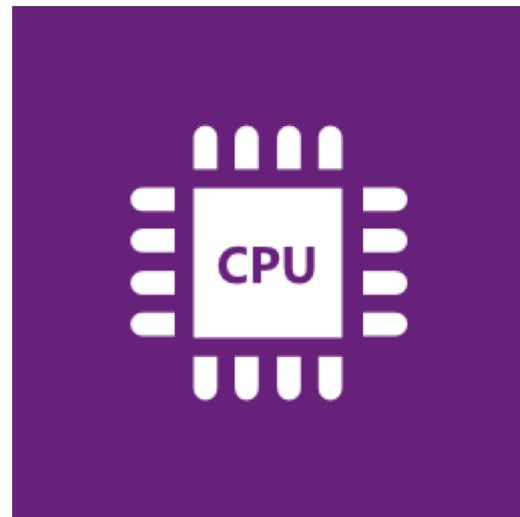


How would  
you architect  
this?

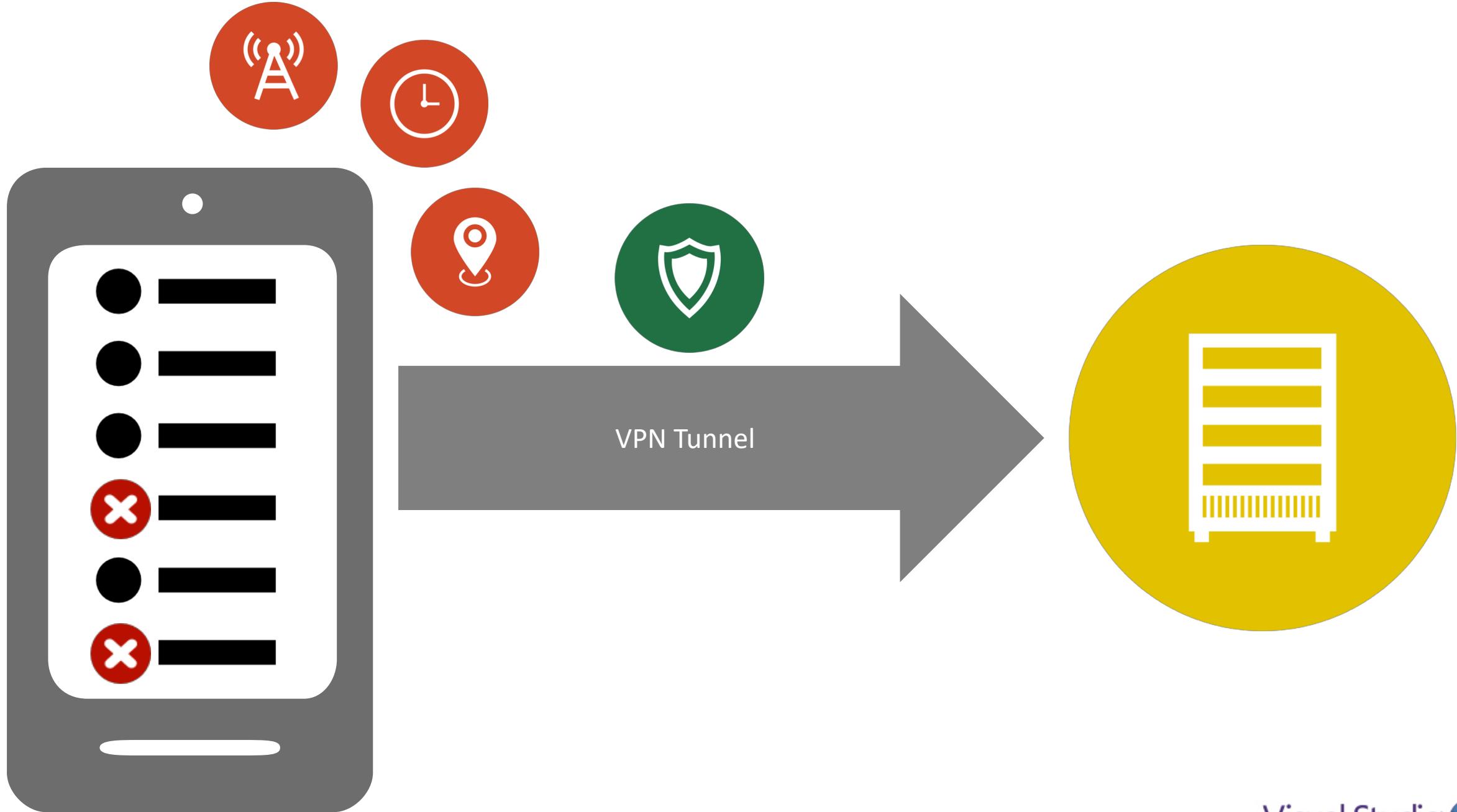


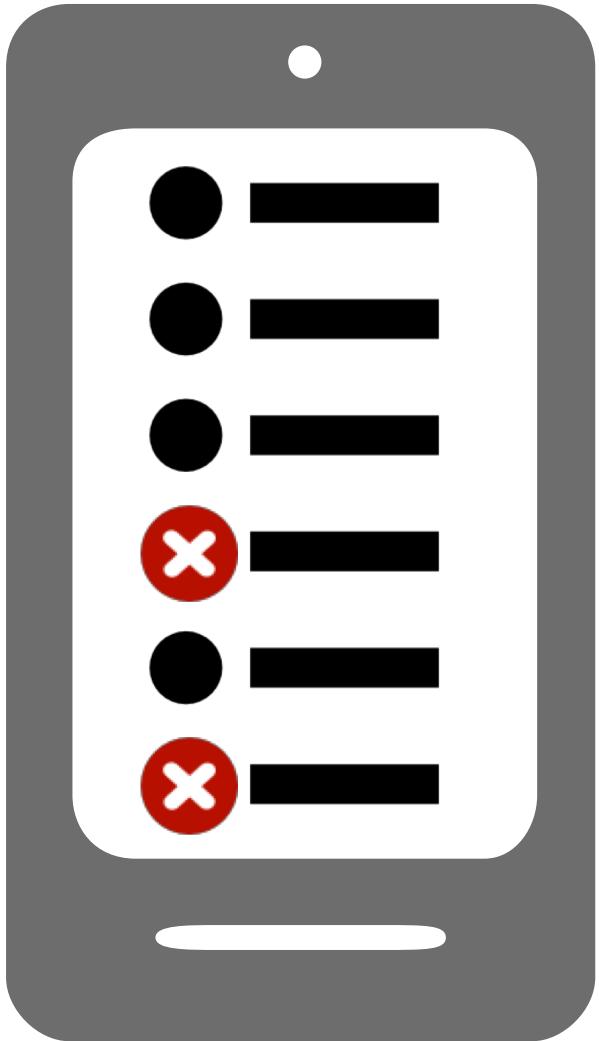


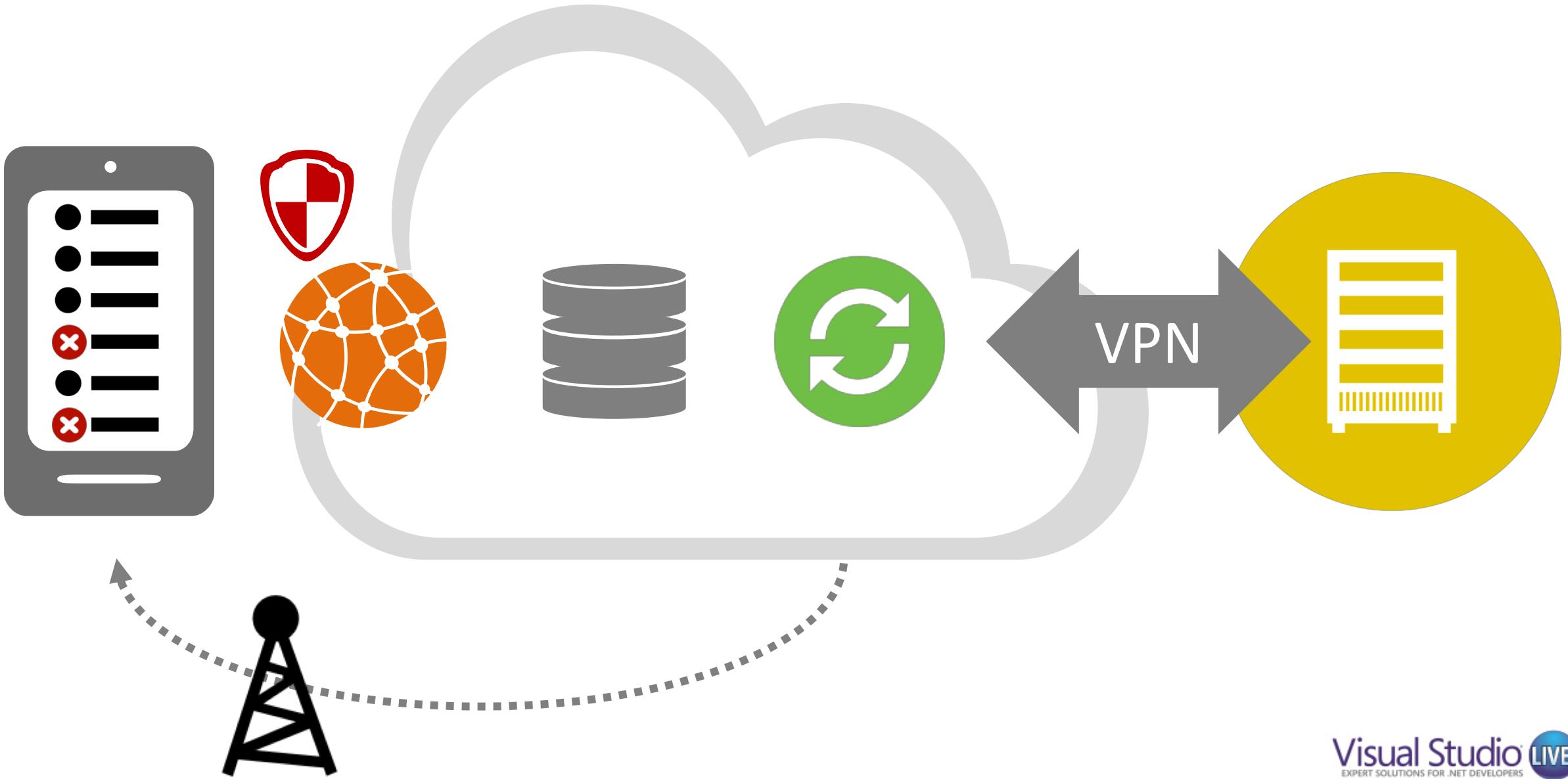
# But what about...



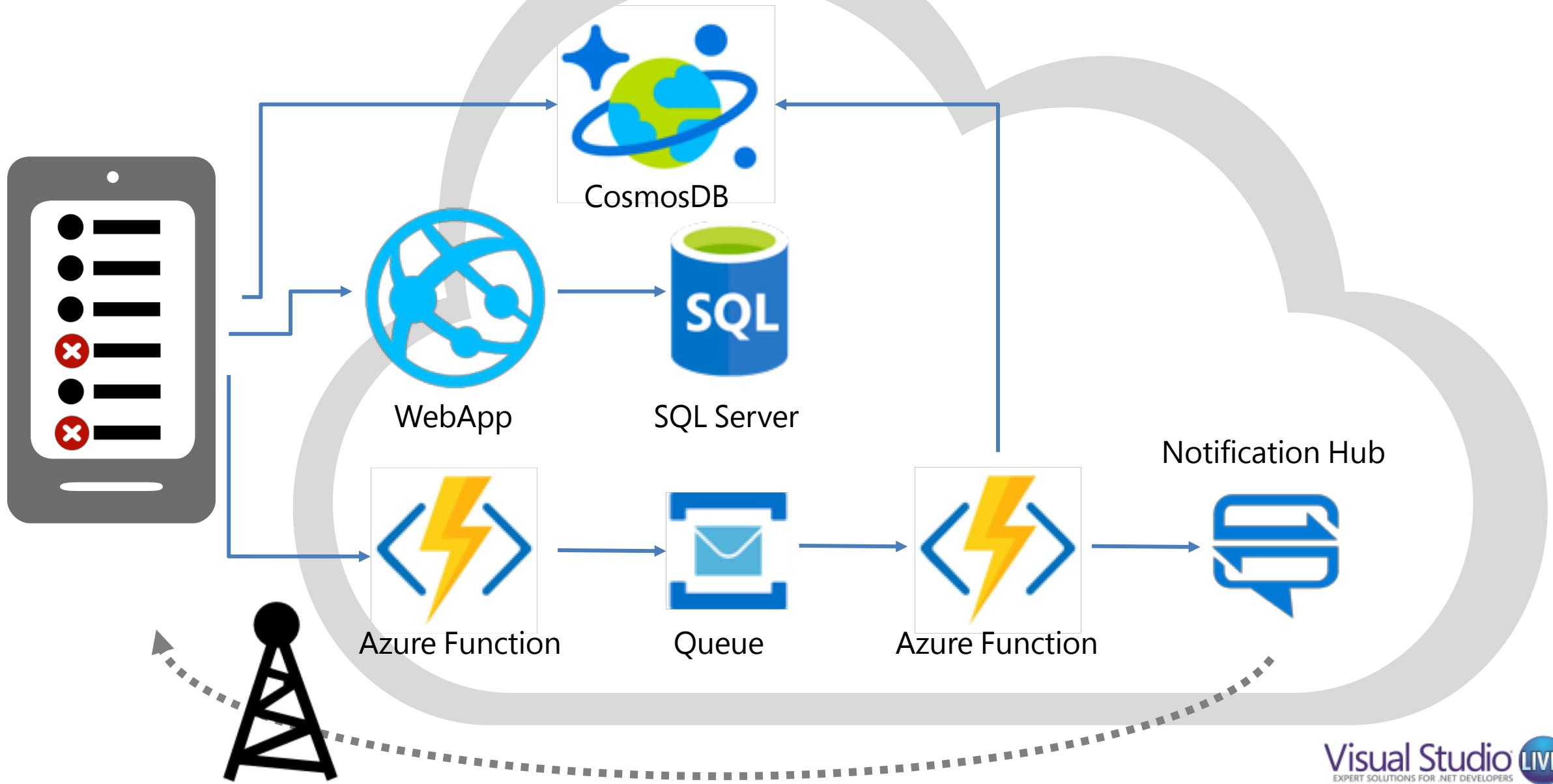








# How this could look in Azure...

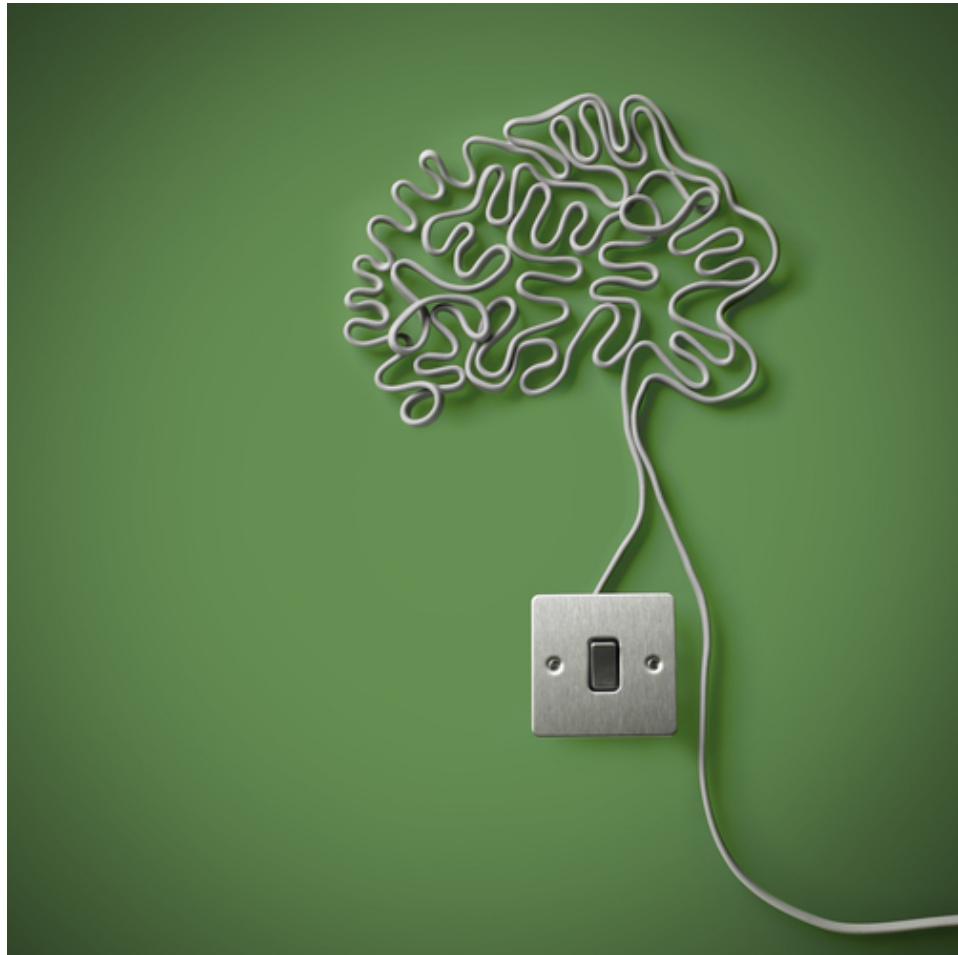




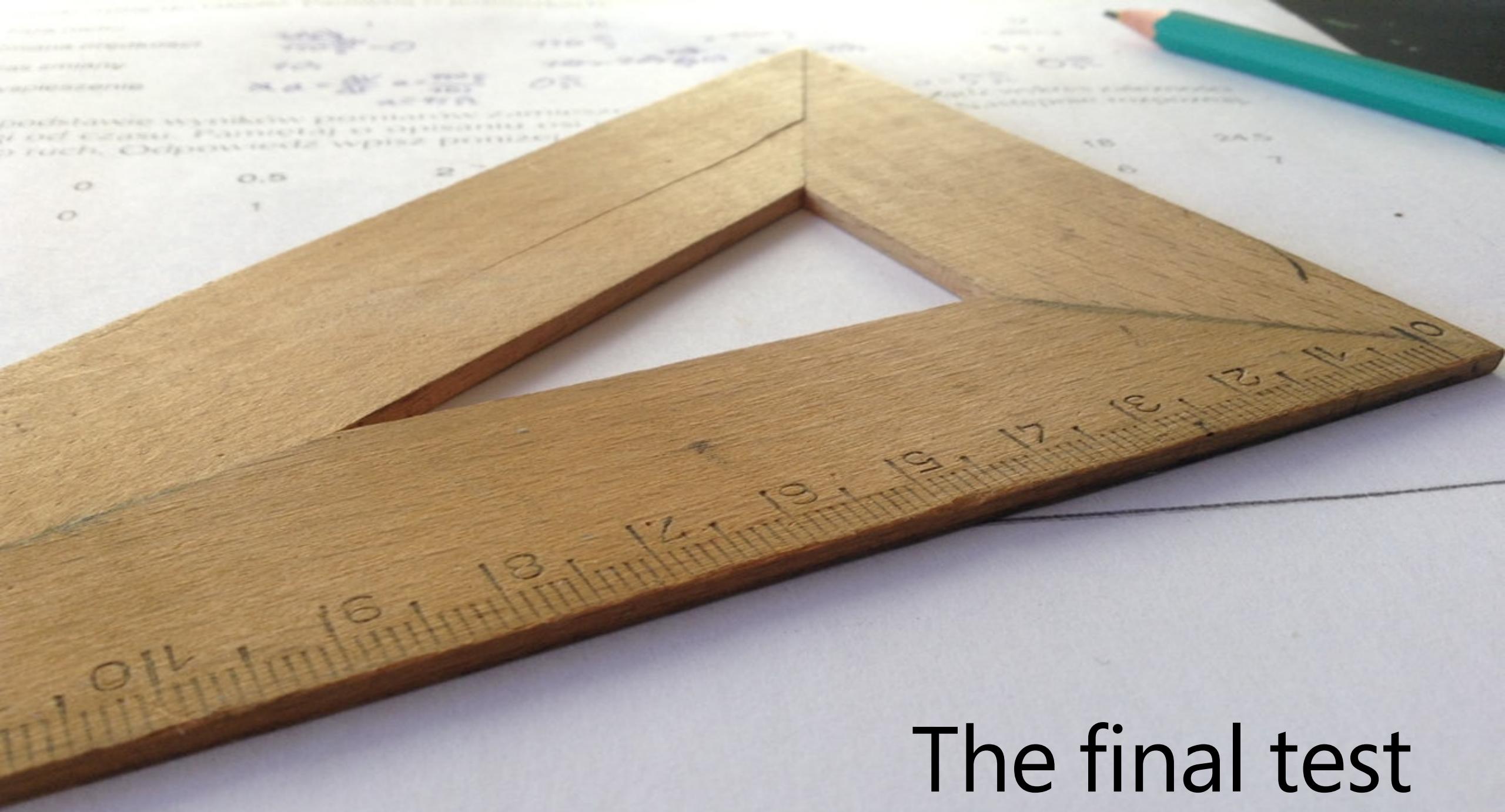
# Architecture tips & tricks

- Use offline data on the device to reduce network traffic
- Use local device resources sparingly
- Create optimized API's for your mobile apps
- Leverage cloud native components
- Use both pull and push style communication for getting data across

# Summary



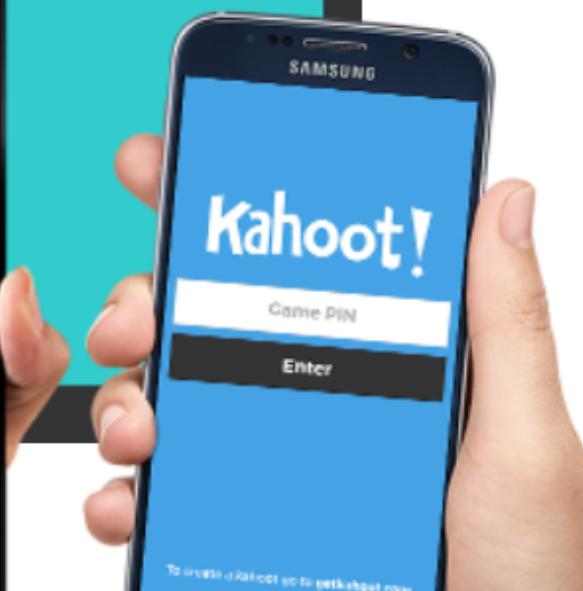
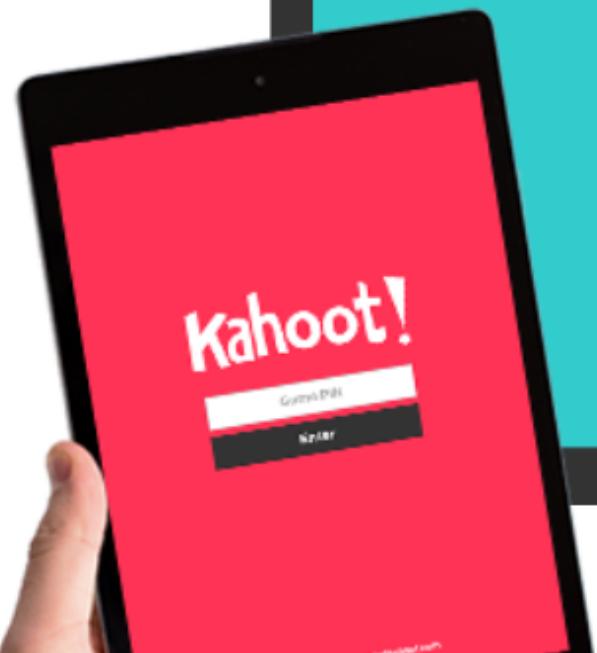
- Remember that devices have limited or expensive resources
- Take the context of the user into account, e.g. BYOD
- Try to focus on creating “**smart systems**” instead of just “apps on smartphones”
- Leverage the cloud to add more brainpower to your solution



The final test

# Ready to join?

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## How would you NOW rate your current Xamarin skills?

 Mentimeter

0  
No idea

0  
Familiar

0  
Proficient

0  
Advanced

0  
Expert

0  
Jedi Master



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0

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