

Testable Mobile Apps

Using MVVMCross with Xamarin, Windows Phone, and Windows Store

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Important rules for mobile testing

- Follow the single responsibility principal!
 - Test one thing at a time.
- Test on real devices
 - Emulators are close but are not the same are real hardware.
 - Verify screen rotation, app shutdown, etc.
 - Use multiple devices.
- Test Disconnected.
 - Environmental factors like poor signal, no GPS, etc. should not cause your application to crash.



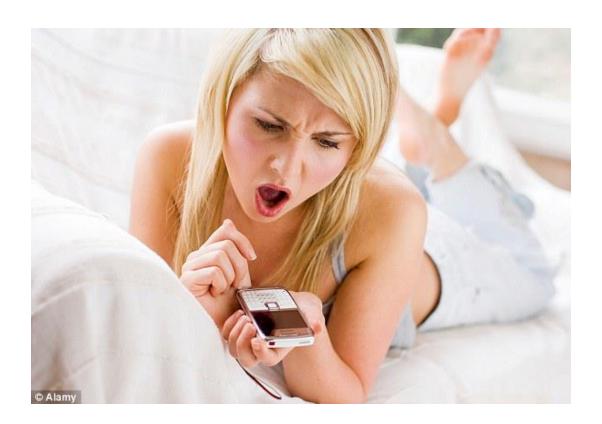
Keeping things in Perspective



Test the appropriate amount for your project

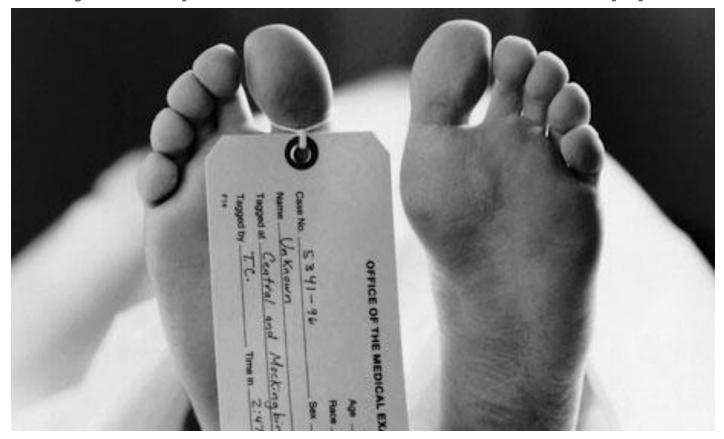


When your cat picture app breaks





When your patient medication app fails





What is MVVM Cross

 Cross-platform mvvm mobile development framework using Portable Class Libraries





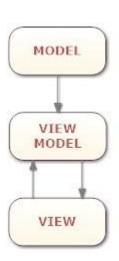




What is the MVVM pattern

 Model (Business rule, data access, model classes)

 ViewModel (Agent or middle man between view and model)



View (User interface)



What is Xamarin



- Compiles to native code & runs natively
- Full access to system API
- Full .Net Framework



Let's look at some code





Resources

- http://docs.xamarin.com/
- https://github.com/MvvmCross/MvvmCross
- http://mvvmcross.blogspot.com/
- Name: Richard Clements
- Blog: http://bobthejanitor.org/
- Email: rclements@synoptek.com
- Twitter: @bob_the_janitor
- Demo Source: https://bob-the-janitor-sample-code.googlecode.com/svn/trunk/MVVMSampleApp