Agile Testautomatisierung im XING Mobile Team

Daniel Knott
Sergej Mudruk

XING AG

XING
THE PROFESSIONAL NETWORK

Sergej Mudruk

Senior Manager Quality Assurance

Sergej.Mudruk@xing.com

Sergej Mudruk ist Senior Manager Quality Assurance. Hat in Hamburg Informatik studiert und ist seit Mai 2008 bei der XING AG beschäftigt. Zuerst in der Entwicklung der internen Testinfrastruktur tätig, war er später Qualitätssicherungs-Mitglied des ersten agilen Teams bei der XING AG. Hiermit hat er an der Einführung der Qualitätssicherung in dem agilen Kontext teilgenommen. Seit der Mitte 2012 ist er ein Mitglied des Mobile-Teams mit dem Hauptfokus auf die iPhone App. Er ist für alle Qualitätssicherungs-Prozesse - wie die Test Planung, manuelles und automatisiertes Testen zuständig.

Mehr Details auf seinem XING-Profil: https://www.xing.com/profile/Sergej_Mudruk

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XING AG

- Gegründet 2003 als OpenBC
- Seit 2006 XING AG
- > 12 Mio. Mitglieder
- ~ 30% Mobile Traffic

Herausforderungen in der mobilen Entwicklung

Herausforderungen – Plattformen

Windows phone

symbian OS

BlackBerry

Herausforderungen – Plattformen

- Verschiedene Hersteller
- Verschiedene User Interfaces
- Unterschiedliche Hardware
- Viele Software-Versionen

- Ein Hersteller
- Unterschiedliche Hardware
- Viele Software-Versionen

Herausforderungen – I18N

Herausforderungen – Datennetze

XING

Werkzeuge

Carrier
3:36 PM
XING
THE PROFESSIONAL NETWORK
Login
Username / E-Mail
Password
Forgot Password?
No XING account?
Sign up now

Werkzeuge – Robotium

- Black Box Test Tool
- Basiert auf Java und JUnit 3
- Support für Android 1.6 – 4.x
- Simuliert User Interaction
- Device & Simulator
- Einfacher Aufbau
- Testet gegen APK Datei

Werkzeuge – Robotium

```
public void testLoginFailed() throws Exception {

   solo.enterText(0, “wrongusername”);
   solo.enterText(1, “wrongpassword”);
   solo.clickOnButton(solo.getString(com.xing.android.R.string.button_login));

   solo.waitForActivity("com.xing.android.activities.SpinnerLoginActivity", 2000);
    assertTrue("ERROR: Error message is not shown",
     verifyTextIsPresent(solo.getString(
        com.xing.android.R.string.dialog_error_body)));

  solo.clickOnButton(solo.getString(com.xing.android.R.string.dialog_button));

}
```

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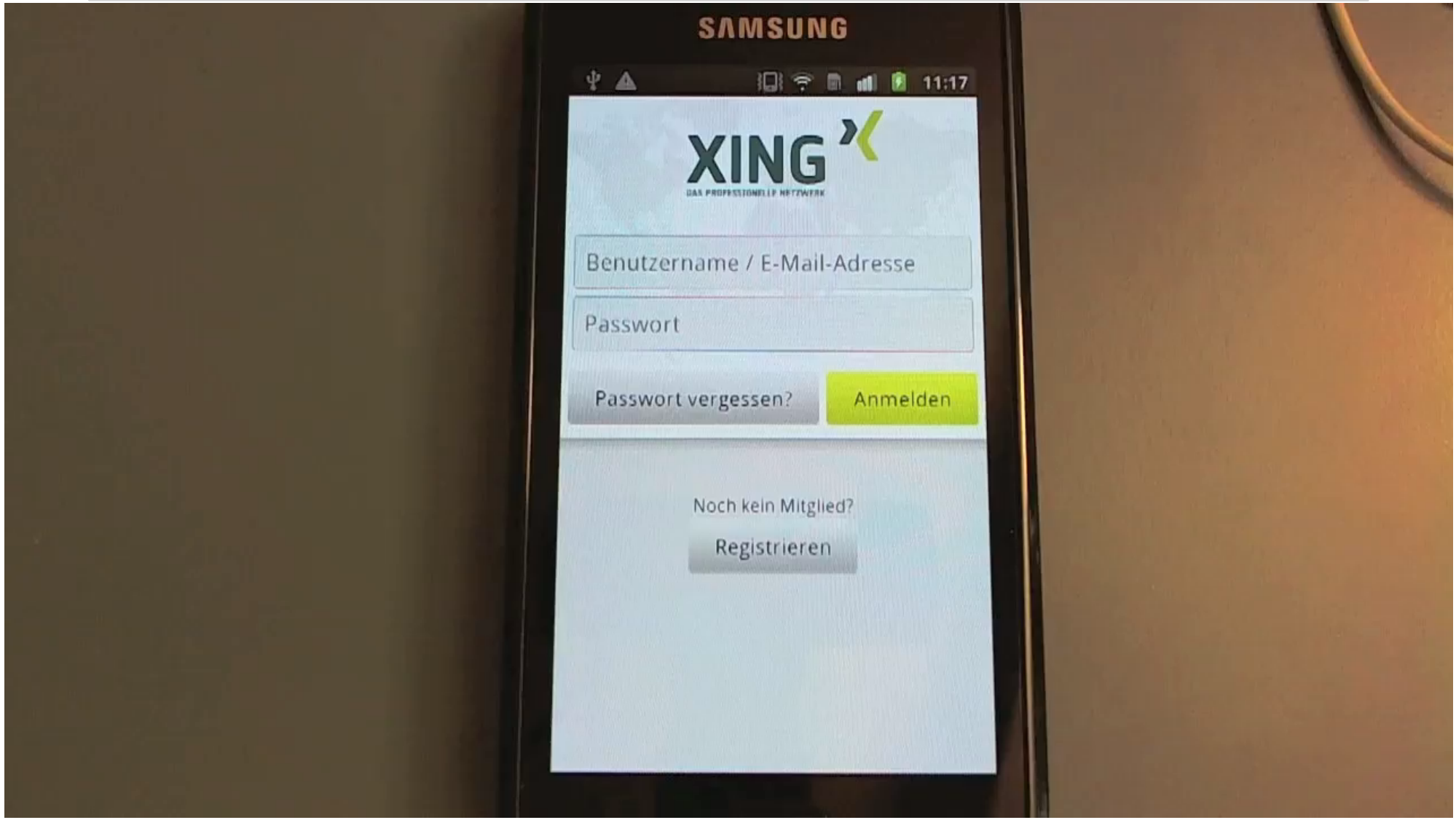
Werkzeuge – Robotium



Werkzeuge – KIF (Keep It Functional)

- Grey Box Test Tool
- Objective C
- Device & Simulator
- Simuliert User Interaction
- Sehr schnell & CI Integration

Werkzeuge – KIF (Keep It Functional)

```
+ (id)scenarioLoginWithWrongCredentials {
    KIFTestScenario *scenario = [KIFTestScenario scenarioWithDescription:@"Test
     the login wrong credentials"];
    [scenario addStep:[KIFTestStep stepToEnterText:@"wrongusername"
      intoViewWithAccessibilityLabel:@"Login User Name"]];
    [scenario addStep:[KIFTestStep stepToEnterText:@"wrongpassword”
     intoViewWithAccessibilityLabel:@"Login Password"]];
    [scenario addStep:[KIFTestStep stepToTapViewWithAccessibilityLabel:@"done"]];
    [scenario addStep:[KIFTestSte stepToWaitForViewWithAccessibilityLabel:
     LocalizedString(@"ID_LOGIN_FAILED_MESSAGE")]];
    [scenario addStep:[KIFTestStep stepToTapViewWithAccessibilityLabel:
     LocalizedString(@"BUTTON_OK")]];
    [scenario addStep:[KIFTestStep stepToTapViewWithAccessibilityLabel:
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}
```

Werkzeuge – KIF (Keep It Functional)

Best
Practices

Best Practices

XING

- Testcode und Anwendung in gleicher Sprache
- Testautomatisierung schreiben
- Kontrollierte Testumgebung
- Werkzeuge kombinieren
- Versionskontrolle nutzen
- Continuous Integration nutzen
- Mobile Simulatoren meiden
- Crowd-/ Cloud Testing nutzen
- Nutzer und den Markt beobachten
- Kunden kennen!

XING

Vielen Dank für Ihre Aufmerksamkeit!

Sergej Mudruk
Senior Manager Quality Assurance

Daniel Knott
Manager Quality Assurance

ANDROID APP ON Google play
Available on the iPhone App Store
Market Place

The professional network
www.xing.com

Links & Referenzen

XING

- Robotium [http://code.google.com/p/robotium/]
- KIF [http://corner.squareup.com/2011/07/ios-integration-testing.html]
- WaxSim [https://github.com/square/waxsim]
- Hockeykit [http://hockeykit.net/]
- Twitter Logo [https://si0.twimg.com/a/1318896278/images/logos/twitter_newbird_white.png]
- Businesswoman [http://www.istockphoto.com/stock-photo-16742115-businesswoman-holding-a-blank-sign-isolated.php]
- Letters, by davide vizzini limbte [http://www.flickr.com/photos/limbte/4007115435/]
- Little Dish, by Juan de Dios Santander Vela [http://www.flickr.com/photos/juandesant/209098053]
- App Store Logo [http://upload.wikimedia.org/wikipedia/de/0/05/App-Store-Logo.png]
- Robot [http://www.nassaulibrary.org/eastrock/robot.jpg]
- Robotium Logo [http://f.hatena.ne.jp/images/fotolife/r/re_shikajiro/20110601/20110601224550.jpg]
- Square Logo [http://c580513.r13.cf2.rackcdn.com/wp-content/uploads/2011/07/Square_Logo_Landscape1-500x214.png?9d7bd4]

Links & Referenzen

- Apple Logo [http://www.lte-tablets.de/files/2011/08/apple_logo.jpg]
- Android Logo [http://www.android.com/media/wallpaper/gif/android_logo.gif]
- Windows Phone Logo [http://upload.wikimedia.org/wikipedia/de/thumb/2/23/Windows_Phone_Logo.svg/500px-Windows_Phone_Logo.svg.png]
- Blackberry Logo [http://us.blackberry.com/legal/bblogo_gray_003.jpg]
- WebOS Logo [http://upload.wikimedia.org/wikipedia/en/e/e0/WebOS_logo.svg]
- Symbian Logo [http://upload.wikimedia.org/wikipedia/de/thumb/c/c8/Symbian_OS_logo.svg/686px-Symbian_OS_logo.svg.png]
- Google Play Logo [http://www.android.com/images/brand/android_app_on_play_logo_small.png]
- Apple App Store Logo [http://www.inext.me/wp-content/uploads/2011/09/app-store_logo.png]
- Windows Market Place Logo [http://modmyi.com/attachments/forums/iphone-4-new-skins-themes-launches/483774d1290368882-release-windows-phone-7-hd-market-place-2x.png]