Accapto, a Generic Design and Development Toolkit for Accessible Mobile Apps

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Some Questions

• Who knowns about Assistive Technologies (AT) on Smart phones?

• Who knows about proper implementation for AT?

• How many apps are accessible?
The Problem

- **3.255.850** Apps in Android Play Store (Sept 2017)
- **Most** apps are not accessible!

- **Some Data**
  - Top 100 Apps checked with Accessibility Scanner
    (top apps Austria, no system apps, no games)

  **ZERO** apps without a problem
Possible Solutions

- Idea: Include Accessibility from the beginning
  - Model-Driven Development for Accessible Apps
  - ACCessible APp TOol
Accapto Modeler

Krainz, Miesenberger
Accapto Generator

- **App-Tool**
  - XML Input
  - Parsing, Validating, Templating, Generating, Extending
  - Accessibility Extension
Results

• Example of model and resulting app

• Accessibility Evaluation
  ✓ Accessibility Scanner (automatic test)
  ✓ Testing with AT (manual test)
  ✓ Material Design Accessibility rules (manual test)
  ✓ W3C Mobile-accessibility-mapping (manual test)
Conclusion & Future Work

• Accessibility awareness for developers
• Support for developers
• More accessible apps!

• Future Work
  – Improvement of the Xml Editor
  – Re-Evaluation with User
  – Tool evaluation with developers

www:  www.accapto.org
github:  https://github.com/elmarkrainz/accapto
Thank You!

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