Android Project:
“Your Fantasy App”

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Android Project

- Project objectives:
  - Develop a series of early prototypes for your mobile app of choice (“Your Fantasy App”) using an iterative design process
- 3 Milestones:
  - 1st Milestone: Paper-based prototype demonstrating your idea and screen designs
  - 2nd Milestone: Implementation of a first paper-based prototype for Android
  - 3nd Milestone: Implementation of a second version of the prototype with extended functionality

Android Project

- Goals:
  - Getting familiar with prototyping and an incremental development process
  - Getting familiar with Android and the Android Development Environment (Android Studio)
  - Getting familiar with the basic interface components
    - Activities
    - Fragments
    - UI Components
    - Intents
  - Getting familiar with the basics of either SQLite, communications to remote servers, or sensors

Android Project

- Marking:
  - 3 big milestones
    - Initial prototype (5% of final grade, paper-based or digital, deadline 20.04 as 3min presentation in the lab AND via email)
    - First Android prototype (7% of final grade, deadline 04.05, in the lab)
    - Highscore with remote server connection (8% of final deadline 18.05, in the lab)
  - We mark milestones 2&3 during the lab
    - You demonstrate your application
    - You can answer questions to the code and explain your approach
    - Talk about problems that you had

Milestone 1:
Initial Prototype as paper sketch or digital sketch (1st design iteration)

Milestone 1

- Create an idea for a small mobile app you will implement over the next weeks (we can help you if you have problems coming up with an idea)
- Use one of the prototyping methods (digital or paper) to create a prototype of your app
- App Requirements:
  - Splash screen
  - Startscreen with menu items (Main Menu)
  - Something to show version details, author details, link to University of Otago homepage (should open in the default browser)
  - All the screens (activities) needed for your app (roughly 5-10)
  - Optimized for phone and tablet (create different prototypes for both platforms)

Milestone 1

- App Requirements (continued):
  - Use either a local SQLite database, a server connection for storing key values pairs (we provide the server), or sensors/camera in your app
- Come to the lab or send mail if you need help with app idea or prototyping
  - Ask if you are not sure if the app complexity is too high/too low
- Presentation:
  - Send the digital prototype or hand in the paper-based prototype at the lab (deadline 20.04)
  - Please prepare a 3min presentation in the lab (deadline 20.04) outlining your app idea and present your prototype
  - Overall: 5% of final grade

Milestone 2: Implementation of the first Android prototype (2nd design iteration)

Milestone 2

- Implement you sketch-based prototype
  - All activities (screens) are there, navigation between activities works
  - Splashscreen works
  - Main Menu works (including link to University of Otago page and about authors page)
  - Implicit and explicit intents work
  - Create fragments to adapt the interface for different platforms
    - Create the interface for at least one fragment in XML
    - for at least on other in Java
  - Think about solutions how to prototype the remaining functionality
- 7% of final grade, deadline 04.05, in the lab, 5min code walkthrough

Milestone 3: Implementation of the second Android prototype (3rd design iteration)

Milestone 3

- Work towards completing the functionality of your prototype:
  - Implement the functions using either
    - a local SQLite database
    - a server connection for storing key values pairs (we provide the server)
    - or sensors/camera in your app
  - Start towards implementing the rest of your prototype (does not need to be finished but we want you to finish parts of your prototype, marking is based on complexity of the finished implementation)
  - Think about solutions how to prototype the remaining functionality that could not be finished
- 8% of final grade, final deadline 18.05, in the lab, 5min code walkthrough

Team:

- Tobias Langlotz: tobias.langlotz@otago.ac.nz (general questions, prototyping, marking etc.)
- Matthew Cook: mgcook89@gmail.com (programming help, prototyping, etc.)
- Mark George: mark.george@otago.ac.nz (problems with lab environment, Android Studio)

Questions?