Psychological Task Design & Development

A Programming Workshop
Part I$_A$ - Introduction

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Background

- PhD candidate – Developmental Psychology (UvA)
- Project details:
  - Focus on cognitive processes in development of addiction
  - Developing cognitive training aimed at adolescents to prevent escalation of substance use: www.impliciet.eu
  - Using game elements to motivate them to finish training
- 6+ years experience designing & developing computer-based psychological assessment and training
  - Tools: Adobe Flash (ActionScript 3), PHP, R, Presentation, ..

- 2 Assistants:
  - Johanna Quist (former student, programming adept)
  - Soraya Sanchez Maceiras (current master student)

Introduction – What's The Plan?

Focus on task design and <u>development</u>
- Basics of programming; several advanced techniques

Many languages (Presentation, Inquisit, E-Prime, JavaScript, etc.)
- Can't cover them all! → focus on one language: ActionScript 3

Why ActionScript 3?
- Clear syntax for learning
- Many features for advanced designs (NB: no fMRI / EEG support)
- Basis for Flash (web), but also AIR (dekstop, mobile apps)

What we won't (learn to) build in this workshop:
- Complete tasks (not enough time!)
- Flashy animations
- Elaborate analysis scripts

(Rough) Workshop Overview

Part I (This morning)
- A.   General introduction to the workshop
- B.   Task design & requirements engineering

Part II (This afternoon)
- A.   Flash IDE - getting to know the environment
- B.   Basic programming principles (with exercises)
- C.   Advanced programming concepts (with exercises)

Part III (Tomorrow morning)
- A.   PhD Presentations: Peggy Bongers & Jantine Boselie
- B.   Where can we take this?
- C.   Advanced programming continued (with exercises)

Part IV (Tomorrow afternoon)
- A.   Advanced programming continued (with exercises)
- B.   Recap & future programming

Before Getting Started

- First time EPP Programming Workshop: Diverse audience
  - Schedule may be adjusted a bit
  - Do ask questions!
  - Feedback is welcome!
  - Topic requests for day 2? Write them down!
- Team up!
  - Many basic & advanced exercises (& challenges!)
  - Do work together with someone with more / less experience
    - Show of hands: experience?
  - Support website: wouboe.nl (slides, exercises, solutions)

- Does everybody have a laptop + Adobe Flash CC installed?