Designing Interactive Systems I: Lab 9

Prof. Dr. Jan Borchers
Chat Wacharamanotham
Simon Völker

Media Computing Group
RWTH Aachen University

Winter term 2011/2012

http://hci.rwth-aachen.de/dis

Overview

- Presentation Guide
- Fitts's law exercise
- Exam topics
- Project coaching

The First Two Questions

- After the presentation, the audience should be able to answer these questions:

1. Who are the users?

2. What do they want to do with the system?

Presentation: Do

- Test your hardware setup before the presentation date
- Plug your hardware during the Q&A time of the previous group
- Engage audience with visual and sound
- Have team member help you during the presentation
  - 2–3 speakers
  - The rest can help in demo and/or role play
- Make audience laugh
- Give some thought for the audience to take away
- The show must go on

Presentation: Avoid

- Take than 10 minutes
  - You will be mercilessly kicked out
- Hardware setup problems: projector, sound
  - If your hardware doesn't work, you will be queued after the last group
- Software demo is not working
- Show routine screens, e.g., login, register
- Too much information that is well-known for the audience
  - Your audience has already taken DIS1
- Reading bullet points on the slides

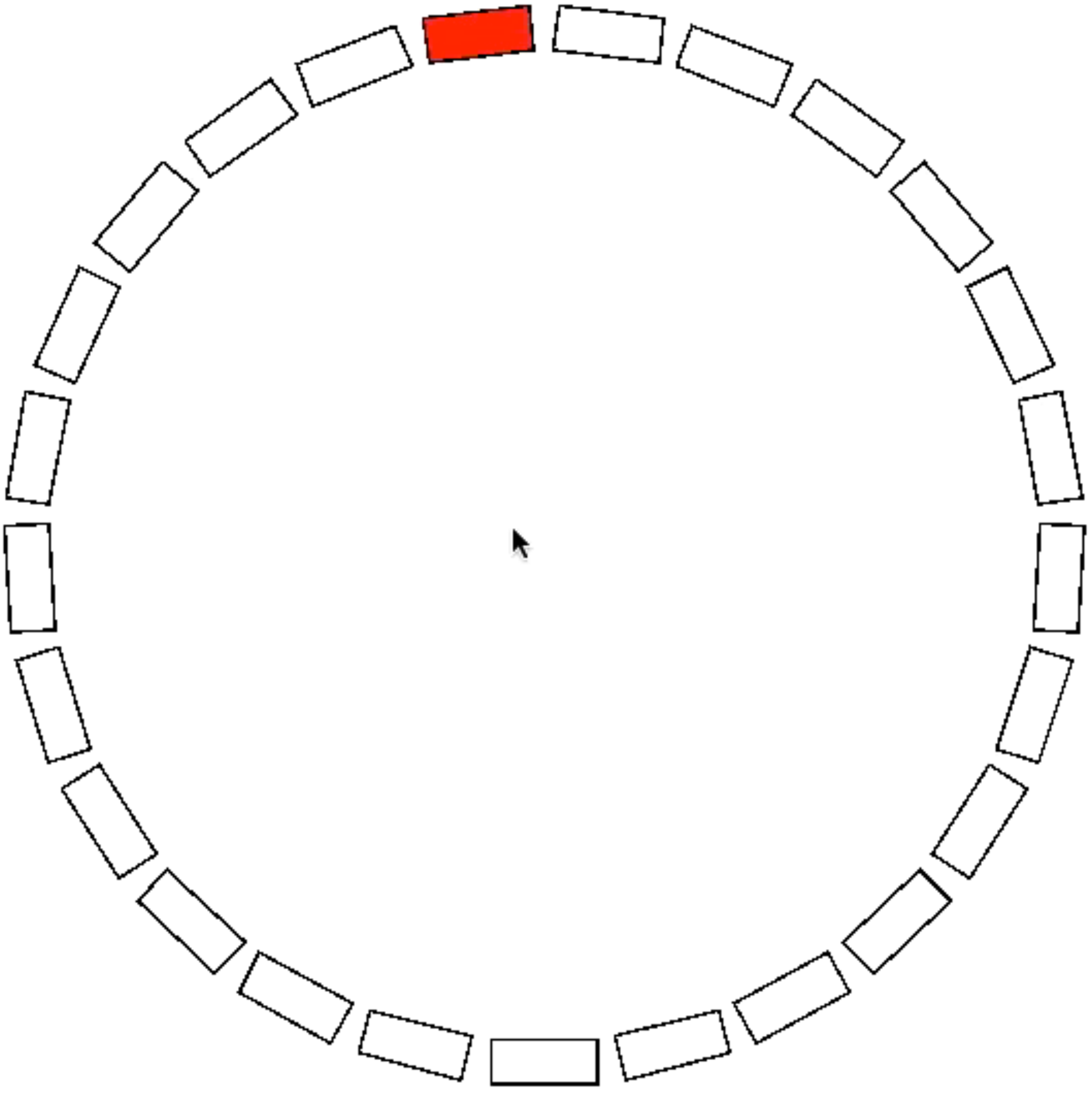
Start with PUNCH

- Primacy effect: people remember the beginning more strongly
- Make it Personal
- Do/say something Unexpected
- Show/tell something Novel
- Challenge assumptions
- Tap emotions with Humors

Gary Raynold's Presentation Zen • http://www.presentationzen.com/

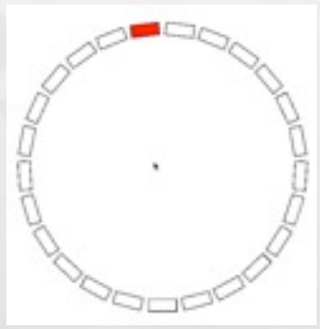
Make Your Presentation "Sticky"

- Simple: What is the key point? Why does it matter?
- Unexpectedness: Pose questions and fill it with answers
- Concrete: Give real example.
- Credible: Use terms that people can visualize and understand
- Emotional: Image that invoke feelings
- Stories: Connect what you want to say into a story



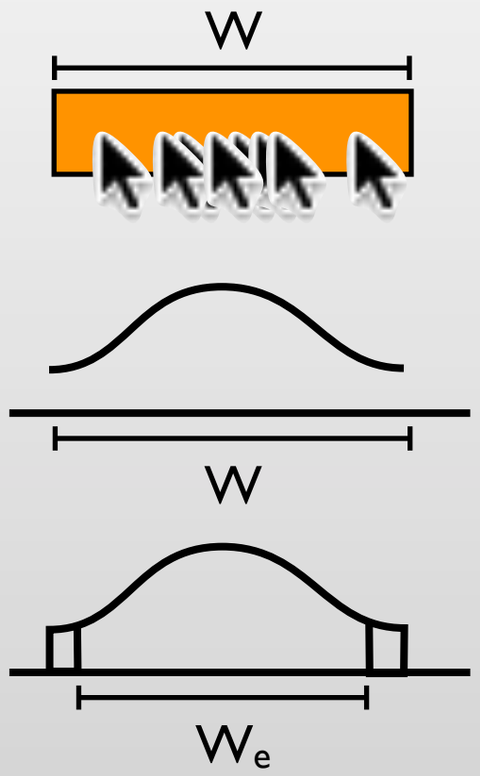
Assignment 1: Fitts' law

ID → W, D →



```
Times(ms); Distance(pixels)
1041.0; 6.0
952.0; -5.782796741474173
896.0; -0.40661550228435317
824.0; -5.228945820189139
1160.0; 6.9936592666416
1352.0; -4.225948483053429
1288.0; 8.430048918662692
783.0; 0.3274586709556502
984.0; -7.082781426273073
768.0; 2.9269123944920565
896.0; 8.540645463001965
792.0; -3.4873980782168985
831.0; 8.244382168846187
736.0; -8.527141825171867
927.0; -6.415614036267016
1176.0; -6.124685904471306
855.0; -3.04985303105218
833.0; -0.7390652923936045
1200.0; -5.239670522968936
824.0; -6.4879528765742975
760.0; -0.2783961781877906
969.0; -4.8229608507982675
862.0; -4.385653696921736
```

→

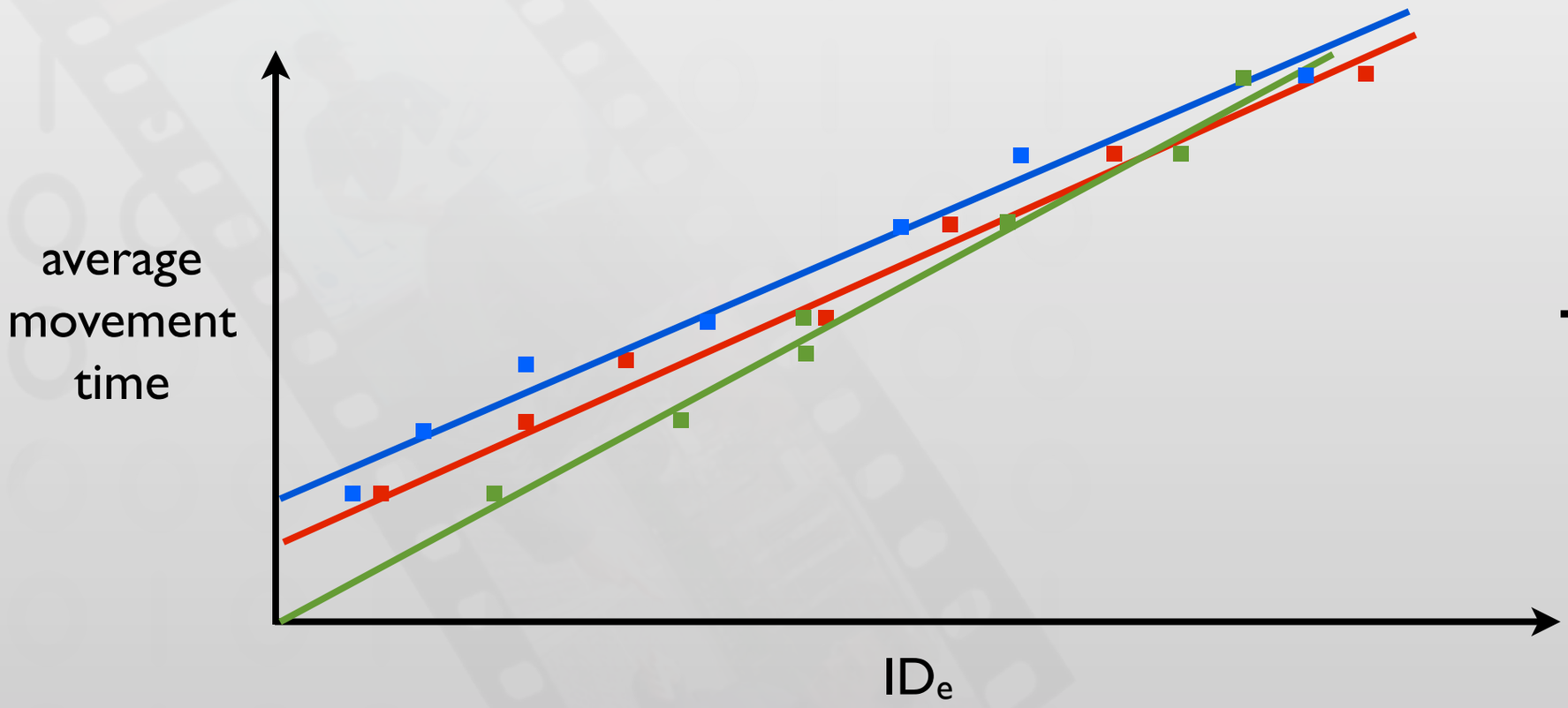


↓

ID_e

Fitts, Welford, Shannon

Assignment 1: Fitts' law



$$y = a + bx$$

$$T_{pos} = a + bID_e$$

$$R^2 = 0.7$$

Best-fit empirical model

Assignment 1: Fitts' law

- How to select best-fit model from linear regression?
- When to use empirical model?
- When to use simplified model?

Exam Topics

- 60 minutes 60 points
- Emphasize the part after the midterm
  - Pre-midterm content: about 10% of the points
- Topics that are not in the exam
  - Objectified, Persuasive interface, Game design, Emotional interface
- Mostly testing knowledge & mechanical skill

Final Exam Question Ordering

- Pre-midterm content:
- Human performance models: CMN, Fitts's
- Interface efficiency: GOMS
- Notation: state machine, petri net
- History
- Vision
- Evaluation with/without users
- Statistics