

IS-B Assignments

(Winter Term 2014/2015): Overview

Mirko Fetter, Sascha Herr

Human-Computer Interaction Group
University of Bamberg
96045 Bamberg, Germany

<firstname>.<lastname>(at)uni-bamberg.de

Introduction

This series of assignments accompanies the **IS-B** lecture held by **Prof. Dr. Tom Gross** at the University of Bamberg, Germany

- It does not claim to be exhaustive but to provide a **coherent example demonstrating certain aspects** in the field of HCI
- It delivers a practical "**hands-on**" guide for human-centred design relating to issues presented in the IS-B lectures
- Therefore it wants to **sensitise** for the pitfalls and challenges that the design and evaluation of interactive systems often bring with them

Introduction (cont'd)

The assignment sessions are held **weekly** (2 SWS)

- The six homework assignments are **due bi-weekly**

Thursdays, 10.00-12.00h, 12.00-14.00h, 14.00-16.00h, and
16.00-18.00h

An der Weberei 5

Room **WE5/03.004** (10.00-12.00h and 12.00-14.00h)

Room **WE5/05.003** (14.00-16.00h and 16.00-18.00h)

Starting 9 October 2015

(for further dates refer to the “Dates & Deadlines”-slide below)

Agenda

Rules and guidelines

- Dates and deadlines
- Group work and formation
- Presence
- Credits
- Submission

Assignment structure

Updates and changes

Introduction of the topic

Rules & Guidelines

You find material and general information on regulations on
Virtual Campus at
<http://vc.uni-bamberg.de/moodle/course/view.php?id=7703>

The assignment **specific rules** are stated in this document

In order to receive full or partial credit, you have to **follow these guidelines** closely

Specific Regulations: Dates & Deadlines

09 Oct 2014: Assignment I (due 28 Oct 2014)

16 Oct 2014: Complementary Material I

23 Oct 2014: Complementary Material II

30 Oct 2014: Assignment II (due 11 Nov 2014)

06 Nov 2014: Complementary Material III (**location CML - WE5/01.045**)

13 Nov 2014: Assignment III (due 25 Nov 2014)

20 Nov 2014: Complementary Material IV

27 Nov 2014: Assignment IV (due 09 Dec 2014)

04 Dec 2014: Complementary Material V

11 Dec 2014: Assignment V (due 13 Jan 2015)

18 Dec 2014: Complementary Material VI

08 Jan 2015: Complementary Material VII (**location CML - WE5/01.045**)

15 Jan 2015: Assignment VI (due 27 Jan 2015)

22 Jan 2015: Complementary Material VIII

29 Jan 2015: Final presentation

All assignments have to be uploaded on due date until **23:55h**

- Concerning deadlines: Make sure you read our assignment guidelines carefully E.g. due 28 Oct 2014 means the latest acceptable submission is on 28 Oct 2014 at 23:55

Specific Regulations: Group Work

This series of assignments is **solved by groups** of 3 members

- Groups are formed in the first session (today)

At each assignment meeting

- Groups are randomly **selected to present** their results
- A **randomly selected group member** presents the results of the group
- Presentations last approximately 20 min
 - ca. 10 minutes talk
 - ca. 10 minutes discussion

Credit is received on **group basis**

Specific Regulations: Group Formation (1/2)

Form groups of 3 members after this session

Send **one e-mail per group** containing...

- ...the **names** of all group members ...
- ...**valid (!!!) e-mail addresses** of all group members...
- ...as well as **preferences for the timeslots** (10h, 12h, 14h, 16h) your group wants to attend the assignments in order of **priority**
 - Example: 1.) 12h, 2.) 10h, 3.) 16h, 4.) 14h

Send the e-mail to **sascha.herr@uni-bamberg.de** with all other **group members** in CC

Use a **subject line** that starts with 'IS-B/'

→ IS-B/Group Formation

Specific Regulations: Group Formation (2/2)

We allocate the groups to timeslots next Monday **13 Oct 2014**

For the allocation we **balance the number of groups per timeslot** based on...

- First-come First-served principle (time and date of your e-mail)
- Your group's priorities for the timeslots in your e-mail

You receive an e-mail **reply to all group members** with your **group number** you need for submissions and your assigned **timeslot**

Specific Regulations: Presence

During an **assignment session**

- You present your results
- The specific assignment is introduced and you are provided with additional hints and help
- You have the opportunity to ask questions

Therefore your **presence is required** during those sessions

Starting with the second assignment session be prepared to present your results in **every session**

- If you are not willing to present your group's result you will get **zero points** for that assignment

So, if you cannot be present you need to submit a **medical report or equivalent**

Specific Regulations: Credits

There are **6** home work assignments

Each assignment...

- ...is worth max. **2 points**
- ...states how to receive its credit

The maximum total is **12 points**

If the **exam** is passed (at least 50% of the points), the **12 points** will be added as **bonus** to the points of the written exam

- In any case, a **top grade** of 1,0 is also reachable without solving the assignments
- The contents of the **complementary material** will be part of the written exam

Specific Regulations: Submission

Create a **.zip** or **.tar.gz** file of each assignment's root directory
– name this directory

- `assignment_<assignment #>_<group #>`

And accordingly name the file:

- `assignment_<assignment #>_<group #>.zip` or
`assignment_<assignment #>_<group #>.tar.gz`

Example:

- You are Group 5 and want to submit a zip file for assignment III
- Filename is: `assignment_03_05.zip`

The assignment section on **Virtual Campus**

<http://vc.uni-bamberg.de/moodle/course/view.php?id=7703>

provides and **upload link** to submit your file (**max size 20MB**)

Updates & Changes

Assignments might be subject to updates and changes. These are announced on Virtual Campus at
<http://vc.uni-bamberg.de/moodle/course/view.php?id=7703>

Changes and updates may be due to:

- Student questions
- The provision of additional help
- Mistakes in the assignment

Therefore it is recommended to check the above mentioned website for updates and changes on a regular basis!

Introduction to the Topic

Video-on-Demand Services

- Allow users to **stream rented** Movies & TV-Shows
- Two Models:
 - **Pay-per-View Model** offers **up-to-date content** for limited time for a **fee per title**
 - **Subscription-Based Model** offer a huge backlist catalog of **older content** for flat rate price
- Apps for SmartTVs, tablets, smartphones, and desktop PCs allow to select and consume the content



Introduction of the Topic

The aim of this year's assignment is to design and evaluate the user interaction with a **subscription based Video-on-Demand Service**

- Design a **web-based interface** for a single user
- Design for **exploring, searching, and viewing** videos from the **backlist catalog**
- Think of new **functionality** to support the users in **finding** movies and tv-shows according to their specific **preferences** based on **their history, interests, watch lists, filters, social network, ratings, curated lists, external sources**, etc.
 - Assume **powerful algorithms** underneath — even beyond feasibility
- Go beyond what is there!

Assignments

Assignment I: Information gathering (SH)

- Focus on qualitative interviews

Assignment II: Lo-Fi prototyping (MF)

- Building paper mockups

Assignment III: Usability testing in the design phase (MF)

- Focus on think-aloud protocols

Assignments (cont'd)

Assignment IV: Interactive version (MF)

- Building a Mid-Fi prototype

Assignment V: Evaluation (SH)

- Empirical evaluation of Mid-Fi prototypes

Assignment VI: Data analysis (SH)

- Statistical analysis of evaluation data

Complementary Material

Complementary material I: Requirements analysis (MF)

- Focus on Hierarchical Task Analysis (HTA)

Complementary material II: Early design phase (MF)

- Focus on scenario and storyboard

Complementary material III: Predictive human performance modelling (MF)

- An introduction to CogTool ([Lab](#))

Complementary material IV: HCI research methods (SH)

- Overview of HCI research methods

Complementary Material (cont'd)

Complementary material V: Evaluation principles (SH)

- Focus on experimental design

Complementary material VI: Interpreting evaluation data (SH)

- Focus on statistical tests and their interpretation

Complementary material VII: Performing statistical analysis (SH)

- An introduction to SPSS (**Lab**)

Complementary Material VIII: Discount usability engineering (MF)

- Focus on Heuristic Evaluation

Comments & Questions

Feel free to send questions and comments about these assignments to:

mirko.fetter@uni-bamberg.de

Due to SPAM-filters and to process your email quickly, please use the following subject line:

IS-B/<your concern>

Thank you!

