

LMU

LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

LFE Medieninformatik - Gregor Broll, Alexander De Luca

Praktikum Entwicklung von Mediensystemen

Mobile Dienste für Studenten

Brainstorming, Scenarios, Design

11/06/2009





Outline:

- **Solution for exercise 2**
 - Http-connections
 - Record stores
- **Exercise 3: Brainstorming, Scenarios, Design**
 - Brainstorming techniques
 - Presentation by Tanja Herting
 - Diskussion with Oliver Diekamp
- **Focus Group**



Http-Connection:

1. Input Form:

```
TextField inputField = new TextField("Please provide input", "", 100, TextField.ANY);
form.append(inputField);
...
String input = inputField.getString();
...
if(input.equals(""))
    midlet.showAlert("", "Please provide some input!", form);
else
{
    midlet.showDisplayable(new WaitingForm(midlet, form));
    run();
}
```



Http-Connection:

2. Http-Connection (GET):

```
String url = "http://murx.medien.ifi.lmu.de/~gregor/echo.php";
```

```
HttpConnection httpConn = null;
```

```
InputStream is = null;
```

```
StringBuffer buffer = new StringBuffer();
```

```
...
```

```
HttpConnection httpConn = (HttpConnection)Connector.open(url + "?input=" + input);
```

```
//GET is the default setting
```



Http-Connection:

3. Http-Connection (POST):

```
OutputStream os = null;  
String request = "input=" + input;
```

```
httpConn = (HttpURLConnection)Connector.open(url);  
httpConn.setRequestMethod(HttpURLConnection.POST);  
httpConn.setRequestProperty("Content-Type", "application/x-www-form-urlencoded");
```

```
os = httpConn.getOutputStream();  
os.write(request.getBytes());
```

```
os.flush(); //Flushes this output stream and forces any buffered bytes to be written out.  
os.close();
```



Http-Connection:

4. Reading Data:

```
is = httpConn.openInputStream();
int ch;

while ((ch = is.read()) != -1)
{
    buffer = buffer.append((char) ch);
}

is.close();
httpConn.close();
recordManager.writeRecord(buffer.toString());
```



Record-Management:

```
//open named recordstore; create new one if not existing
RecordStore historyStore = RecordStore.openRecordStore("History", true);
...
//add records to the recordstore
historyStore.addRecord(input.getBytes(), 0, input.length());
...
//algorithm for last 5 records


- Not possible to add records to the recordstore at arbitrary positions
- Get the last 5 records from the queue


...
//close recordstore
historyStore.closeRecordStore();
```



Date	Topics
23.10.2008	L1: Introduction to Java ME; Mobile Media API
30.10.2008	L2: Http and Record Stores
06.11.2008	L3: Brainstorming, Scenarios, Design
13.11.2008	Project Phase starts
27.11.2009	Milestone Meeting 1
18.12.2009	Milestone Meeting 2
08.01.2010	Milestone Meeting 3 - Introduction to User Studies
22.01.2010	Milestone Meeting 4
12.02.2010	Final Presentation



Scenario Design, Prototyping and Architecture

- **Design, development and evaluation of mobile service applications for students**
- **Goal: 3 groups, 3 scenarios, 3 applications**
- **Brainstorming and conceptual phase**
 - Develop different ideas for mobile services for students
 - Create scenarios and mockups, conduct paper-prototyping and sketch out the architecture of your approach(es)
 - Input from online questionnaire, focus group and yourselves
- **Next meeting: 13.11.2009**
 - Presentation of application designs (ideas, mockups, ...)
 - Discussion about technical feasibility with Oliver Diekamp
 - Start of project phase
- **Afterwards: regular milestone meetings with presentations**



Brainstorming

- Collect as many ideas as possible
- Allow ideas!
 - During brainstorming **NO criticism is allowed**
 - Developers must not say “this can’t be implemented”
 - Graphics designers are not to comment on drawing styles
- Do a selection in a second step



(Pin&Play Meeting, July 2002, Lancaster)



- **General hints**
 - Get a mixed set of people (developer, manager, admin, writer, students ...)
 - Allow people to have freaky / crazy / unrealistic ideas
 - Use low technology (e.g. paper, pens, post-its, posters)
 - Go to a neutral / different / inspiring place
 - Ignore boundaries – assume there is a little magic available
- **Organize the ideas**
 - Identify concepts and themes
 - Group ideas that express the same concept or belong to a common theme
 - Identify conflicting, parallel, excluding ideas
- **Document the results!!!**
 - Capture the raw material (usually you won't need it but it is no effort...)
 - Extract the design/product concepts
 - In the best case you have several competing concepts that can be evaluated

**Questions?
Have fun!**