

Application Development for Mobile and Ubiquitous Computing

Seminar Task

Final Presentation

GroupNo. 09

Team:

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Our mobile application offers you the following features for managing university career:

✚ Enroll for various lectures, such as exercise courses, seminars, practical courses etc.

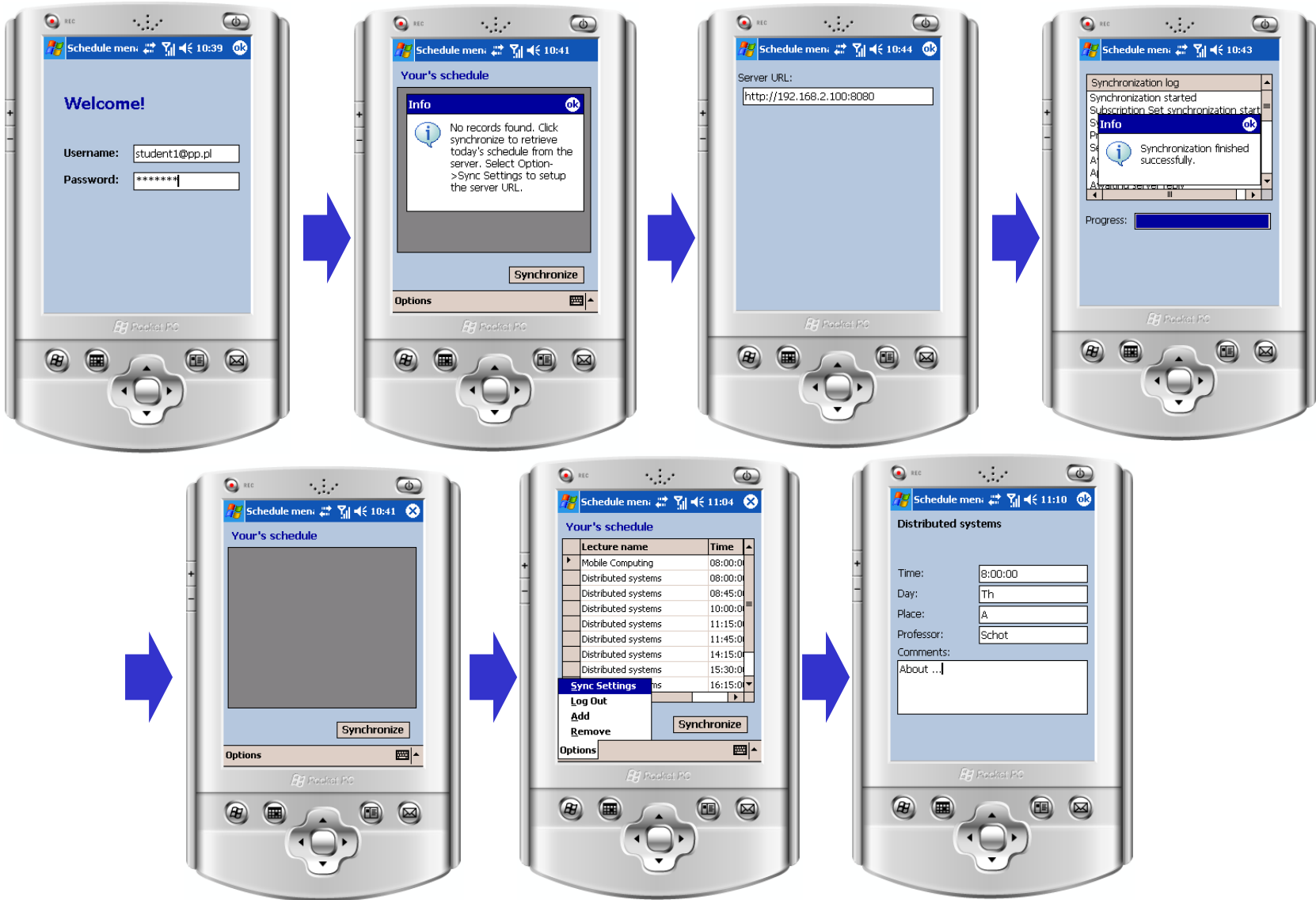
✚ Check your personal timetable showing all your lectures you are enrolled to.

How does it work:

1st Scenario:

User logs in for the first time:

- ✚ Logs in with university e-mail and password
- ✚ As there are no previous records is asked to enter Server URL
- ✚ Synchronization with database
- ✚ As there were no subjects student enrolled for so far, gets an empty list
- ✚ Possibility to add course
- ✚ List of available courses on given semester
- ✚ Adding the chosen course
- ✚ Display details of subject
- ✚ Option to remove subject student just enrolled to
- ✚ Logs out



How does it work:

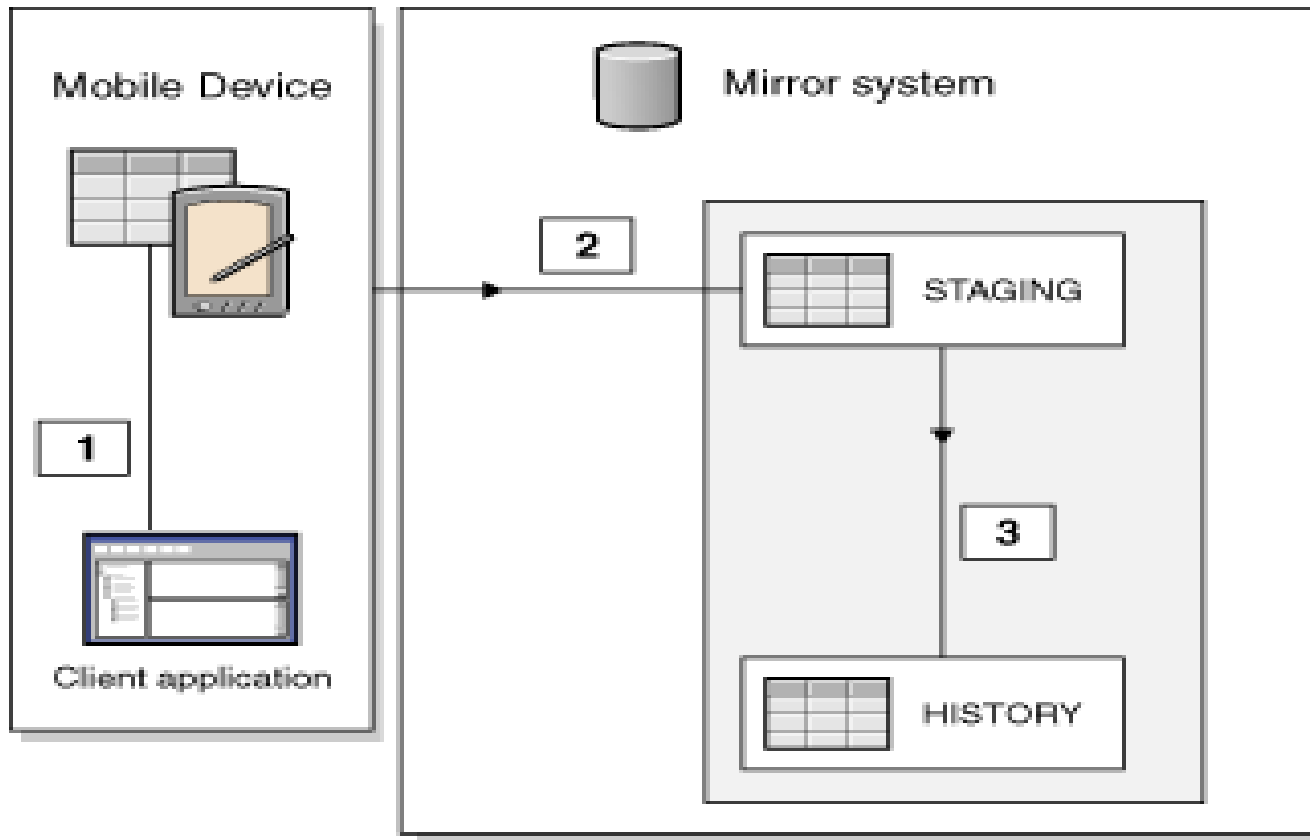
2nd Scenario:

User logs in for the next time:

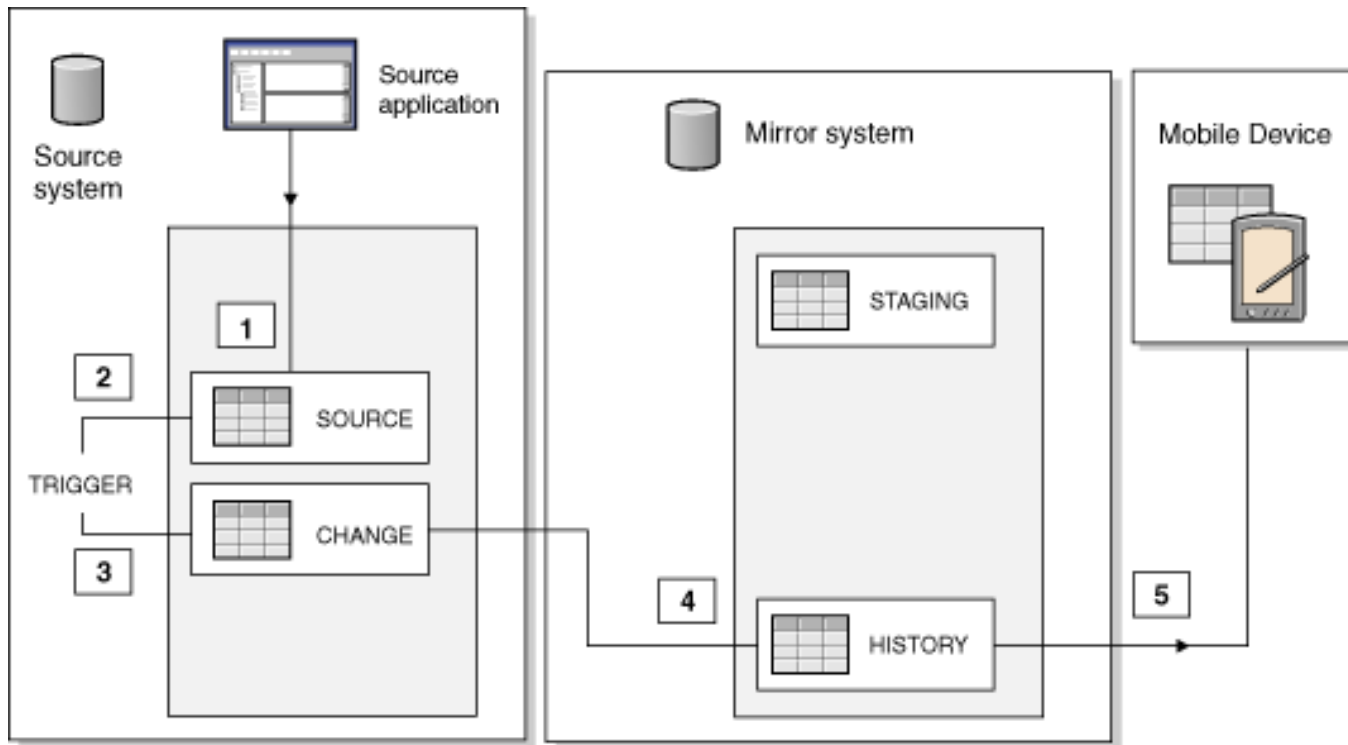
- ✚ Logs in with university e-mail and password
- ✚ Gets the list of courses he is applied for
- ✚ Is able to manage them having same possibilities as in 1st case
- ✚ When is done then its synchronize with the database
- ✚ Changes are applied
- ✚ Logs out







Data changes to the Client System





Data changes to the Source System



Advantages:

-  ability to manage through courses without constant connection to the Internet
-  No need to worry about disconnections, due to short synchronization process
-  Once you are able to connect, synchronize device with server to apply the changes
-  Extends battery lifetime

Limitations:

-  Different preinstall requirements for different mobile devices (Mobile Database)
-  Server has to be up all the time

+ Privacy:

- only student is able to manage his timetable via his account

+ Disconnections:




- synchronization with other clients

+ Synchronization (Client):

- courses in offer (Add/Delete)
- sign in for course -> takes one place from the list
- sign out from the course -> returns one place to the list
- when the list is full subject is not available

+ Our challenges:

- Know and better understand environment of .Net compact framework and IBM DB2
- check its usability on mobile devices

-  Mirror database concept
-  Configuration
-  .Net cooperation with DB2e

Thank you for your attention!