

Department of Computer Science Institute for System Architecture, Chair for Computer Networks

## Application Development for Mobile and Ubiquitous Computing

## Seminar Task Second Presentation

GroupNo. 8

Team:

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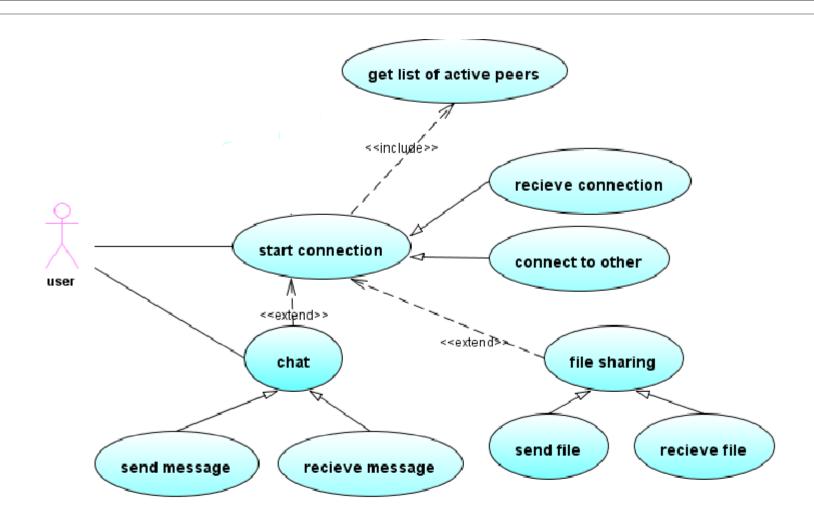
Formatvorlage des Untertitelmasters durch Klicken bearbeiten



- 1. User opens an application trying to connect to the default peer group;
- 2. Login and password verification;
- 3. Application enables chatting (by sending an asynchronous messages) and file sharing;
- 4. User can choose a chat partner from the active users' list;
- 5. User can define his own peer group and verify its members.

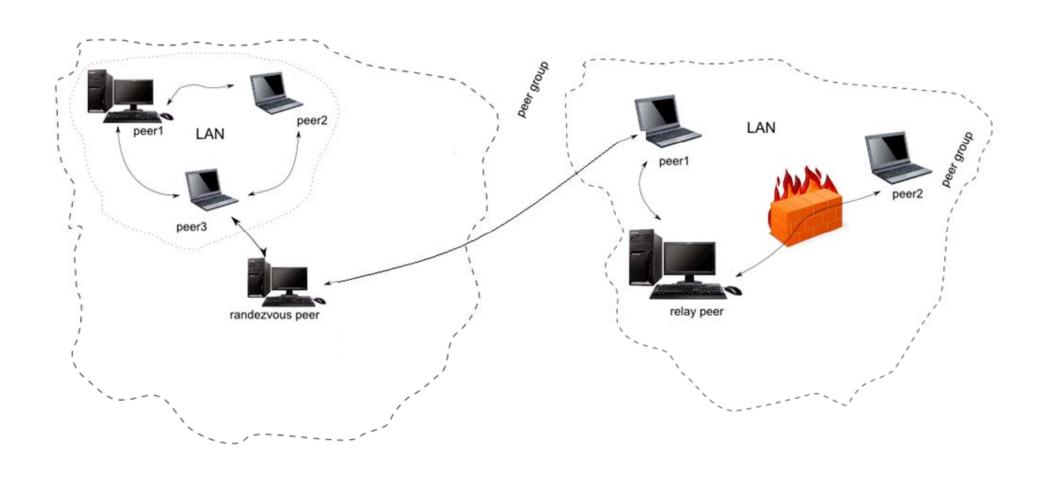


## **Application Scenario**











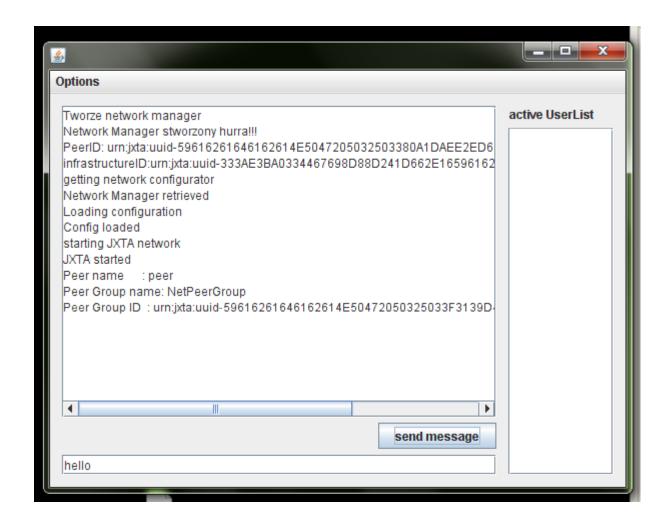
- Peer connects to the network (default peer group) –
   NetworkManager and NetworkConfigurator;
- Listens for other peers' advertisement,
  - If there are any it gets advertisement and thereby other peers IDs;
- Publishes its own advertisement;
- If peer wants to communicate with another peer, it has to set up a bidirectional pipe (a channel through which messages are sent). The other peer has to accept a request and make the other end of the pipe. If it don't accept it, a special message is sent back with information about rejection.



## **OPEN TASKS:**

- Communication with many peers at the same time (private chatroom) propagated pipes;
- Communication with peers behind the firewall a relay peer;
- •Creating private peer groups;
- File sharing;
- Authentication Membership Service or PSE (Personal Security Environment) Membership Service.





Dr. Thomas Application Development - Second Seminar



