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

Application Development for Mobile and Ubiquitous Computing

Location based ATM search First Presentation

Group #11

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Problem:

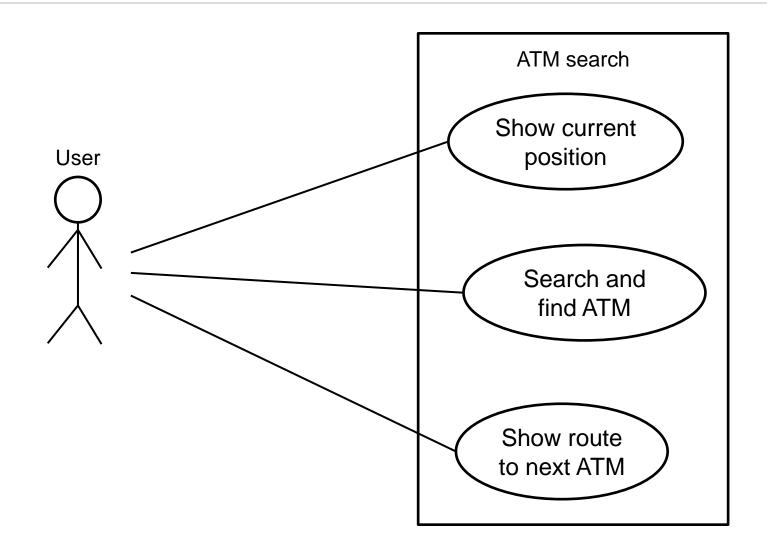
- Customer wants to draw out money
 - without handling charges, if possible
- Customer has no idea where the next ATM is located
- → Find the next ATM near your current position

Solution:

 Creating a mobile application which searches the next ATM based on the current user position



Solution - Use Case









- User can choose its bank group
- User can also search for every available atm
- Easy to use interface







- Insert current location into a form
- For use if no gps is available/working
- Searching for an ATM at a specific location







- User can see its own position
- User can see the position of ATM
- Everything is shown on a map



- Customer Satisfaction Challenge
 - Usability
 - o Small Screen Size
 - Allways find a (working) ATM

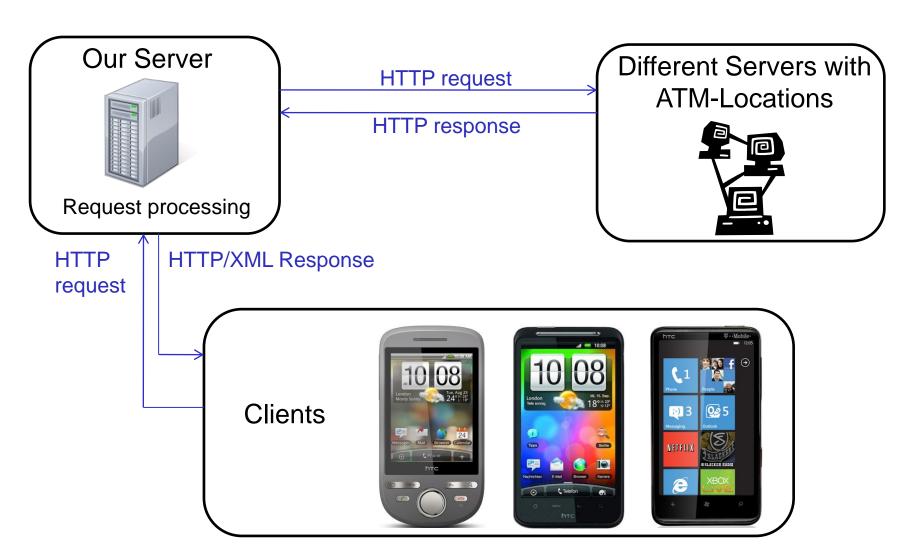
- Device Challenge
 - Heterogenity of software because we use client-server-architecture with defined communication rules



- Client-Server Architecture
 - PHP-based server solution
 - Client-communication with XML
- Client
 - Webbrowser with adress-fields
 - Android-Client using GPS user-location
- Technologies
 - PHP 5.3
 - Java for Android 1.6
 - Connection via EDGE/UMTS/WLAN



Application Architecture







08.11.2010	Create server-side request-application/xml design	
15.11.2010	Finalized design xml for client communication	
30.11.2010	First prototype for web request form	
09.12.2010	First dummy prototype for android client	prototype with all features for web request form
31.12.2010	prototype with all features for android client	
15.01.2011	Server and Clients fully implemented and tested	