



# Application Development for Mobile and Ubiquitous Computing

## Seminar Task

## Second Presentation

GroupNo. 15

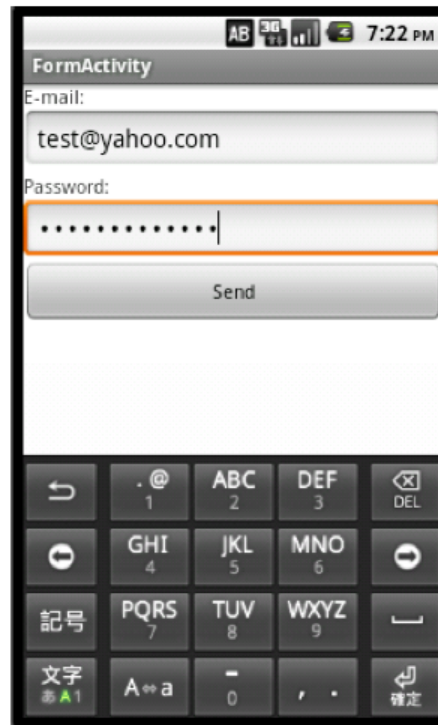
Team:

Mihail Maxacov

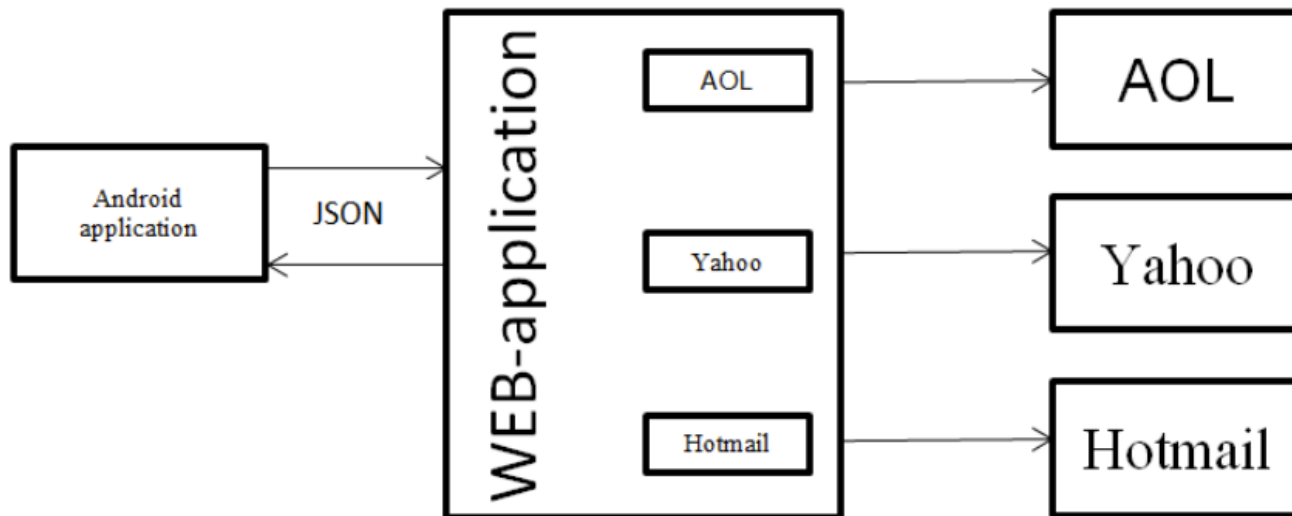
Vitalii Kushinr

- Application Scenario
- Technologies
- Challenges
- Work plan

- user sends request with login and password to our server



- server sends request to mail server and receives list of contacts
- server generates JSON file with contacts and sends response to the application



When Server received correct login and password:

```
{"status": "ok",  
"content": [{"name": "Mihail Maxacov", "email": "0xf013@gmail.com"},  
             {"name": "Vitalii Kushnir", "email": "kushnirv88@gmail.com"}]}
```

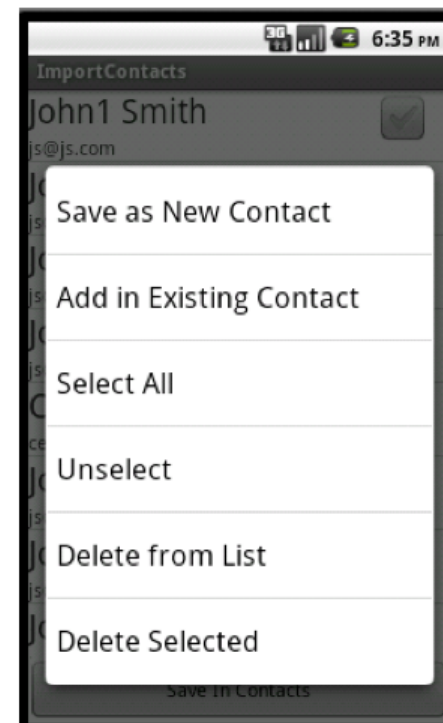
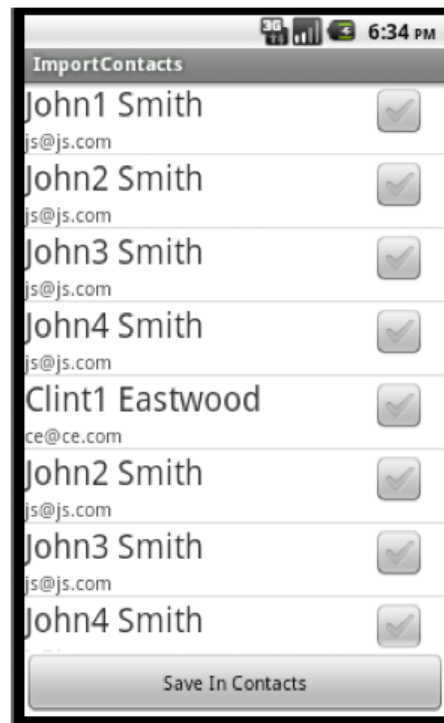
When Server received incorrect login and password

```
{"status": "error", "message": "Username or password are incorrect"}
```

If Server does not support such provider:

```
{"status": "error", "message": "Unsupported provider"}
```

- application creates ListView with contacts
- user decides what to do with the contacts



- For a front-end we employ Android 2.3
- The web-app is a Sinatra application, which is a lightweight Ruby framework.
- Ruby itself was chosen due to its easily comprehensible nature and some facilitating plugins for Contacts Import.

- Fragmentation of Android smartphones:
  - application should look the same on the different devices
- Limited bandwidth:
  - generate as little traffic as possible
- Usability:
  - intuitive and fast UI on limited screen space
- Reduce the use of resources on device



- Improve the Frontend design
- Connect Android application and Server
- Fix existing problems with umlauts and Cyrillic characters
- Test the functionality against known possible flaws (encoding, invalid password, unsupported providers, multiple domains per provider: Hotmail.de, Hotmail.com etc.)
- Develop additional parsing strategies to those available at the moment.

# Questions?