

# Application Development for Mobile and Ubiquitous Computing

## Seminar Task

## Final Presentation

GroupNo. 16

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This is Andy.

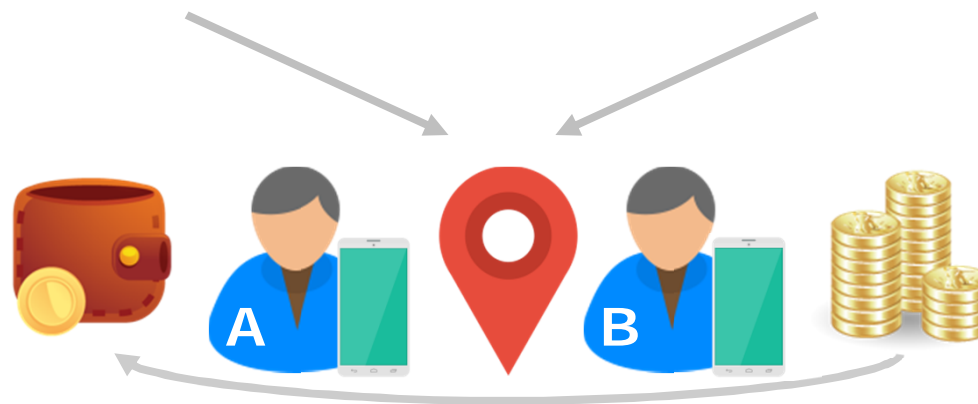


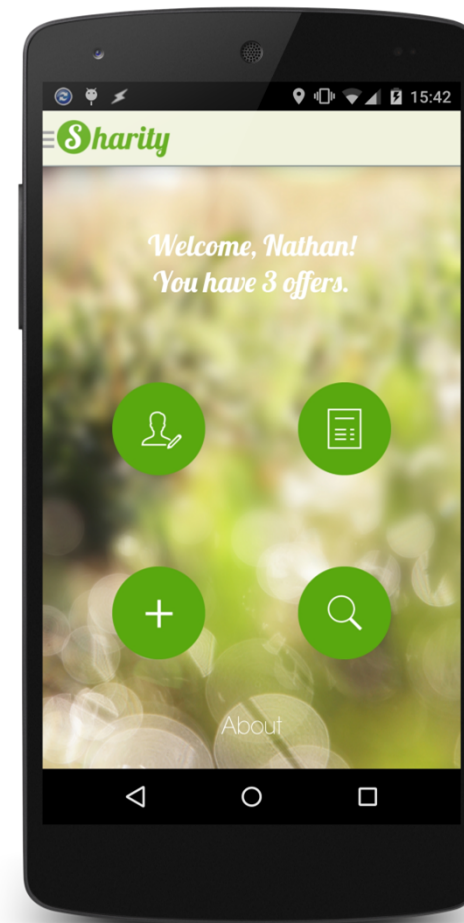
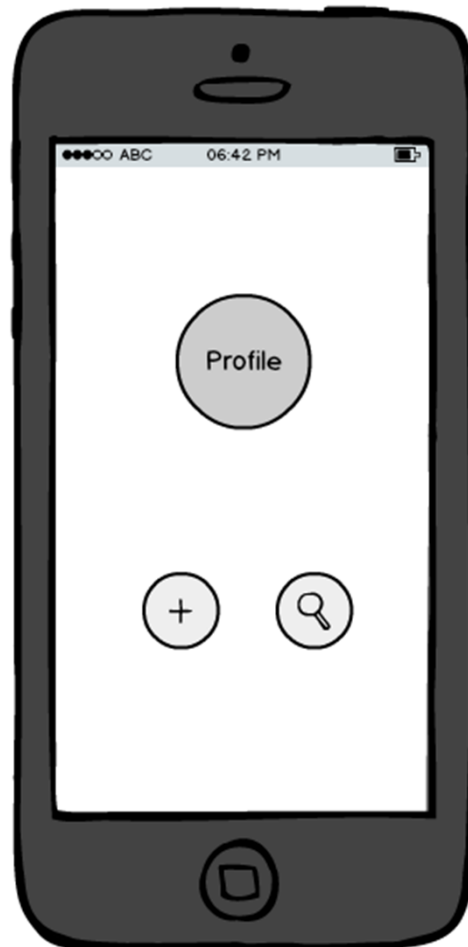
And this is Bob.



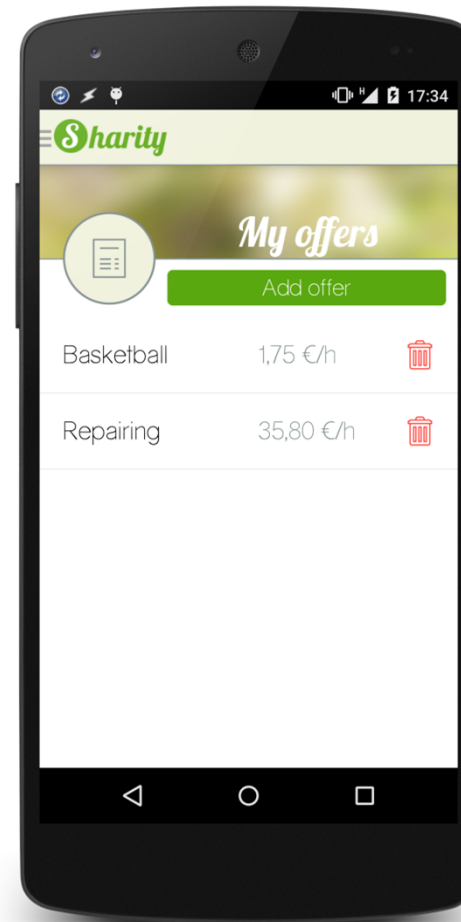
- Owns a camera
- Doesn't have time to take photos

- Has to take photos
- Cannot afford a camera

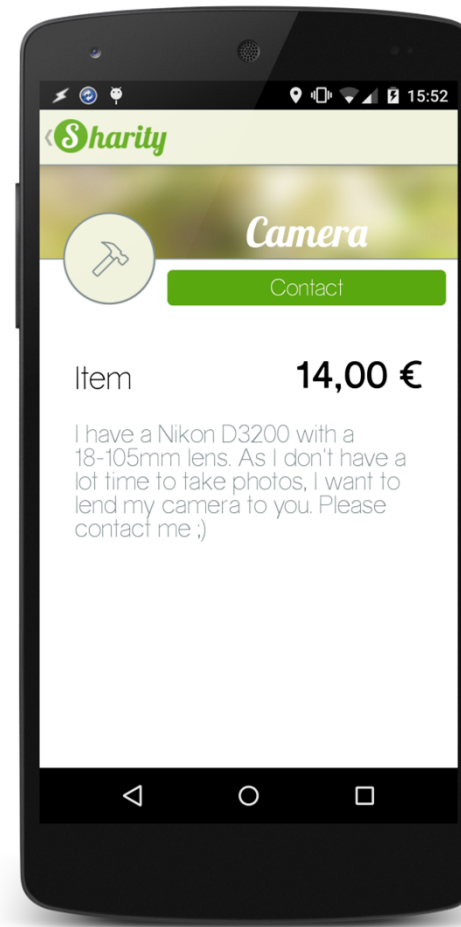


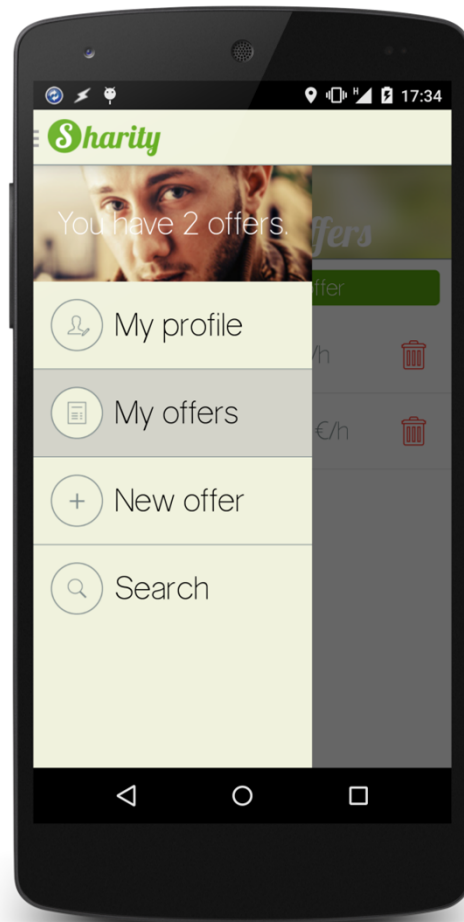


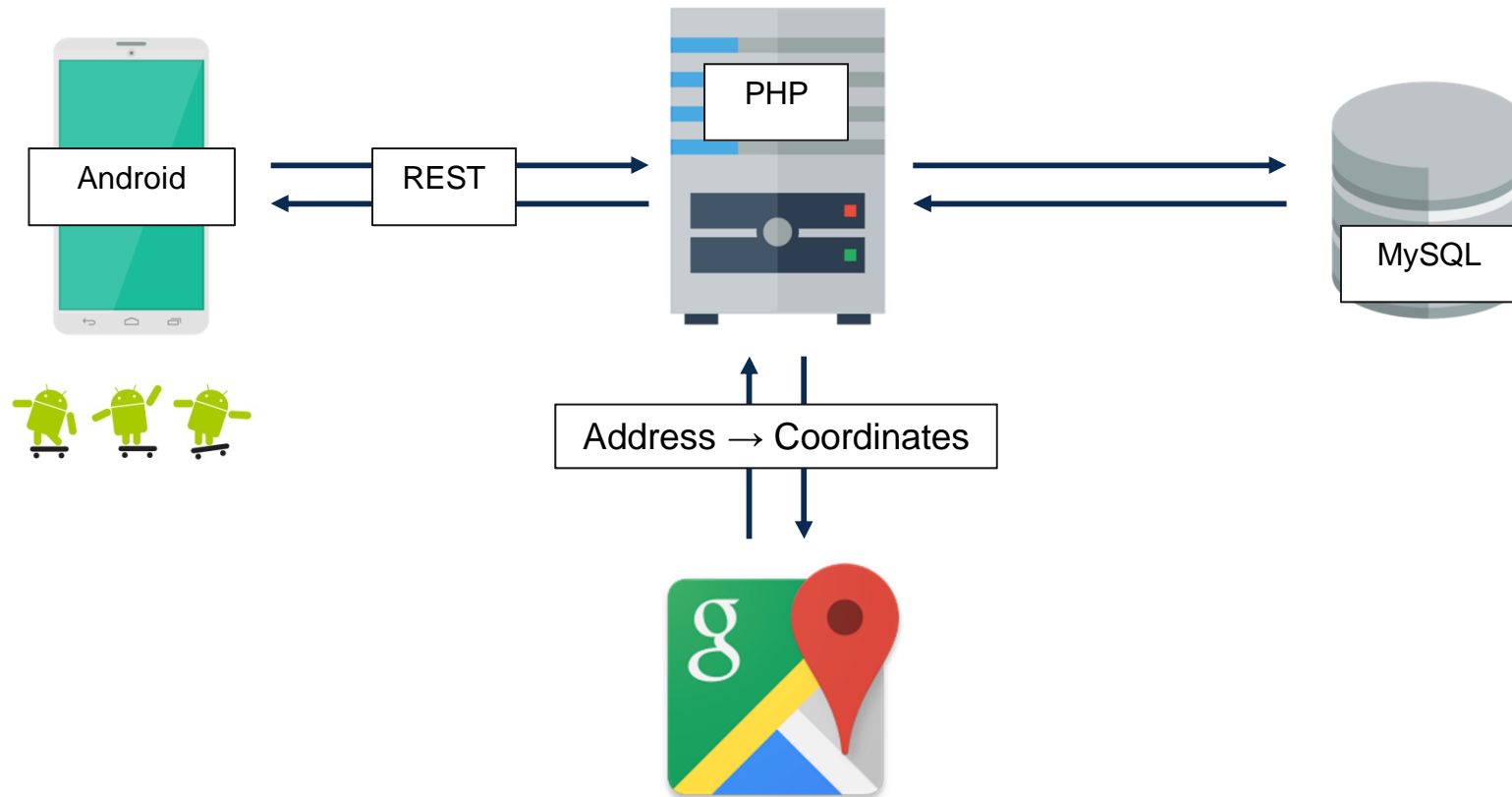
## Screenshots – My offers

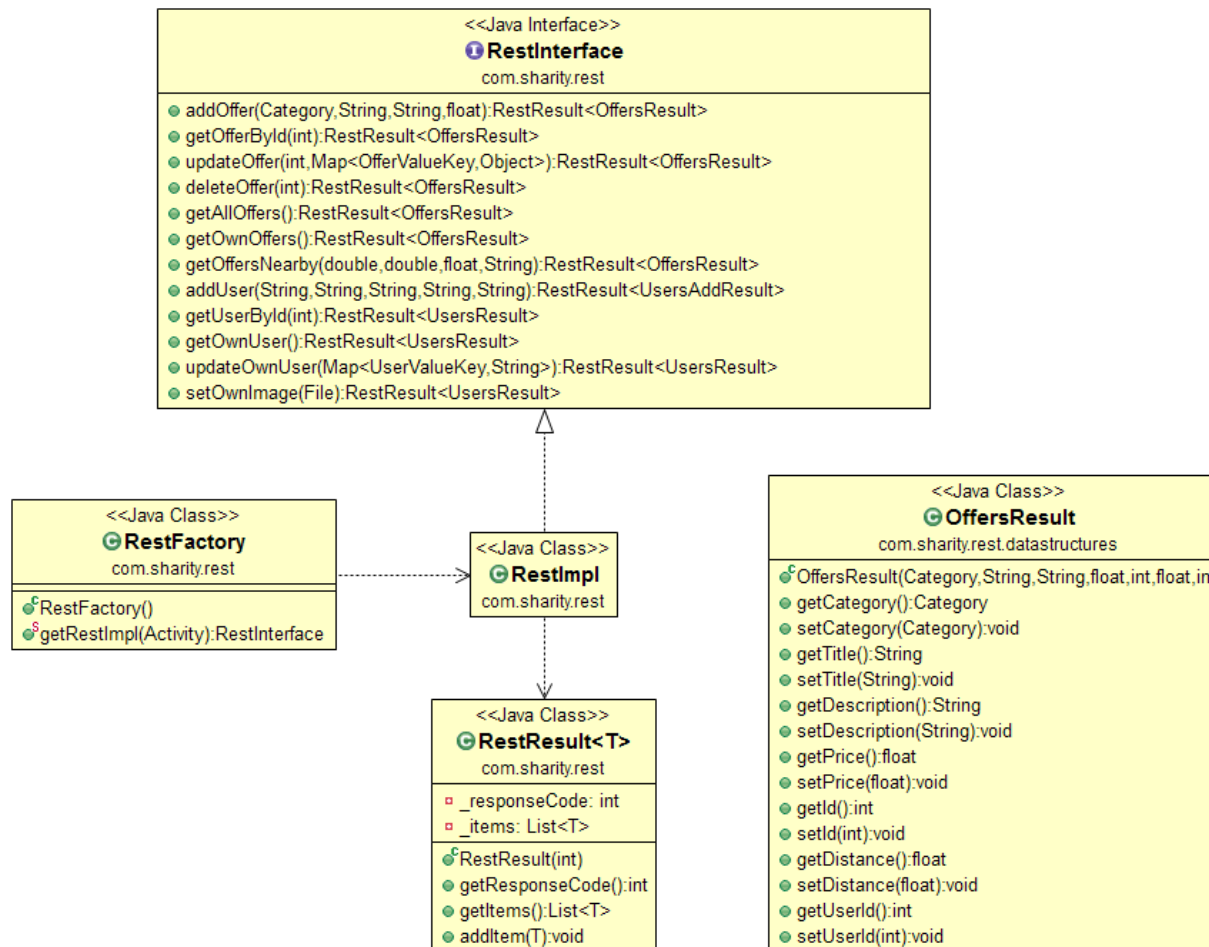












```
47@  @Override
48  public RestResult<OffersResult> addOffer(Category category, String title, String description, float price) {
49
50      if(!_network.isConnected()) {
51          return null;
52      }
53
54      JSONObject dataJSON = new JSONObject();
55
56      RestResult<OffersResult> result;
57
58      int id = _restPrefs.getInt(RestInterface.KEY_PREF_ID, -1);
59      String hash = _restPrefs.getString(RestInterface.KEY_PREF_HASH, "-");
60
61      if(id == -1 || hash.equals("-")) {
62          result = new RestResult<OffersResult>(400);
63          return result;
64      }
65
66      try {
67
68          dataJSON.put("category", Category.toString(category));
69          dataJSON.put("title", title);
70          dataJSON.put("description", description);
71          dataJSON.put("price", price);
72          dataJSON.put("userid", id);
73
74          JSONResource responseResource;
75
76          responseResource = _resty.json(BASE_URL + "offers?hash=" + hash, Resty.content(dataJSON));
77          int responseCode = responseResource.http().getResponseCode();
78
79          result = new RestResult<OffersResult>(responseCode);
80      } catch(Exception e) {
81          result = new RestResult<OffersResult>(400);
82      }
83
84      return result;
85  }
```



## Manage own profile

- Enter & edit profile data
- Upload profile image



## Search & view offers near me

- Search for offers within a certain distance
- View offers in detail



## View profile and contact provider

- Instantly contact in the app via
  - Phone
  - Email
- Exact address is hidden

- + Works even without location
  - + Location timeout
  - + Different representation when no location available
- + Comfortable UI
- + Images loading in background process
  - + UI not blocked
  - + Adapting to different bandwidths
  
- No caching
  - Profile images will be downloaded again for every request
  - Increases mobile data usage
- Location cannot be accessed indoors
  - Last known location should be cached
- Does not work without internet connection

## Form factor challenge

- Custom UI → Not depending on system look and feel

## Energy challenge

- Only getting location when needed
- Fixed interval for GPS updates

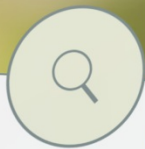
## Usability challenge

- Filtering/sorting search results depending on user's location





Sharitty



Search

New search

Piano lessons 25,00 €

Bike 15,00 €

Book 4,00 €

Guitar lessons 32,00 €

Computer help 25,00 €

Printer 7,50 €

Sharitty