RAD - Pinjobs

TDA367

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Contents

1. Introduction

The project is a smartphone application, below follows a brief overview of the project.

1.1 Purpose of application

Our application serves to help regular people with ordinary tasks and at the same time give working opportunities to people searching for an extra income. The application will connect those who are in need of domestic help and people interested in earning some extra money.

1.2 General characteristics of application

The application will be an android smartphone application which is available for multiple mobile devices. The application will connect different applicants in our network over the internet.

In the application you will be able to both view and browse through different users posts, either through a list or a map. The items will mainly be sorted by the position closest to you. Communication between the two parties will not happen through the application, but between mail or phone.

1.3 Scope of application

The application will require an internet connection. It supports the mobile device GPS and maps to make it easier for the user to locate jobs. Employers will have to make an account. People searching for jobs doesn't need an account.

1.4 Objectives and success criteria of the project

It should be possible for the person searching for a job and an employer to get in contact with each other. The searcher will see jobs available near his location. Every user will be able to make an account and make a post as an employer.

1.5 Definitions, acronyms and abbreviations

- GUI, Graphical User Interface
- Device, the smartphone running the program
- Employer, the person who is in need of domestic help
- Searcher, the person who is willing to help with domestic chores.
- GPS (Global Positioning System), tracking your position.

2. Requirements

2.1 Functional requirements

The user(s) should be able to;

1. Start the application.

2. Create an account
3. Login to an existing account
4. Remove an existing account (not implemented)
5. Get a new password if he has forgot his present password (not implemented)
6. Change to a new password (not implemented)
7. Add contact information to an account
8. Modify account information
9. Create an ad for what type of chore the user needs help with
10. Chose the location for where the job is supposed to take place
11. Specify what he is willing to pay for the service
12. See old posts in the application (not implemented)
13. Remove a posted ad (not implemented)
14. Modify an already posted ad with new information
15. Have a post shown on a map with other ads
16. Have a post shown in a list with other ads
17. Have a post shown in a list sorted in distance from the person using the application
18. View other peoples profiles (not implemented)
19. Browse other peoples ads
20. View other peoples ads
21. Search for a person(profile) (not implemented)
22. Search for a job title (not implemented)
23. Search for a job location (not implemented)
24. Filter the search for location by area distance (not implemented)
25. Filter the browsing by type of job (not implemented)
26. Filter the browsing by distance (not implemented)

2.2 Non-functional requirements

2.2.1 Usability

The average smartphone user will be able to use our applicaton without hesitation since it's going to look like other applications. The application will be in Swedish. The application should be very easy to use and go fast to browse. It should also be easy to see new jobs.

2.2.2 Reliability

A users login-information should be kept private.
The application should not crash

2.2.3 Performance

Any actions initiated by a user should not exceed a 2 seconds response time in worst case. Exceptions can be made when loading of large results occur.

2.2.4 Supportability
The application must be implemented so that the GUI fits for all android devices.

2.2.5 Implementation
The application will be available for devices using android.

2.2.6 Packaging and installation

NA

2.2.7 Legal

There are legal issues due to jobs being offered without an organisation or corporation which mean that jobs without paying taxes might be offered.

2.3 Application models

2.3.1 Use case model

See APPENDIX for UML diagram and textual descriptions

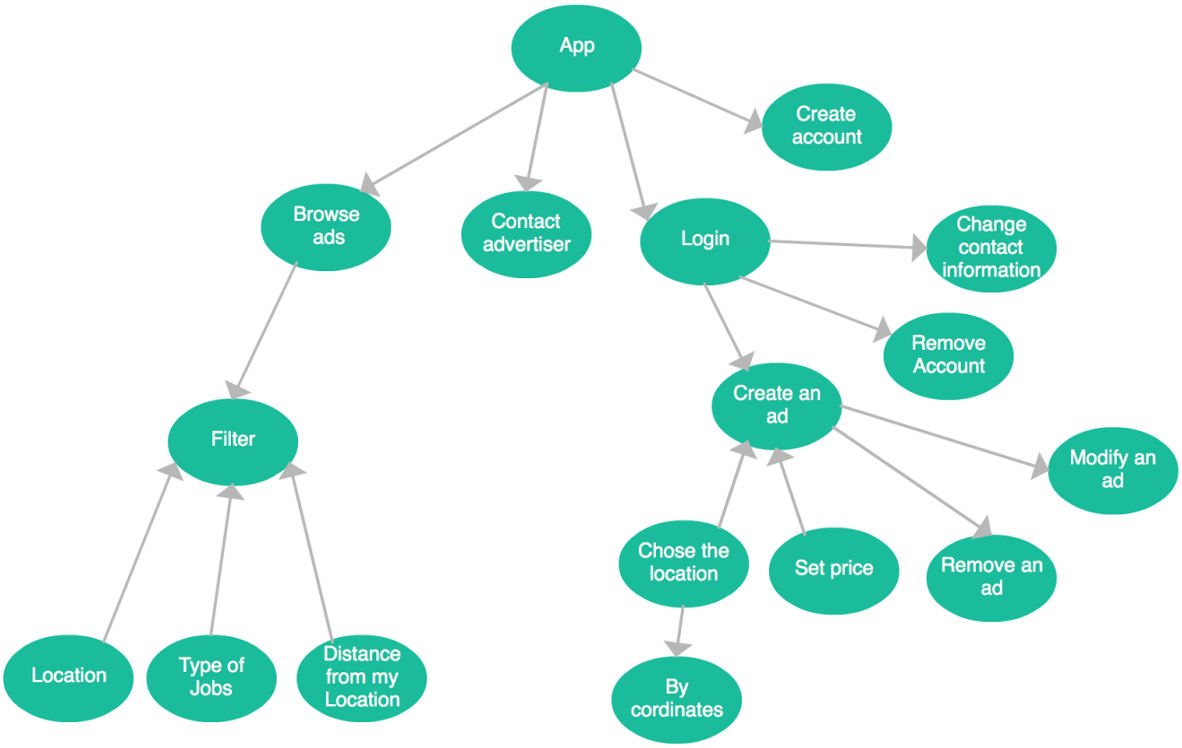
2.3.2 Use cases priority
1. Post ad
2. Show ad
3. Browse ads
4. Create account
5. Contact advertiser (not implemented)

2.3.3 Analysis model
See Appendix

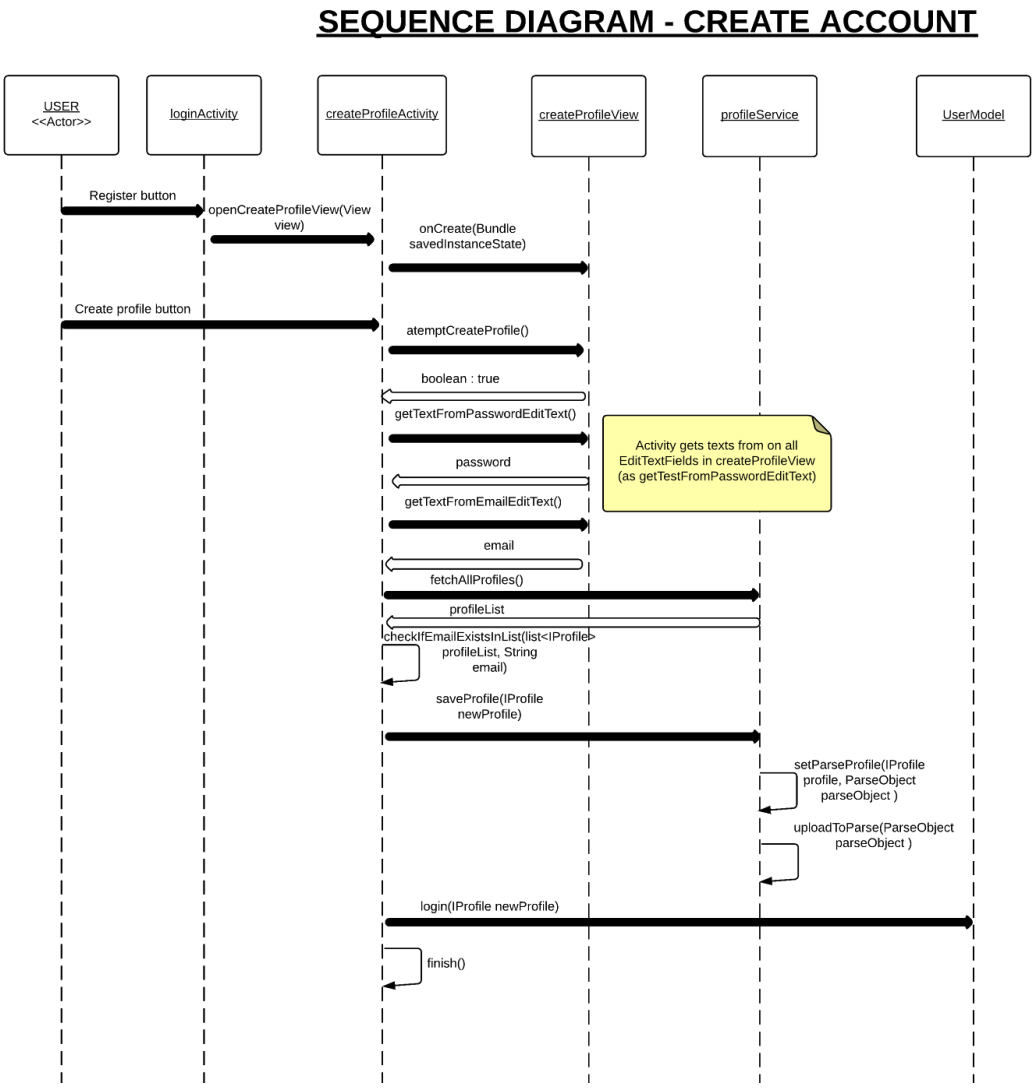
2.3.4 User interface
The application will use a fixed (none skinable, none themeable) GUI following standard conventions. The GUI will take into account different screen sizes since most devices using android have different screen sizes. See Appendix for preliminary GUI.

APPENDIX

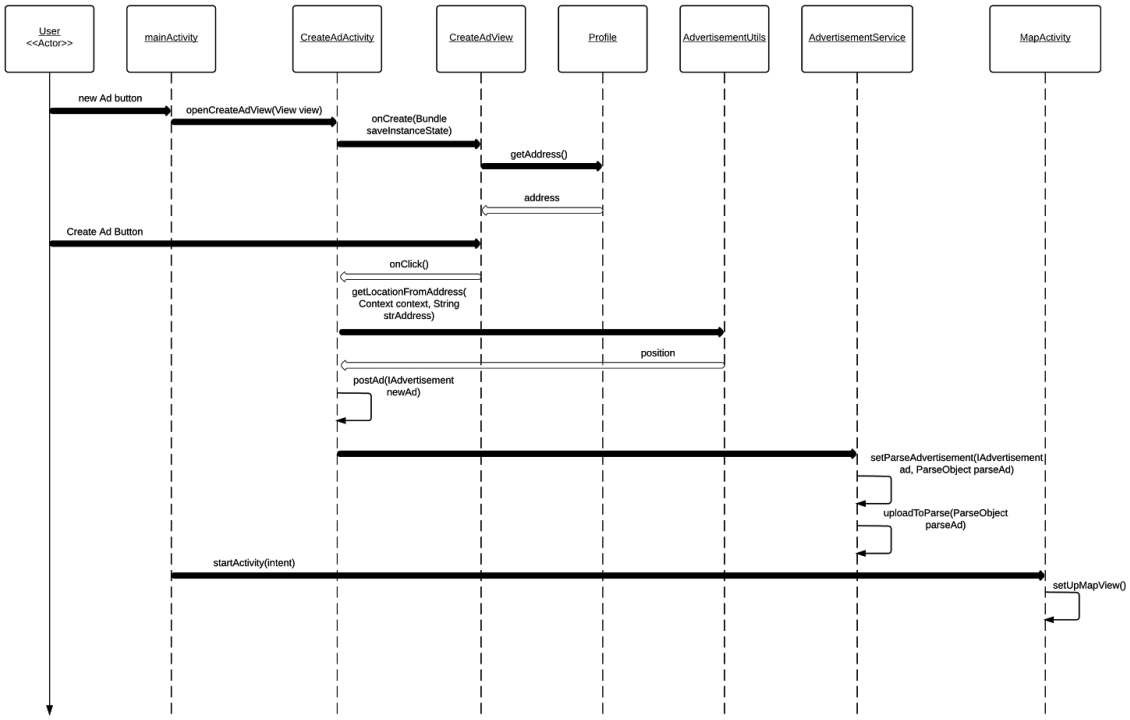
Use cases



Sequence diagram



SEQUENCE DIAGRAM - POST AD



Use Case texts

Post ad

Summary: This is how the user posts an ad to the application.
Priority: high
Extends: -
Participators: User

Normal flow of events

	Actor	System
1	Clicks create new ad button	
2		“Create ad” view opens
3		Auto generates information from profile page as good defaults
4	Fills in all the textfields necessary to continue	
5	Presses the continue button	Checks if textfields are filled in correctly.
6		ad is saved by the system
7		Map view opens with new ad in focus

Alternative flows

Flow 5.1 The textfields are not filled in correctly

	Actor	System
5.1		A red mark will be shown next to the inputfield the user filled in incorrectly, aswell as an input hint
5.2		loops to 5 until textfields have gotten correct input

Flow 6.1 actor has no internet connection

	Actor	System
6.1		Prompts an allert dialog
6.2		Goes back to step 2.

Create account

Summary: This is how the user creates an account
Priority: medium
Extends: -
Participators: User

Normal flow of events

	Actor	System
1	Clicks create new account button	
2		“Create account” view opens
3	Fills in all the textfields necessary to continue	
4	Presses the “create account” button	Checks if textfields are filled in correctly.
5		Saves information in database
6		Login user and navigates to main window

Alternative flows

Flow 4.1 The textfields are not filled in correctly

	Actor	System
4.1		A red mark will be shown next to the inputfield the user filled in incorrectly, aswell as an input hint explaining what is wrong
4.2		loops to 4 until textfields have gotten correct input

Flow 4.1 e-mail already used

	Actor	System
4.1		A red mark will be shown next to the inputfield the user filled in incorrectly, aswell as an input hint explaining what is wrong
4.2		loops to 4 until textfields have gotten correct input

Flow 5.1 actor has no internet connection

	Actor	System
5.1		Prompts an allert dialog
5.2		Goes back to step 2.

Browse ads

Summary: This is how the user browses ads in the application.
Priority: high
Extends:-
Participators: User

Normal flow of events

	Actor	System
1	Clicks “browse ads” button	
2		A news feed with ads will show up

Alternate flows

Flow 2.1 user scrolls

2.1	scrolls down the list	shows more ads into the news feed

Flow 2.1 user has no connection

	Actor	System
2.1		No ads appear. Alert dialog appers

Flow 2.1 There are no ads posted in the system or ads matching your filter

	Actor	System
2.1		Shows an empty list and notifys that there are no ads posted yet.

Flow 2.1 the scroll list ends

	Actor	System
2.1		The list ends and you can’t scroll further down

Flow 2.1 The user scrolls up at the top of the list

	Actor	System
2.1		The view shows an update icon
2.2		the view updates with new ads if there are any

Show ad

Summary: This is how the user looks at the detailed view of the ad.
Priority: high
Extends:-
Participators: User

Normal flow of events

	Actor	System
1	clicks on an ad	
2		show a detailed view of the job ad

Alternate flows

Flow 2.1 the ad is removed at the same time you try to click it

	Actor	System
2.1		prompts dialog “ad has been deleted”

Flow 2.1 the ad pressed is one of the ads the logged in user has posted

	Actor	System
2.1		shows a modify ad view

Contact advertiser

Summary: This is how the user contacts an advertiser
Priority: low
Extends:-
Participators: User

Normal flow of events

	Actor	System
1	Clicks on an ad	
2		Displays a window with a detailed view of the ad
3	Clicks on “email advertiser” button	
4		New window/form shows up with two text fields; Sender’s email address and message.
5	Fills in email and message.	
6	Clicks on send message.	
7		Message is sent to advertisers email from senders email.

Alternative flows

Flow 3.1 The user clicks “call advertiser” button (if available)

	Actor	System
3.1.1	The user clicks on “send message” button	

3.1.2		The messageview is shown where you can fill in a message
3.1.3	User writes message and clicks send	
4.1		The advertiser gets an e-mail from the user

Flow 4.1 The user types in an invalid email address in the “senders email” text field.

	Actor	System
5.1		Red checkmark next to email textfield saying “invalid email address”.

Flow 6.1 user has no connection

	Actor	System
2.1		Prompts dialog saying “internet connection needed to email advertiser”.

Analysis Model

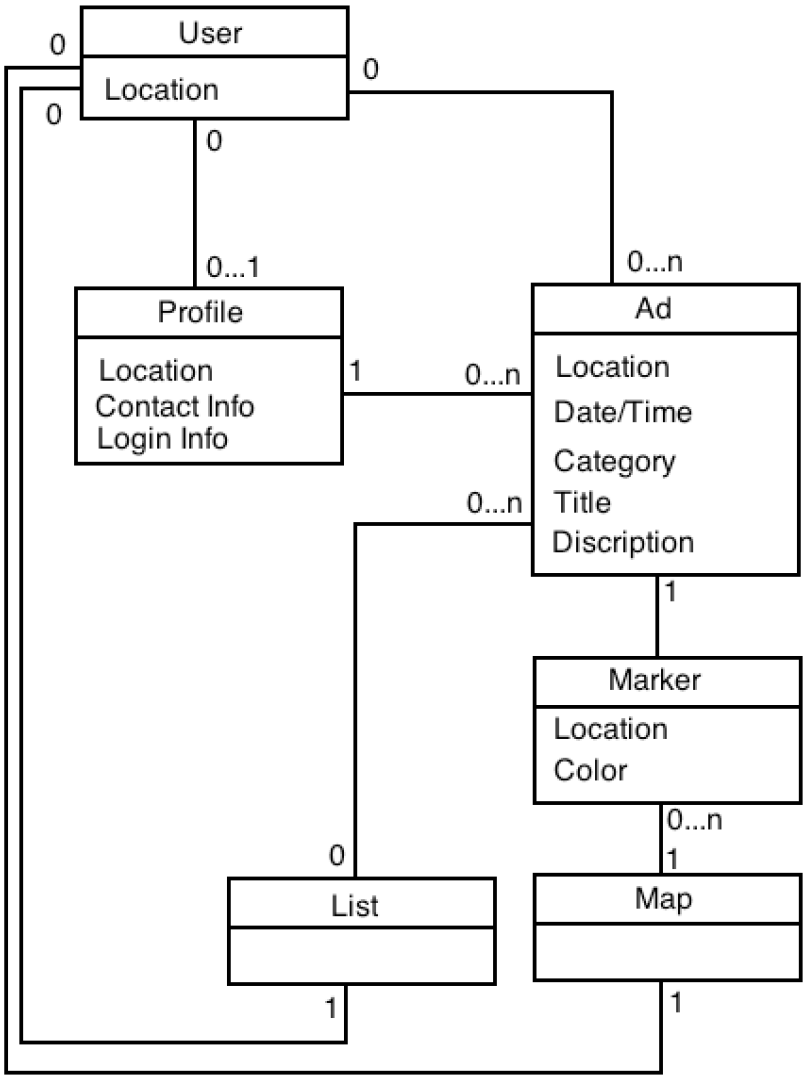


Figure 1. GUI - Pins with available jobs

Figure 2. GUI - Main screen

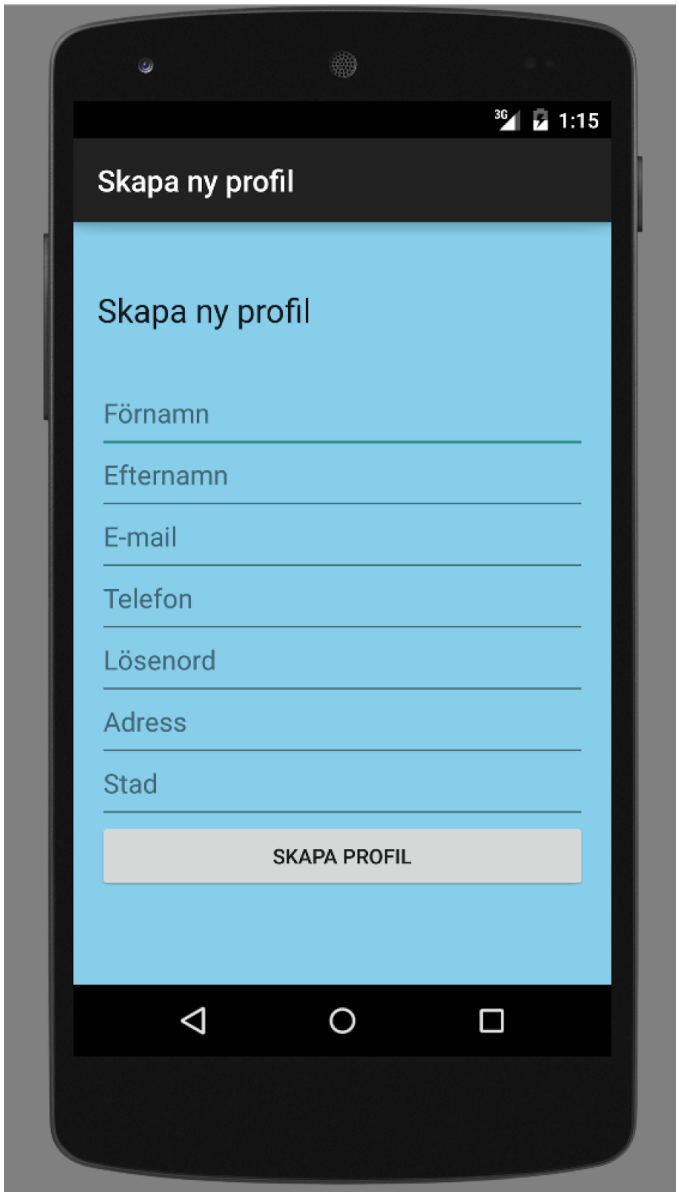


Figure 3. GUI - Create new profile

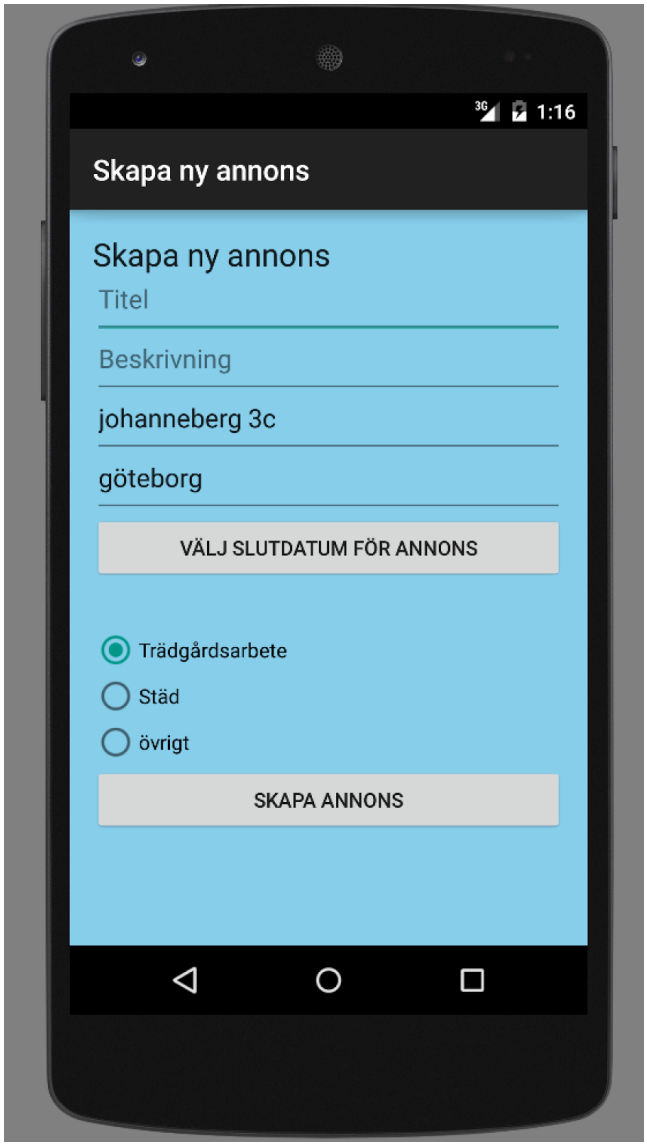


Figure 4. GUI - Create new ad

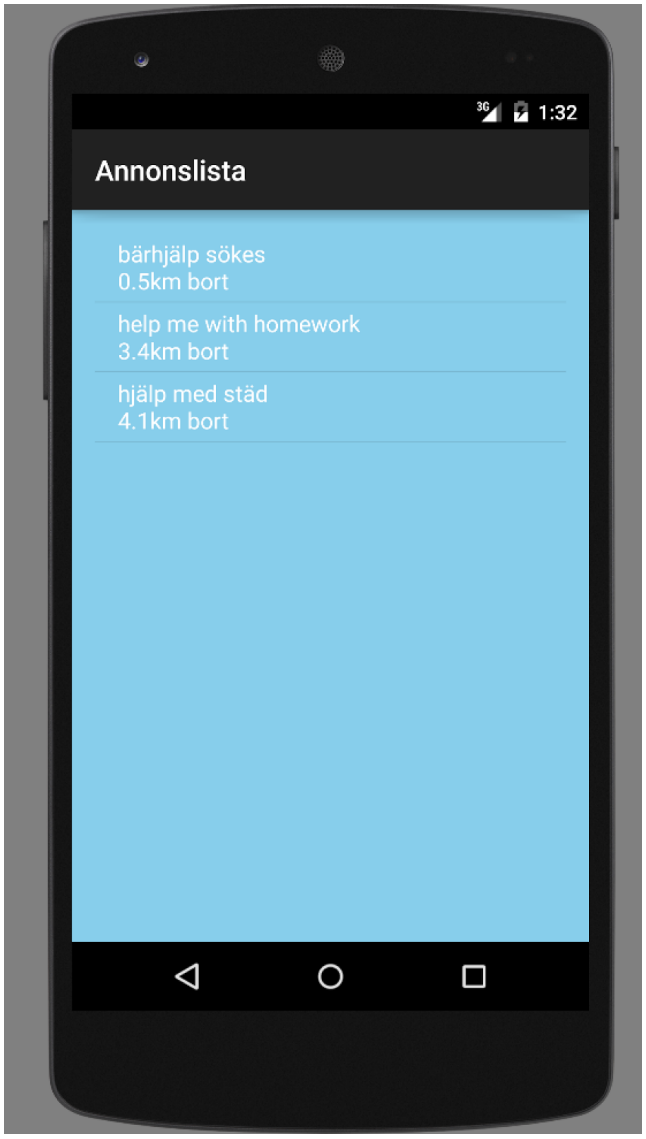


Figure 5. GUI - List with available jobs