RAD Grupp 10 - TDA367

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 your choise. 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
- 5. Get a new password if he has forgot his present password
- 6. Change to a new password
- 7. Add contact information to an account
- 8. Modify his 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 his old posts in the application
- 13. Remove a posted ad
- 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
- 19. Browse other peoples ads
- 20. View other peoples ads
- 21. Search for a person(profile)
- 22. Search for a job title
- 23. Search for a job location
- 24. Filter the search for location by area distance
- 25. Filter the browsing by type of job
- 26. Filter the browsing by distance

2.2 Non-functional requirements

2.2.1 Usability

The average smartphone user will be able to use our application without hesitation since it's going to look like other applications. The application will be in Swedish and English. 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. Browse ads
- 3. Create account
- 4. Contact advertiser

2.3.3 Analysis model

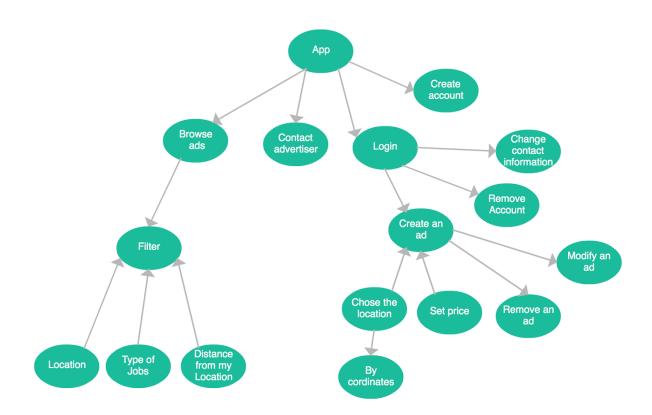
See Appendix

2.3.4 User interface

The application will use a fixed (non skinable, non 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



Use Case texts

Post ad

Summary: This is how the user posts 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	Checks if textfields are filled in correctly.and shows with a green checkmark that the textfield is ok
5		Continue button is enabled
6	Presses the continue button	
7		ad is saved by the system
8		"your ad has been posted" view opens for a few seconds
9		Submit users ad to a list of other ads
10		List view with most recent ads opens

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
5.1		Continue button is disabled
5.2		loops to 4.1 until textfields have gotten correct input

Flow 7.1 actor has no internet connection

	Actor	System
7.1		Prompts a pop-up that says "internet connection needed to post ad, ad has not been posted".
7.2		Goes back to step 5.

Flow 8.1 actor presses the "post has been posted" picture

	Actor	System
8.1	presses the picture	
8.2		skips the timer and jumps straight to step 9

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	Checks if textfields are filled in correctly and shows with a green checkmark that the textfield is ok
4		"Create account" button is enabled
5	Presses the "create account" button	
6		"You've succefully created an account" view will show.
7		Overview of the users profile is shown

Alternative flows

Flow 3.1 The textfields are not filled in correctly

	Actor	System
3.1		A red mark will be shown next to the inputfield the user filled in incorrectly, aswell as an input hint explaining what is wrong
4.1		"Create account" button is disabled

4.2	loops to 3.1 until textfields have gotten correct input
	Correct input

Flow 3.1 Contact information already used(ex. Username or e-mail)

	Actor	System
3.1		A red mark will be shown next to the inputfield the user filled in incorrectly, aswell as an input hint explaining what is wrong
4.1		"Create account" button is disabled
4.2		loops to 3.1 until textfields have gotten correct input

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	loads more ads into the news feed and displays them
		displays them

Flow 2.1 user loses connection mid scroll

	Actor	System
2.1	scrolls down the list	
2.2		No new ads appear. If loadtime is too long, dialog prompt reports: "internet connection lost".

Flow 2.1 user has no connection

	Actor	System
2.1		No ads appear. Dialog prompt reports: "No ads found due to missing internet connection".

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

	Actor	System
2.1		Cannot find any ads matching your criterias.

Flow 2.1 the scroll list ends

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

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
3.1.1	clicks on an ad	
3.1.2		show a detailed view of the job ad

Alternate flows

Flow 4.1 the ad is removed at the same time you try to click it

	Actor	System
3.1.1	clicks on an ad	
3.1.2		prompts dialog "ad has been deleted"

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 "ivalid email address".

Flow 6.1 user has no connection

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

Analysis Model

