



DELIVERABLE REPORT

D2.5.3

“Iterative User Interface Design”

Collaborative project

MASELTOV

Mobile Assistance for Social Inclusion and Empowerment of Immigrants with Persuasive Learning
Technologies and Social Network Services

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1. EXECUTIVE SUMMARY

This deliverable report includes the final iteration of the user interface design. The revised screens of the MASELTOV services have been updated and finalised. In respect with recent standards and heuristics major usability issues and inconsistencies in the designs of the screens were pointed out and corresponding improvements were suggested and discussed.

The deliverable presents all updated screens and an argumentation about the changes made in order to achieve a meaningful and uniform design style.

The screens will then be used for the upcoming final usability testing with immigrants that are planned for September 2013. The feedback will be reported in deliverable D9.2.3. Recommendations to handle further usability issues will then be incorporated directly into the first running prototypes that will be reported in the accordant work packages.

The deliverable report finally concludes with an outlook to further activities for usability analysis.

2. INTRODUCTION

This deliverable presents the third and final iteration of the user interface design process which is defined in D9.1.1 (Evaluation Plan). It contains revised screens of MASELTOV services that were already presented in the first and second version of this document (deliverables D2.5.1 and D2.5.2). Based on the feedback from usability experts (D9.2.1) as well as the results and accordant implications drawn from the first usability testing (D9.2.2) with immigrant users the screens have been updated and finalised. Results and implications from evaluations were presented to the involved partners in form of bilateral calls between CUR and representatives of the developers of the services. In respect with recent standards and heuristics major usability issues and inconsistencies in the designs of the screens were pointed out and corresponding improvements were suggested and discussed.

In doing so, an improvement of the user interface design could be attained for the services Geo-Social Radar, Language Lessons, Social Network Service, Navigation Service, Text Lens, Information Service, and Serious Game. In this final iteration of the user interface design, mock-ups have been elaborated into high-fidelity prototypes with a real layout and graphical user interface. We relied on the Android standard theme Holo Light¹ to ensure that all partners can easily use it. It defines the final layout grid, the look and feel of user interfaces components, exact button sizes and appearances, colours and the typography.

The screens presented in this deliverable will be used for the upcoming final usability testing with immigrants that are planned for September and will be reported in D9.2.3. Recommendations to handle potential usability issues will be incorporated directly into the first running prototypes that will be reported in the accordant work packages (WP6-WP8).

¹ <http://developer.android.com/design/style/themes.html>

3. THIRD ITERATION OF USER INTERFACES

In this chapter we present the final screens that have been designed for the various MASELTOV services. Like introduced above they stick to the Android Holo Light Theme to ensure a common look and feel which makes the usage easier for the immigrants.

3.1 GEO-SOCIAL RADAR

The Geo-Social Radar Service has the purpose to connect an immigrant needing assistance with a volunteer nearby by allowing user-to-user communications in many ways (video, call, chat, SMS, etc.). The GeoRadar will search and display potential volunteers nearby to the requesting participant according to different search criteria. The user participation will be on a voluntary basis and each participant will be able to allow or deny his/her localization.

The detailed specification of this service can be found in D3.2.1 and the according user scenario in D2.3.1.

3.1.1 DASHBOARD

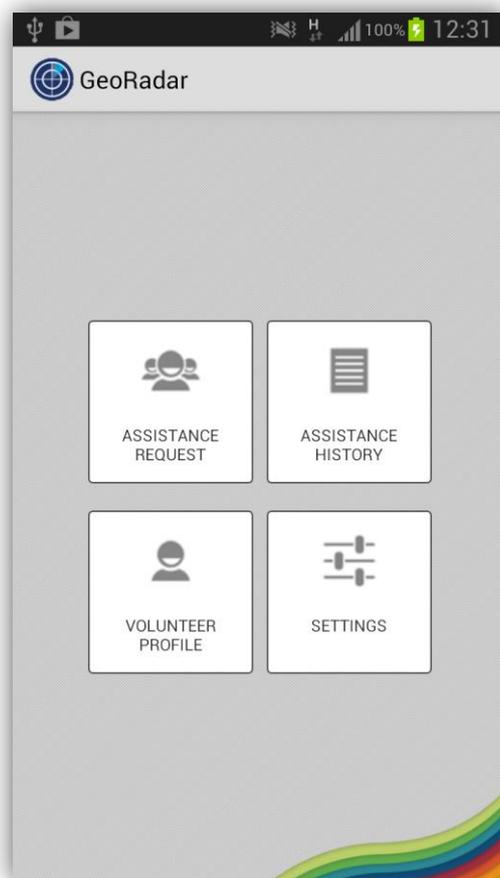


Figure 1: Dashboard user interface.

The Geo-social Radar dashboard is shown following the MASELTOV main dashboard. Users can select one function by tapping it.

3.1.2 REQUEST FOR ASSISTANCE (I): COMPETENCES SELECTION

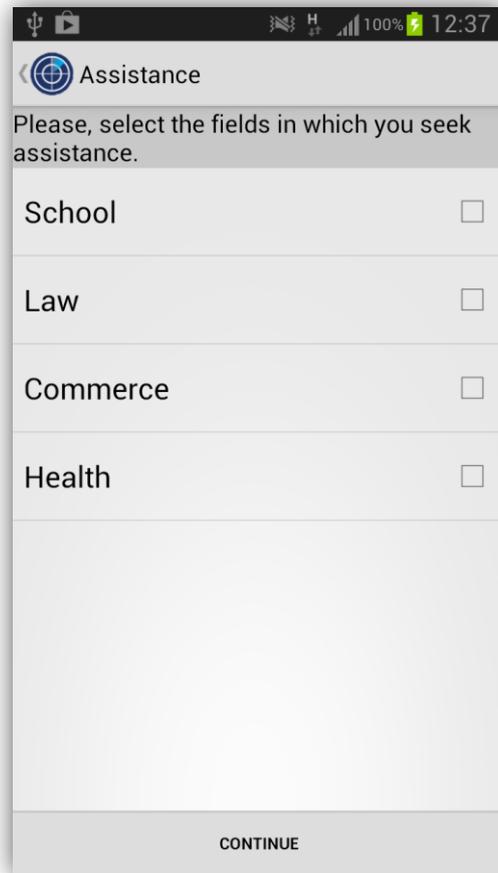


Figure 2: Competences selection.

The user should select the required competences (one or more) by tapping it. S/he can also select nothing (it means that any competence is ok). Finally, the user has to tap “Continue”.

3.1.3 REQUEST FOR ASSISTANCE (II): LANGUAGE SELECTION

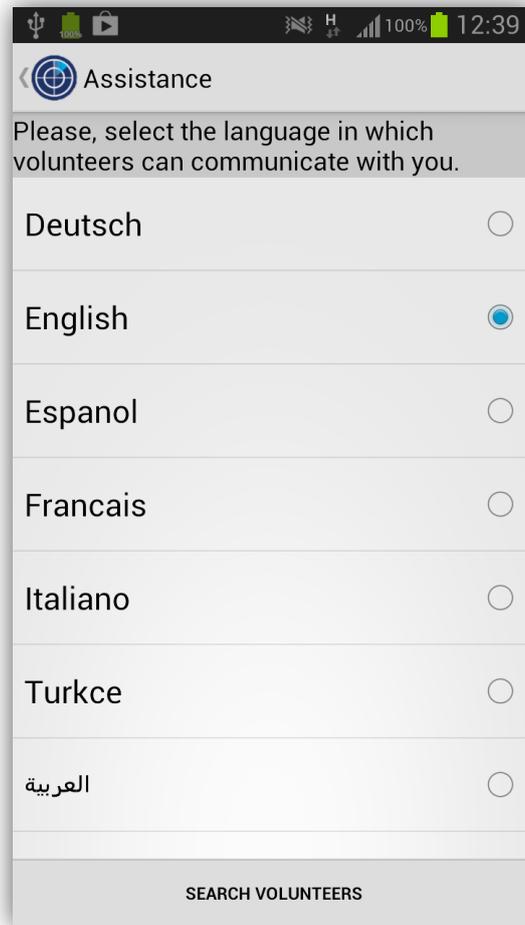


Figure 3: Language selection.

The user must select the required volunteer’s language by tapping it. This screen visualization depends on ‘default language for assistance’ setting. Afterwards, the user has to tap on “Search volunteers”. The GeoRadar Platform starts searching for available volunteers according to the required features.

3.1.4 REQUEST FOR ASSISTANCE (III): AVAILABLE VOLUNTEERS LIST

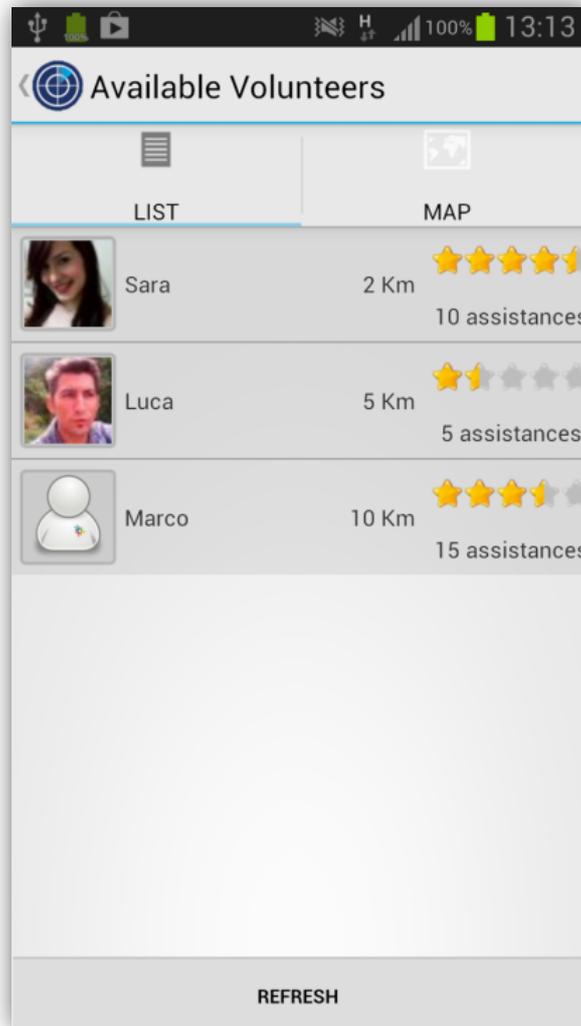


Figure 4: Volunteers list.

The volunteers set can be shown in a list as well as on a map. The list is ordered by distance (the nearest volunteer on top). For each volunteer the following information is shown: volunteer photo, his current distance, the summary of given assistances (number and rating). A tap on a list element displays volunteer details. A tap on “Refresh Button” searches for near-by volunteers again.

3.1.5 REQUEST FOR ASSISTANCE (IV): AVAILABLE VOLUNTEERS MAP

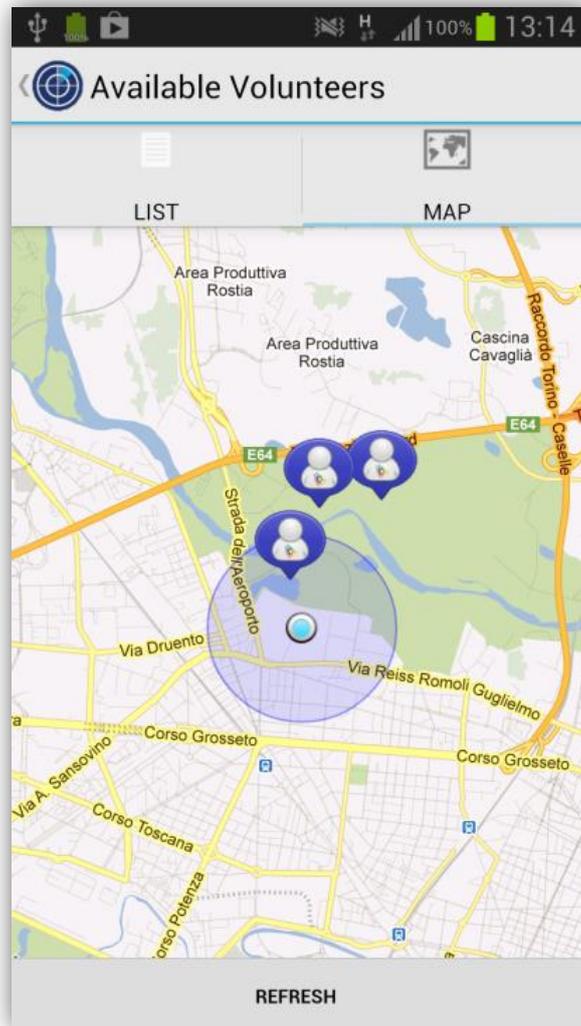


Figure 5: Volunteers map.

If the user taps a volunteer picture in the map, a callout window is displayed with some information about the volunteer:

- an image (photo or what else he has chosen)
- the current distance
- the summary of given assistances (number and global rating)

A tap on “Refresh Button” searches volunteers again.

3.1.6 REQUEST FOR ASSISTANCE (V): VOLUNTEER SELECTION ON MAP

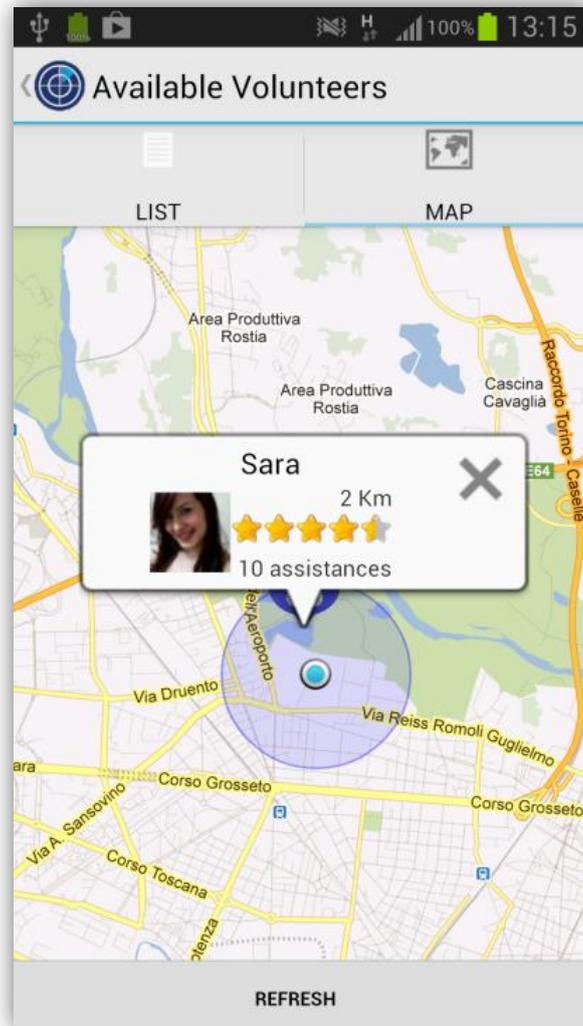


Figure 6: Volunteers selection on map.

A tap on the callout window displays volunteer details. A tap on “X” closes the callout window. A tap on “Refresh Button” searches volunteers again.

3.1.7 REQUEST FOR ASSISTANCE (VI): VOLUNTEER DETAILS

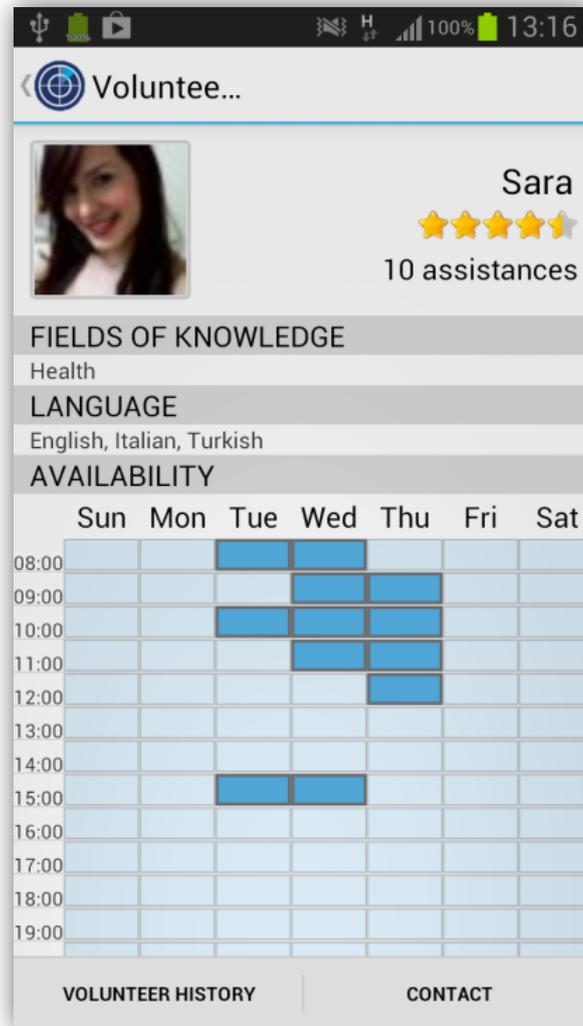


Figure 7: Volunteers details.

Extended volunteer information is shown:

- Photo
- Number of given assistances
- Global rating
- Competences
- Language spoken
- Availability daytime

Tap on Volunteer History button to display the volunteer assistance list. Tap on Contact button to call the volunteer.

3.1.8 REQUEST FOR ASSISTANCE (VII): ALL VOLUNTEER HISTORY

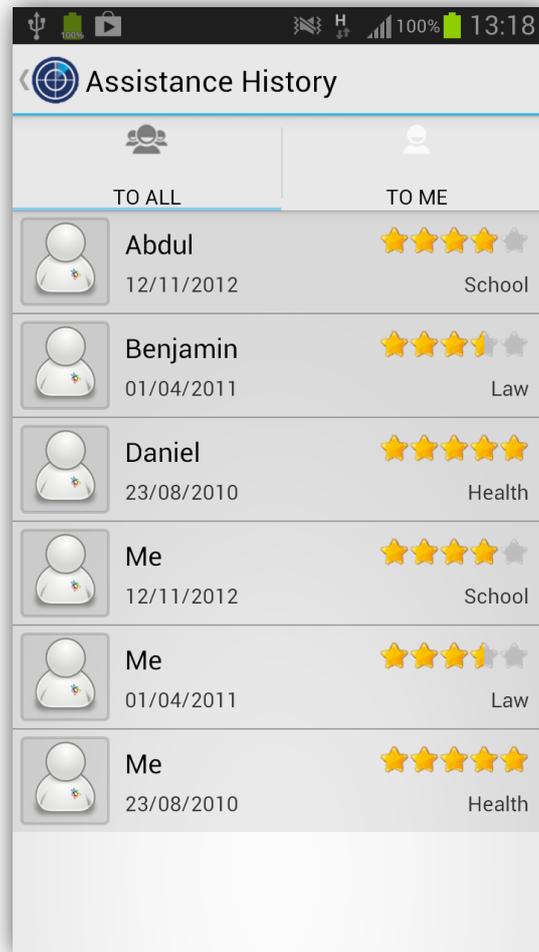


Figure 8: Volunteers history.

The Given Assistances History shows details such as:

- Date of assistance
- Field of assistance (see competences)
- Nickname of the assisted person
- Vote of the assistance

A tap on the tab “To me” displays personal assistance only.

3.1.9 REQUEST FOR ASSISTANCE (VIII): PERSONAL VOLUNTEER HISTORY

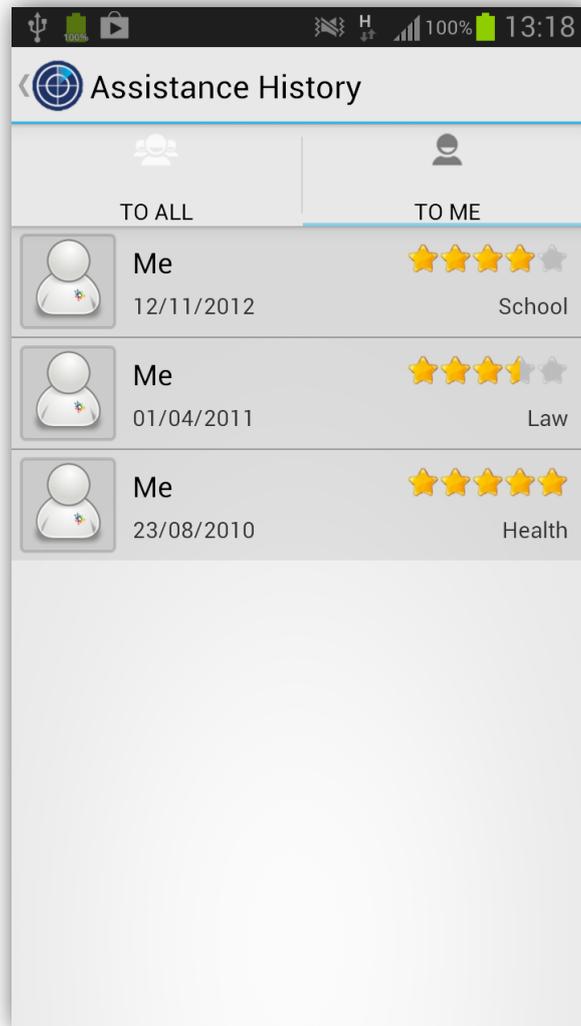


Figure 9: Personal volunteer history.

The Given Assistances History shows details such as:

- Date of assistance
- Field of assistance (see competences)
- Nickname of the assisted person
- Vote of the assistance

A tap on the tab “To all” displays all volunteer’s assistances.

3.1.10 REQUEST FOR ASSISTANCE (IX) : CONTACT VOLUNTEER

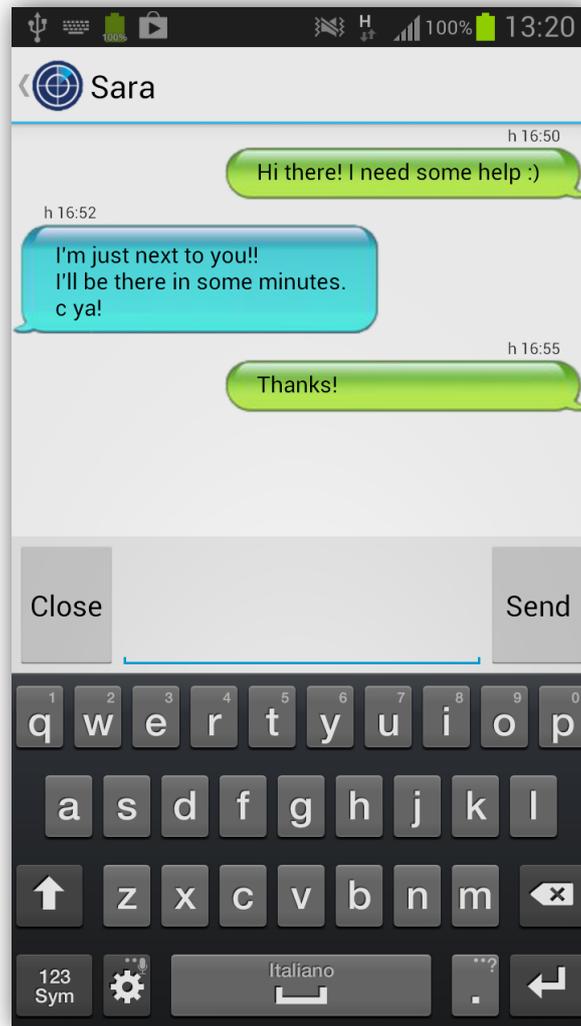


Figure 10: Contact volunteer.

The selected volunteer can be contacted by starting a chat session. Tap on “Close button” to finish the chat session.

3.1.11 ASSISTANCE HISTORY (I)

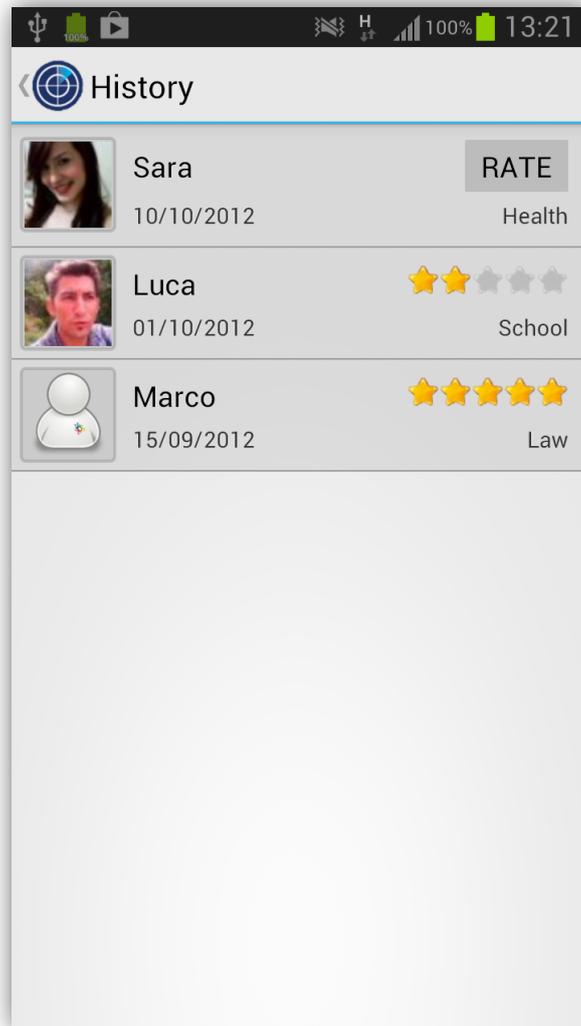


Figure 11: Assistance history.

This screen shows the history of the received assistance. Shown details are:

- Date of assistance
- Field of assistance (see competences)
- Nickname of the volunteer who gave the assistance
- Rate of the received assistance or button to rate the received assistance

3.1.12 ASSISTANCE HISTORY (II): RATE AN ASSISTANCE

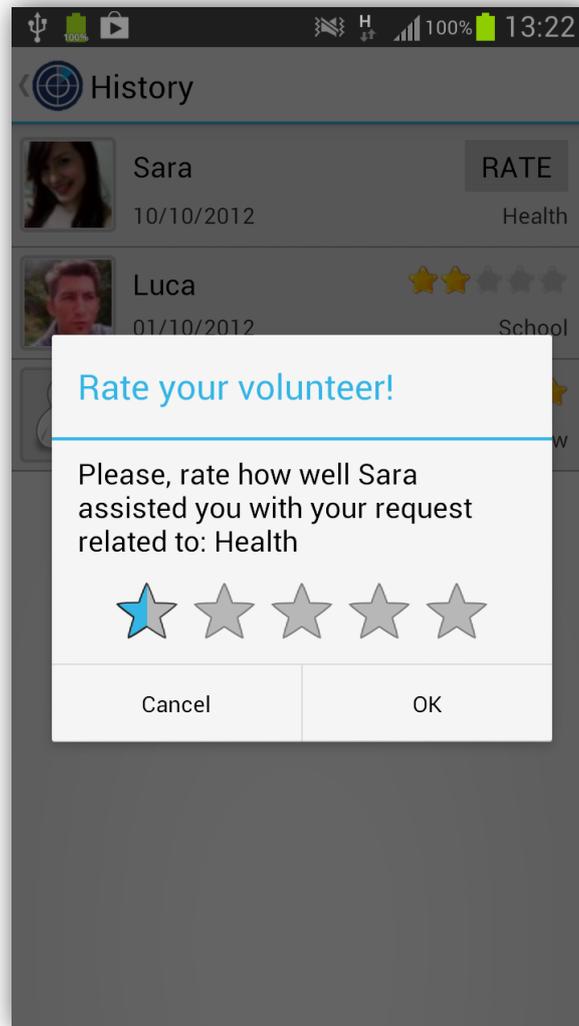


Figure 12: Assistance history: rate an assistance.

Rate the received assistance by tapping at one of the stars.

3.1.13 VOLUNTEER PROFILE (I)

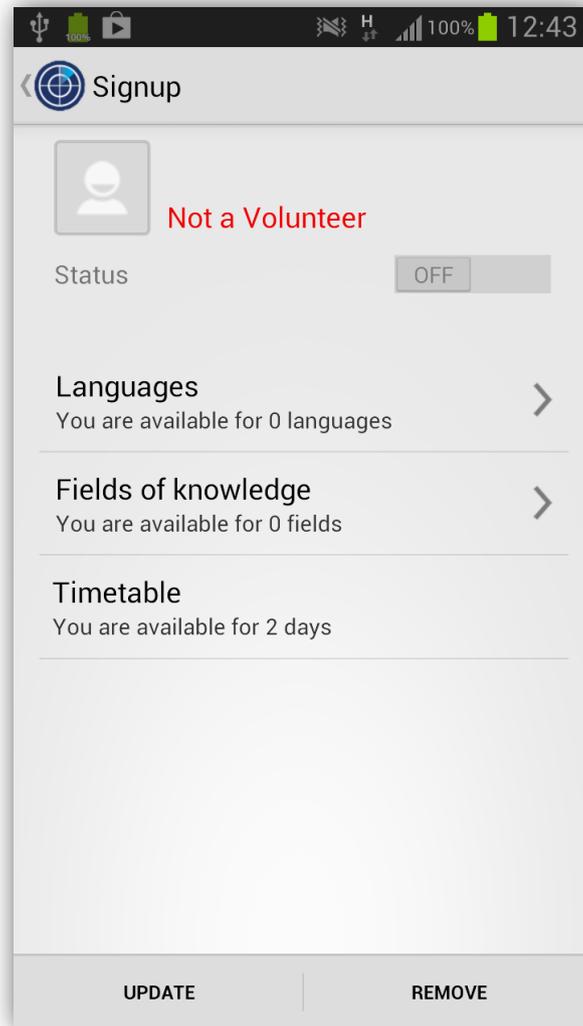


Figure 13: Volunteer profile.

Signing up as volunteer is optional. The user can set up a volunteer profile, if s/he wants to make assistances to other users. Language skills, fields of knowledge and timetable have to be specified. The user taps on “Update” to become a volunteer.

3.1.14 VOLUNTEER PROFILE (II): LANGUAGES SELECTION

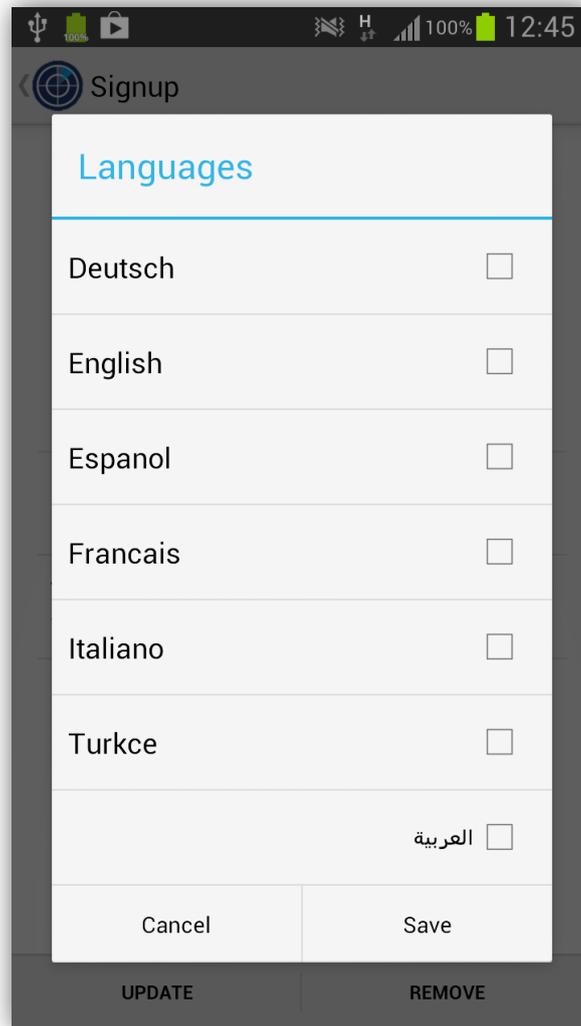


Figure 14: Volunteer profile: languages selection.

The user taps Languages and then selects the languages s/he is able to speak.

3.1.15 VOLUNTEER PROFILE (III): COMPETENCES SELECTION

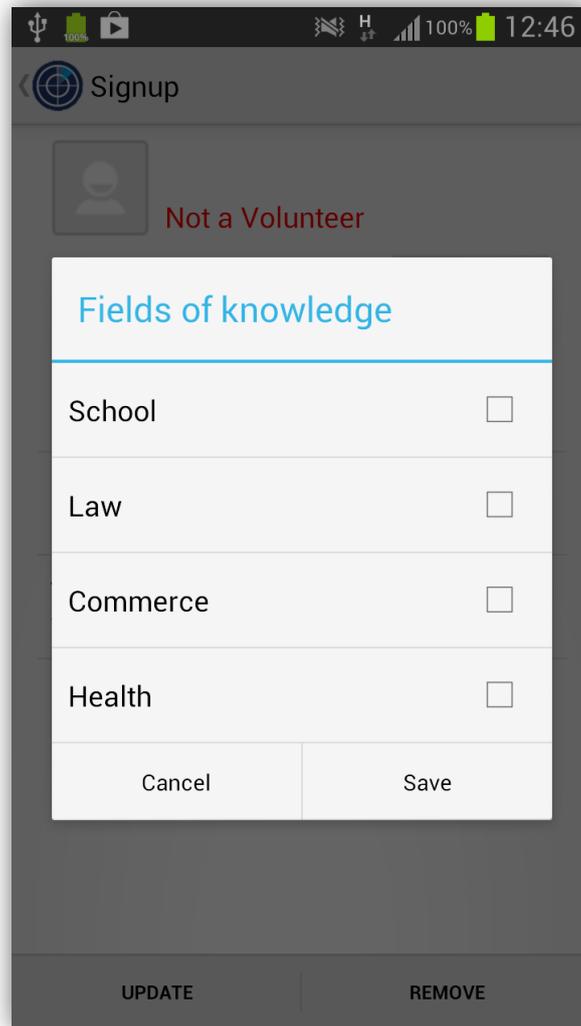
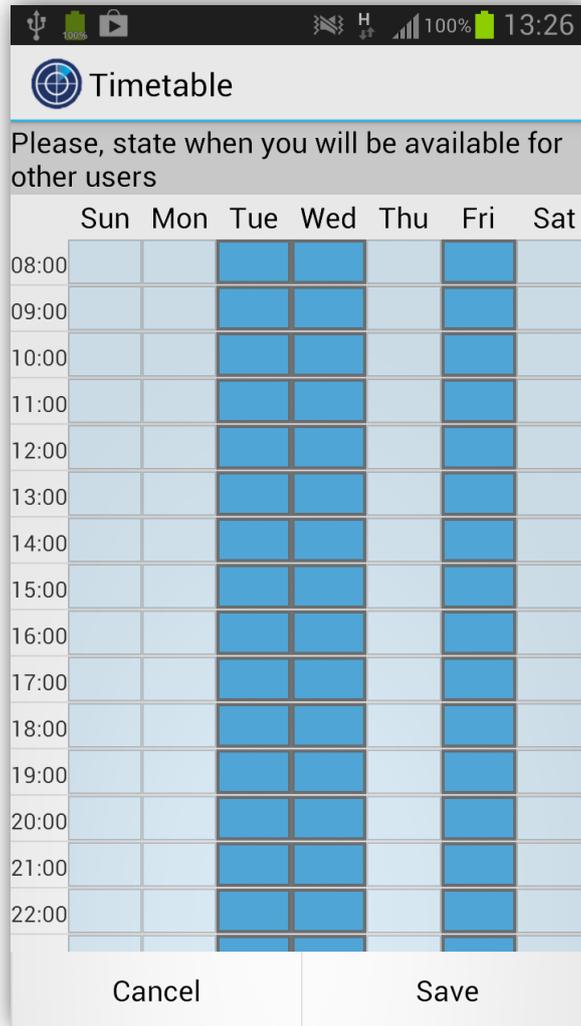


Figure 15: Volunteer profile: competences selection.

The user taps Fields of knowledge and then selects the competences s/he has.

3.1.16 VOLUNTEER PROFILE (IV): AVAILABILITY TIMETABLE



	Sun	Mon	Tue	Wed	Thu	Fri	Sat
08:00			Available	Available		Available	
09:00			Available	Available		Available	
10:00			Available	Available		Available	
11:00			Available	Available		Available	
12:00			Available	Available		Available	
13:00			Available	Available		Available	
14:00			Available	Available		Available	
15:00			Available	Available		Available	
16:00			Available	Available		Available	
17:00			Available	Available		Available	
18:00			Available	Available		Available	
19:00			Available	Available		Available	
20:00			Available	Available		Available	
21:00			Available	Available		Available	
22:00			Available	Available		Available	

Figure 16: Volunteer profile: availability timetable.

The user taps Timetable and then selects the days and hours in which s/he is usually available.

3.1.17 VOLUNTEER PROFILE (V): USER IS A VOLUNTEER



Figure 17: Volunteer profile: user is a volunteer.

The volunteer can declare himself as temporarily unavailable by tapping the “ON switch”. The volunteer can terminate to be a volunteer by tapping the “Remove button”.

3.1.18 VOLUNTEER PROFILE (VI): TEMPORARILY MODIFY AVAILABILITY

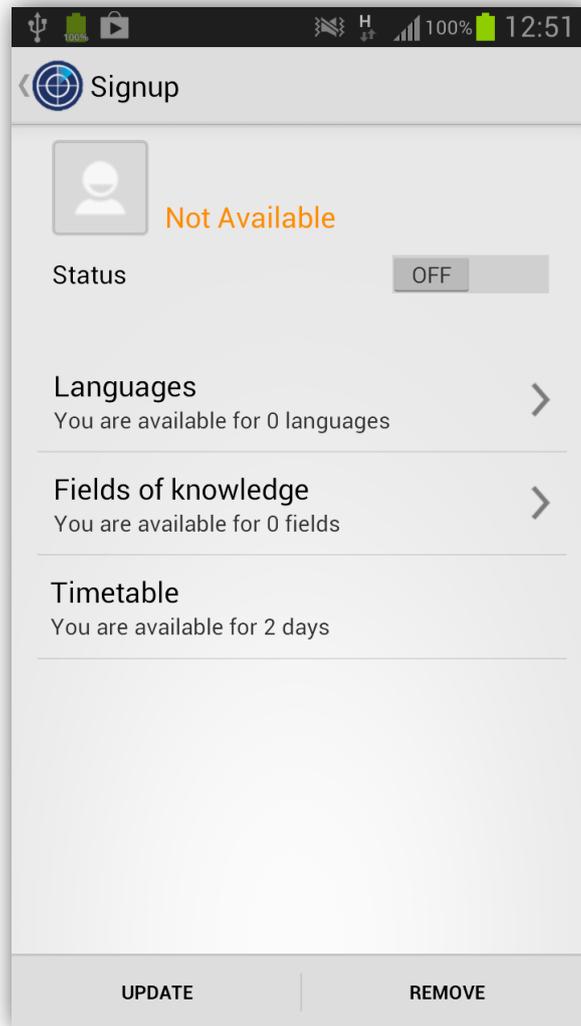


Figure 18: Volunteer profile: modification.

The volunteer can declare himself as available by tapping the “OFF switch”.

3.1.19 SETTINGS (I)

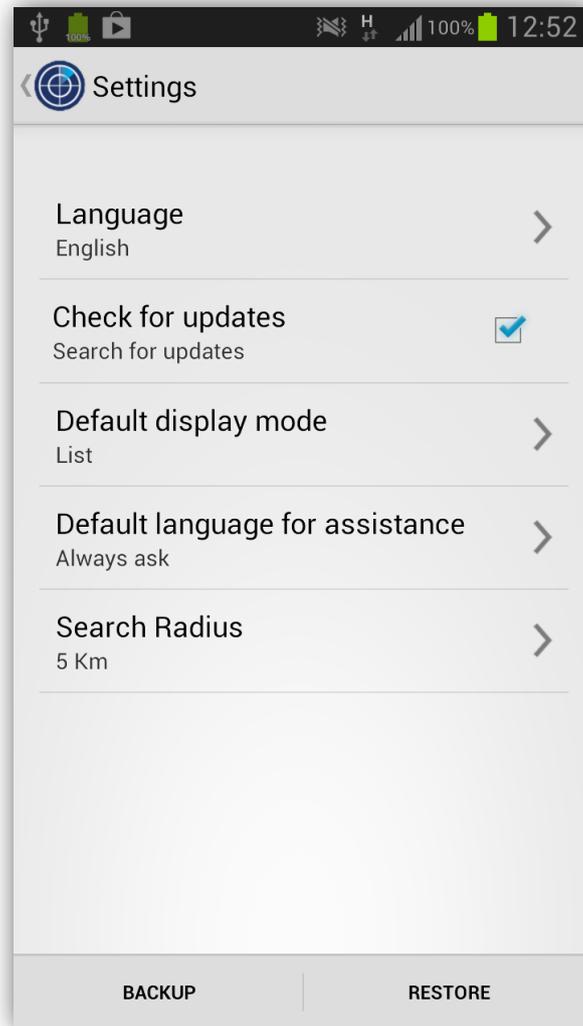


Figure 19: Geosocial radar: settings.

The user can set some application parameters.

Tap on Backup button to save settings on central GeoRadar server. Tap on Restore button to load settings from central GeoRadar server.

3.1.20 SETTINGS (II): UI LANGUAGE

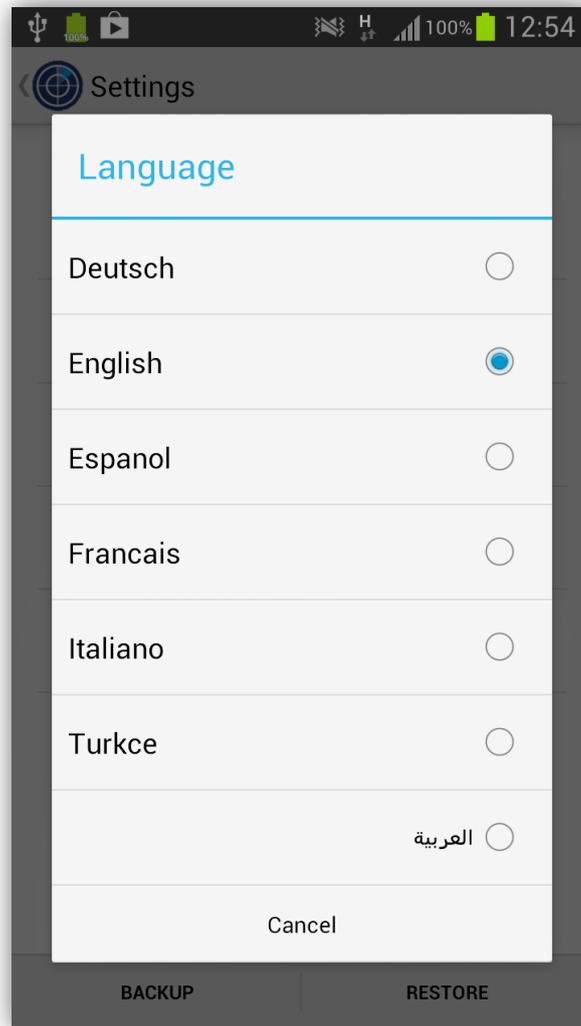


Figure 20: Geosocial radar: UI language.

The user selects the GeoRadar UI language.

3.1.21 SETTINGS (III): DEFAULT VOLUNTEER PRESENTATION MODE

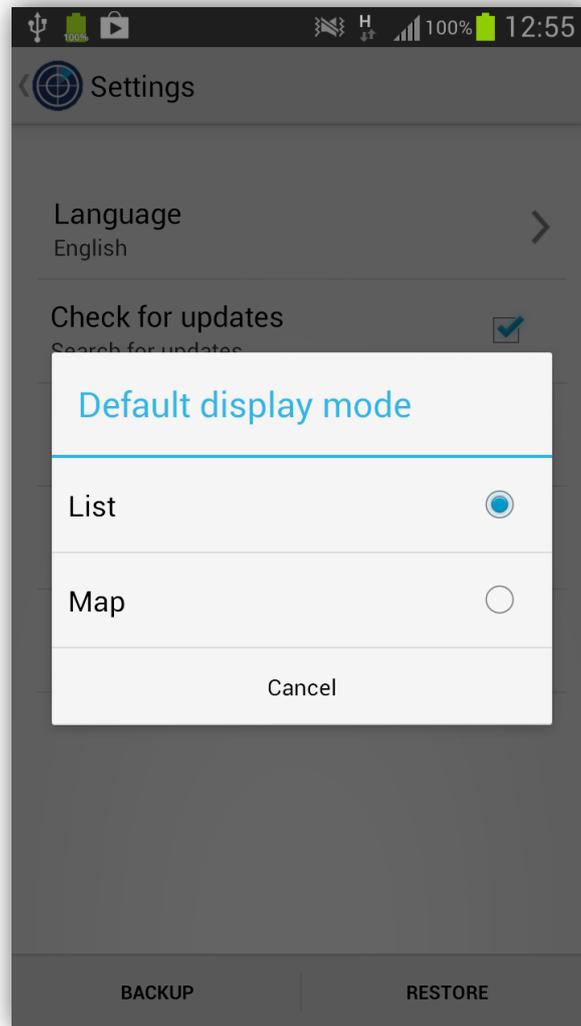


Figure 21: Settings: default volunteer presentation mode.

The user selects volunteers default display mode (map/list).

3.1.22 SETTINGS (IV): VOLUNTEER LANGUAGE

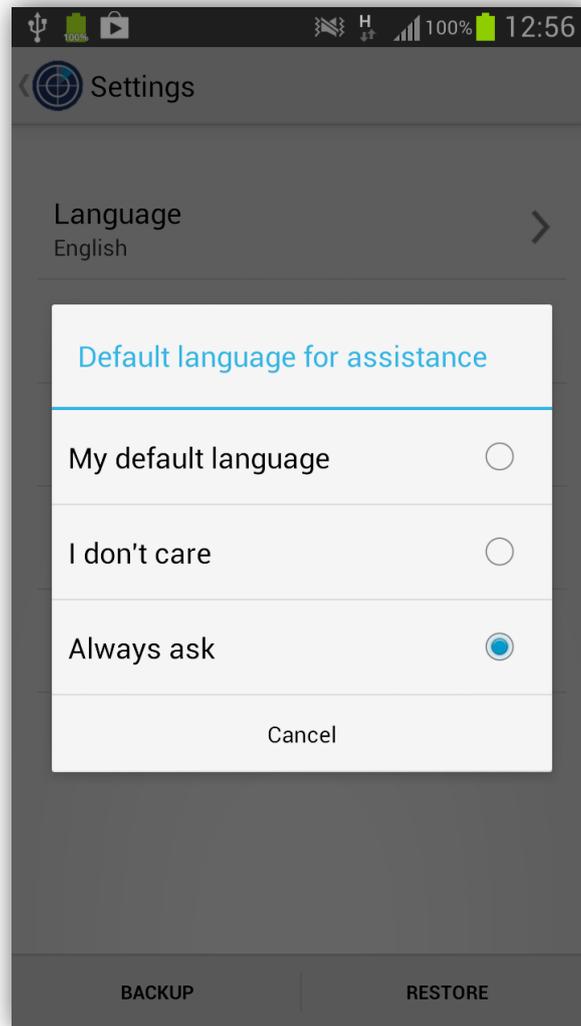


Figure 22: Settings: volunteer language.

The user selects the language of volunteers he will look for.

3.1.23 SETTINGS (V): SEARCH AREA

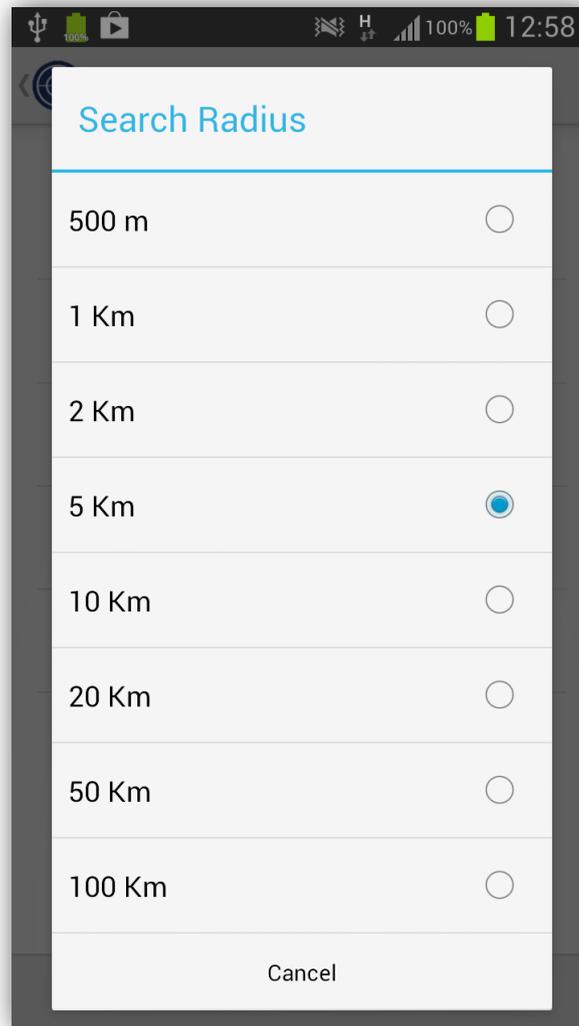


Figure 23: Settings: search area.

The user selects the area range around his current position to search volunteers.

3.2 LANGUAGE LESSONS

With the help of structured language lessons the immigrants can improve their language skills of the host language.

3.2.1 UNIT OVERVIEW

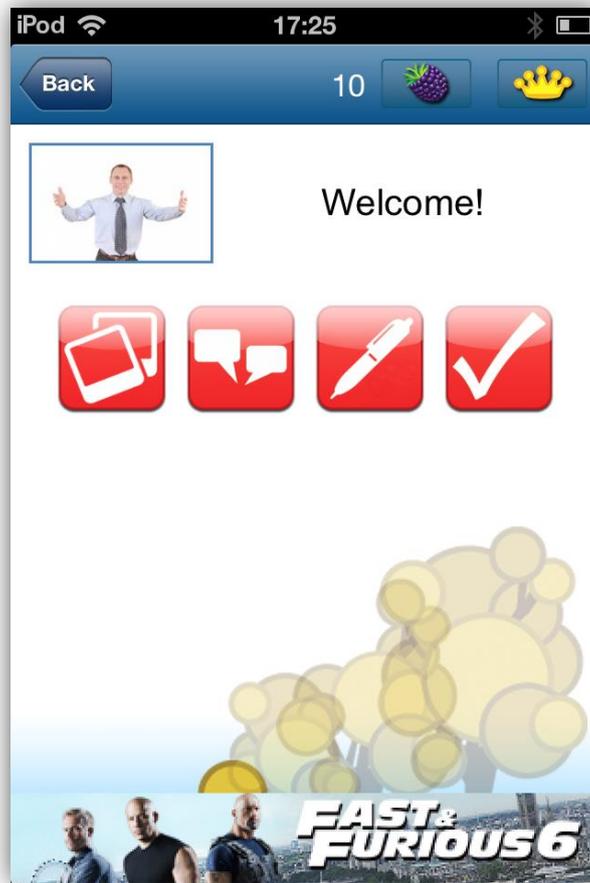


Figure 24: Language lessons: unit overview.

After the learner has chosen his lesson's category and topic, he is led inside of the lesson itself. This mock-up represents one individual unit. Each unit has a specific objective which is stated to the learner and is made of the different tasks:

1. Vocabulary
2. Dialogue
3. Writing exercise
4. Review

The color of the task indicates that it is completed (green) not started (red).

3.2.2 VOCABULARY: FLASH CARDS

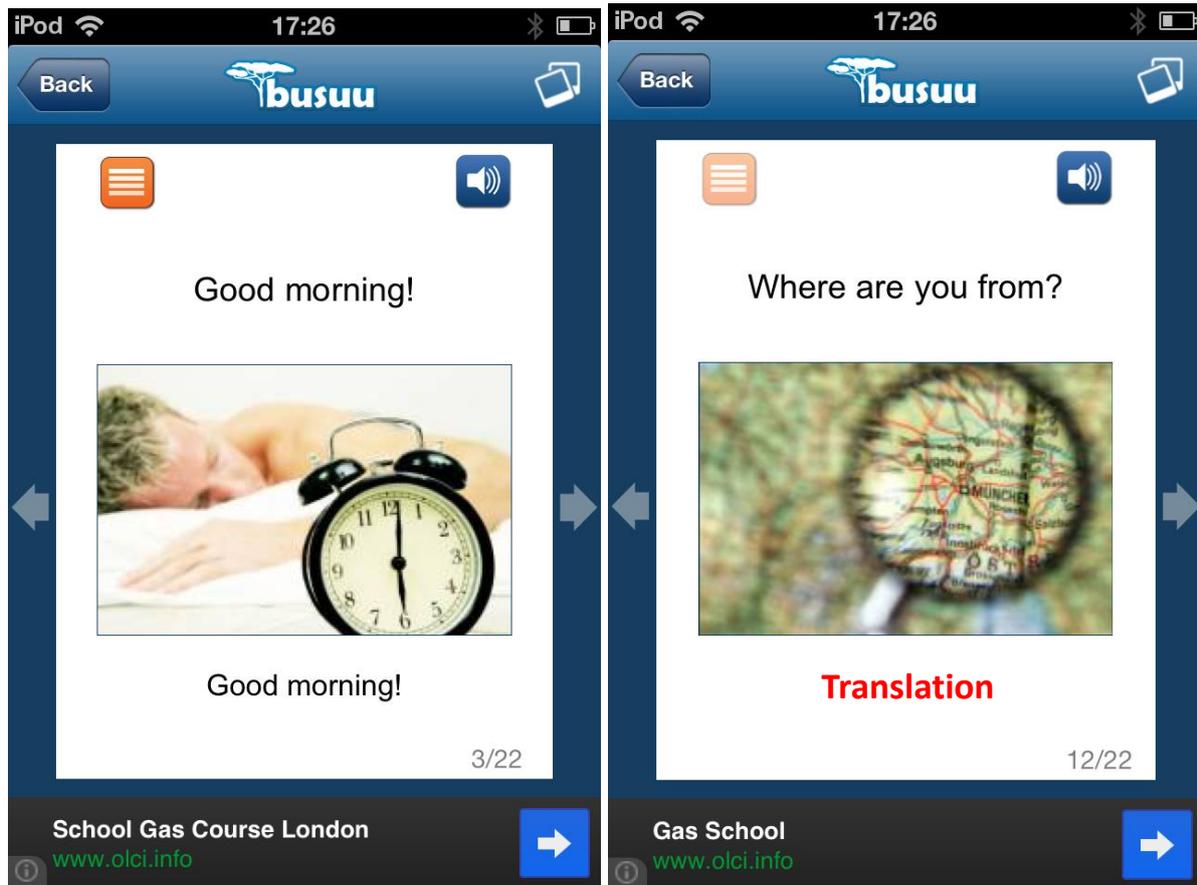


Figure 25: Language lessons: flash cards.

The vocabulary section will be composed of 20 to 25 key words or expressions. The learner learns the new language using sound, image, and a translation in his mother tongue. The progress is shown below as the learner goes through the intended content.

Navigation: Clicking on Back will lead to the course overview and clicking on the image will show the lesson page with all the different tasks allowing the navigation between all of the tasks.

3.2.3 VOCABULARY: CHECK POINT

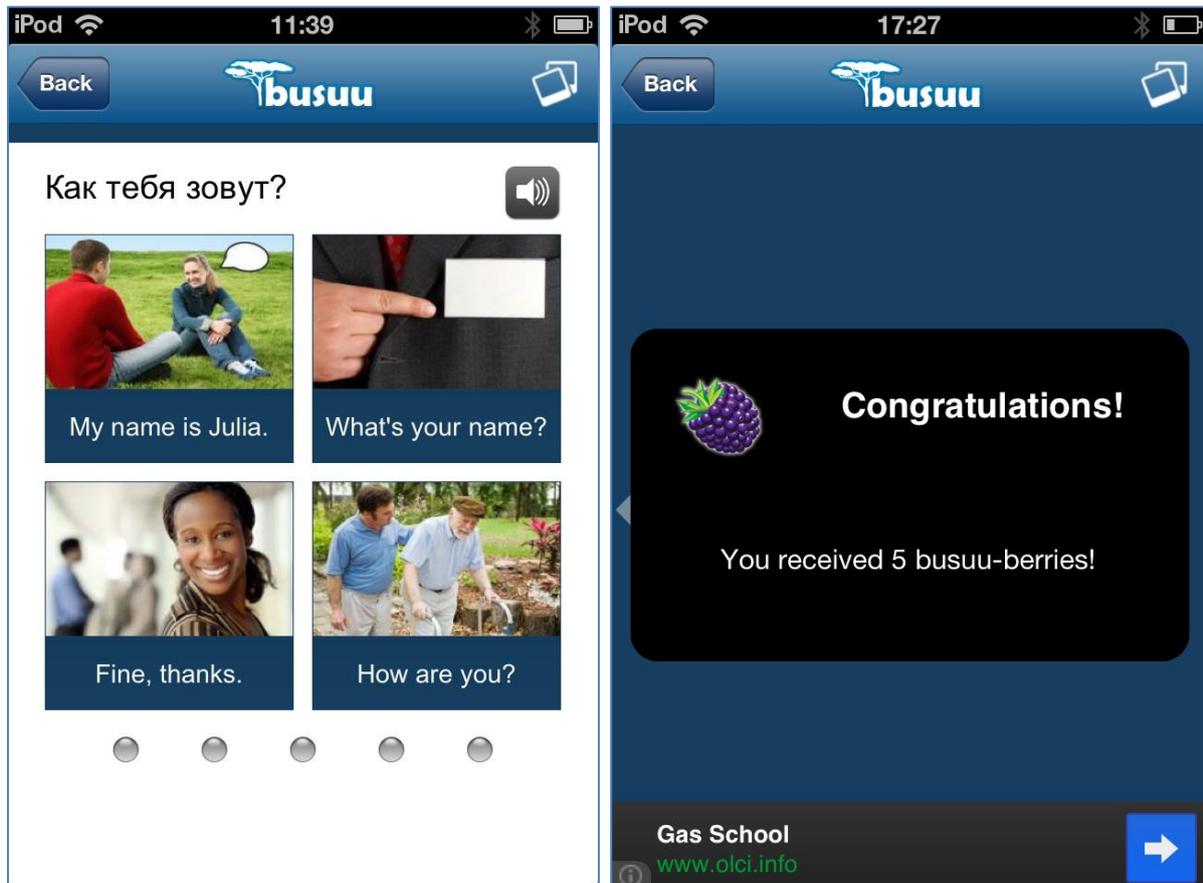


Figure 26: Language lessons: check point.

After a couple of flash cards a check point is presented to the users where the vocabulary will be controlled the first time. Afterwards, user are rewarded with Busuu-berries.

3.2.4 DIALOGUE: PRESENTATION



Figure 27: Language lessons: dialogue: presentation.

The dialogue task takes into account the vocabulary learned and puts it in the context of a conversation. The dialogue will use audio-based output. After the audio the learner will be asked to answer a set of comprehension questions.

The translation of the text can be seen by tapping at the flag.

3.2.5 DIALOGUE: COMPREHENSION QUESTIONS

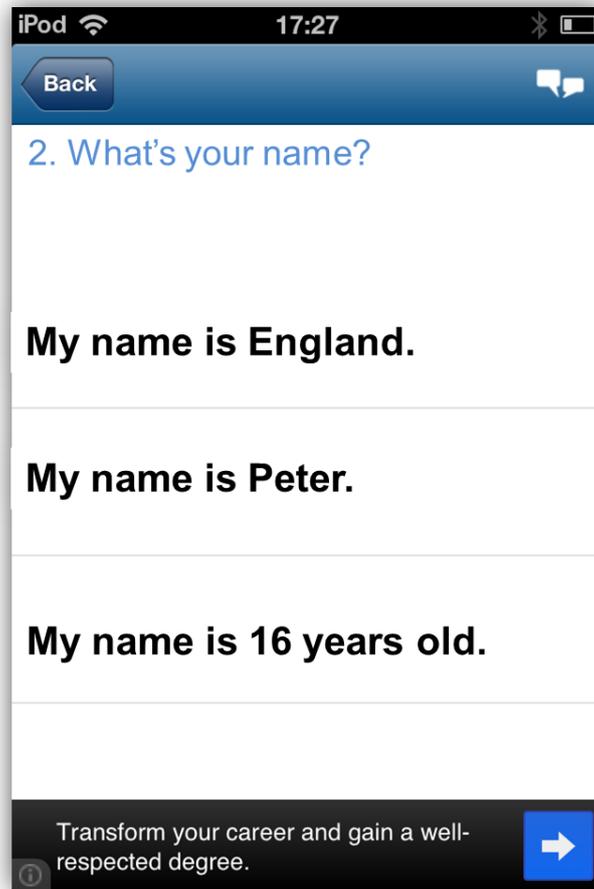


Figure 28: Language lessons: dialogue: comprehension questions.

The learner will be asked to answer a set of comprehension questions.

3.2.6 DIALOGUE: ASSESSMENT OF GIVEN ANSWERS

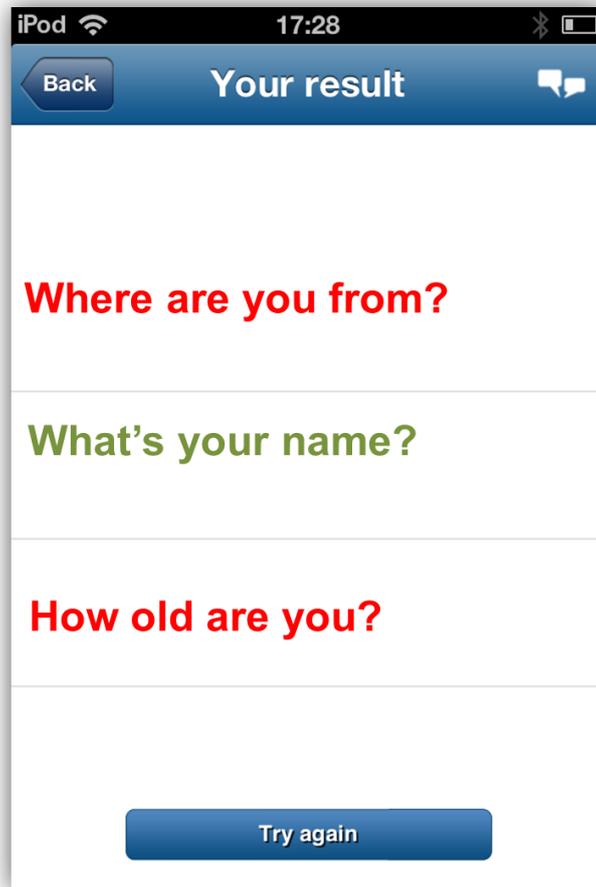


Figure 29: Language lessons: dialogue: assessments of given answers.

Wrong or right answers can be easily distinguished with the help of colour coding.

3.2.7 WRITING

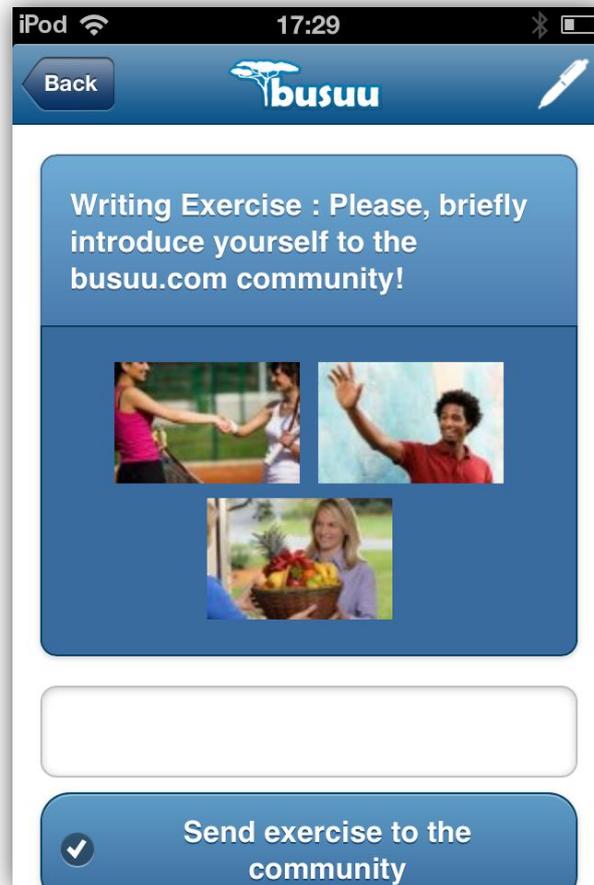


Figure 30: Language lessons: writing

The learner practices what he has learned in a written manner and sends out his exercise to be corrected by a native speaking member of the social network. It would be posted in the discussion board for comments.

3.2.8 REVIEW EXERCISE: MULTIPLE CHOICE

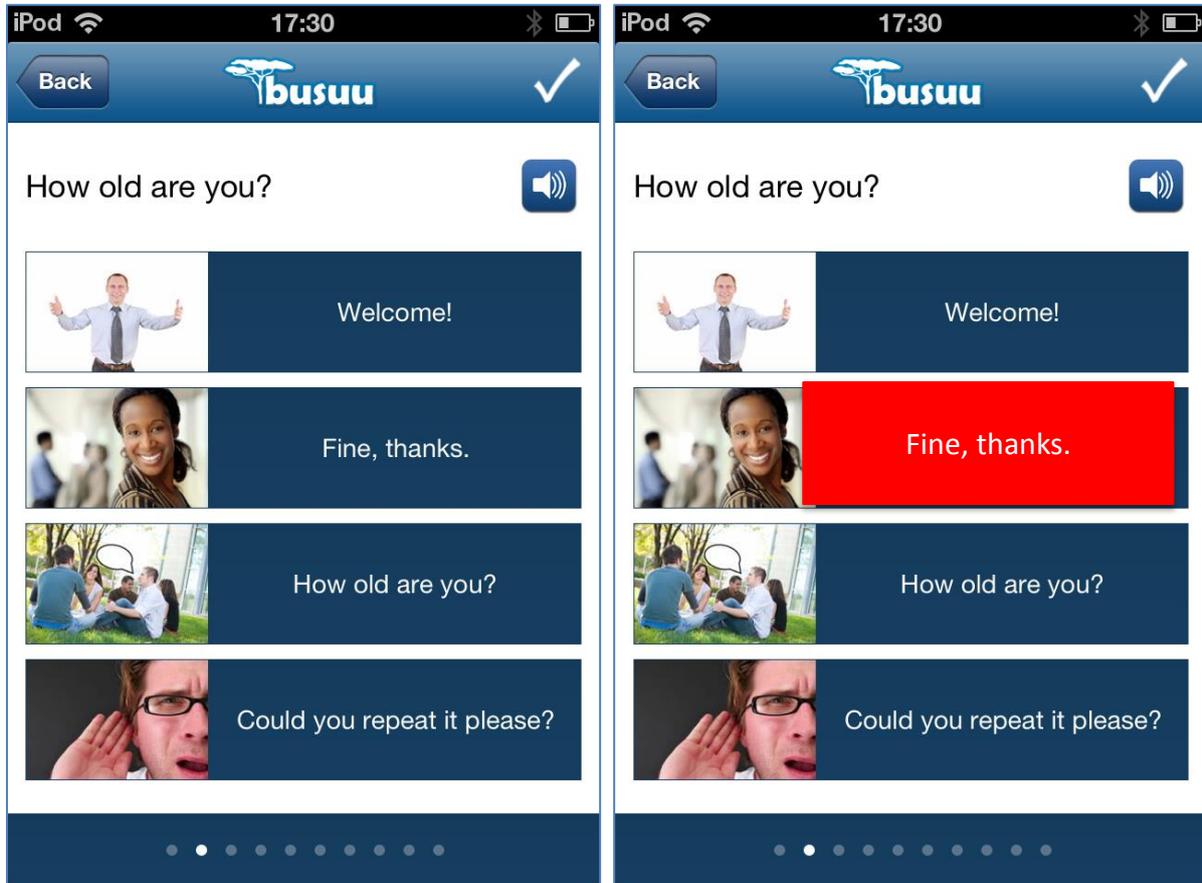


Figure 31: Review exercise: multiple choice.

The review will be composed of more than one type of exercises to cover main skills such as comprehension, listening and writing.

In the Multiple Choice exercise the correct translation of the displayed phrase shall be tapped. If it was the correct answer the entry will be highlighted in green, otherwise in red (see picture above on the right).

3.2.9 REVIEW EXERCISE: DRAG AND DROP

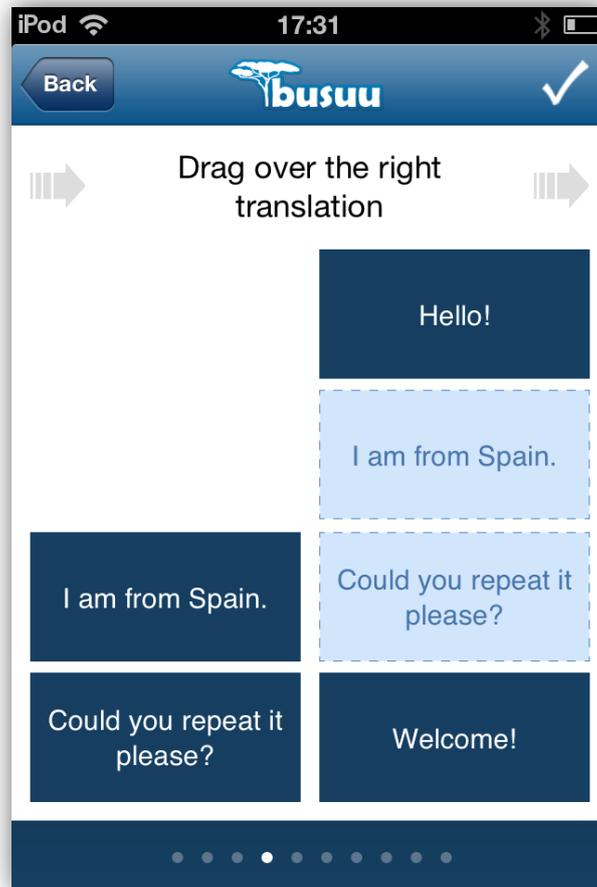


Figure 32: Review exercise: drag and drop.

The review will be composed of more than one type of exercises to cover main skills such as comprehension, listening and writing.

In the Drag and Drop exercise the correct translation of the displayed phrases shall be dragged from the left column onto the correct field in right column. Correct matches will be highlighted in green, wrong matches in red.

3.2.10 REVIEW: OVERVIEW OF FINAL RESULTS



Figure 33: Review exercise: overview of final results.

At the end of the review, the results will be summarized by displaying correct and wrong exercises in a colour-coded grid.

3.3 SOCIAL NETWORK SERVICE

The Social Network Service has the goal to provide users the functionality of a forum and to connect to existing social networks. Users will be able to manage posts and discussions. Furthermore, they will be notified about news within the Social Network.

The detailed specification of this service can be found in D3.2.1 and the according user scenario in D2.3.1.

3.3.1 DASHBOARD



Figure 34: Social Network Service dashboard.

Social service dashboard will provide overall information about services (i.e. last news, messages and post published), total number of unread items and direct access to main subsections and functions (News, Messages, Topics, Setting and Search).

3.3.2 TOPICS: OVERVIEW

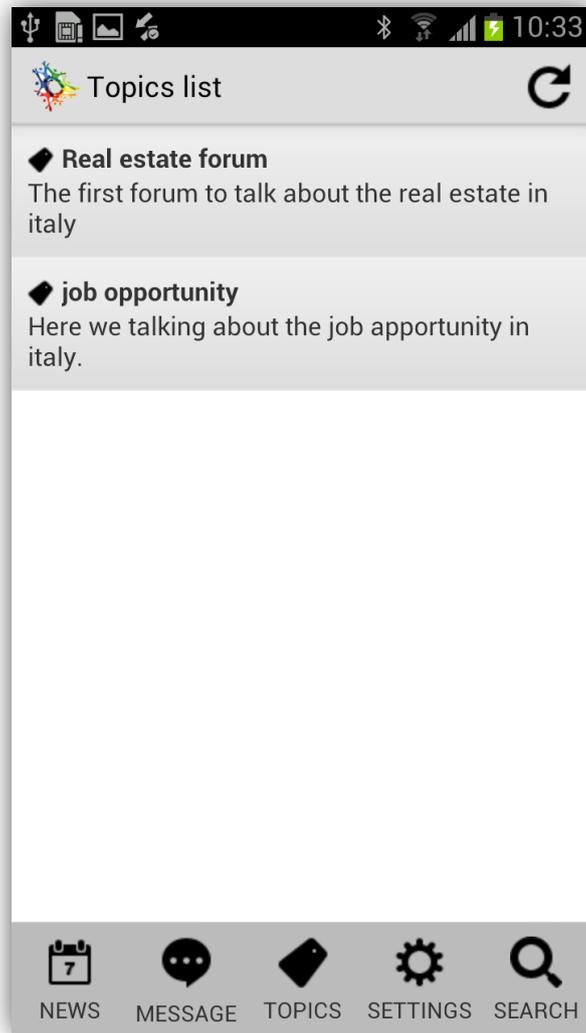


Figure 35: Topics list.

This GUI provides access to the main topics. These are presented and updated in a list format.

3.3.3 TOPICS: THREAD OVERVIEW WITHIN ONE TOPIC



Figure 36: Tread overview.

User can access to the list of discussions in a specific topic by pressing the associated button. The list is displayed as shown in the previous picture (specific topic is ‘Real estate forum’). Single item provides summary information about the discussion: author, title, post excerpt, number of reply and number of ‘like’.

3.3.4 TOPICS: CREATE NEW THREAD

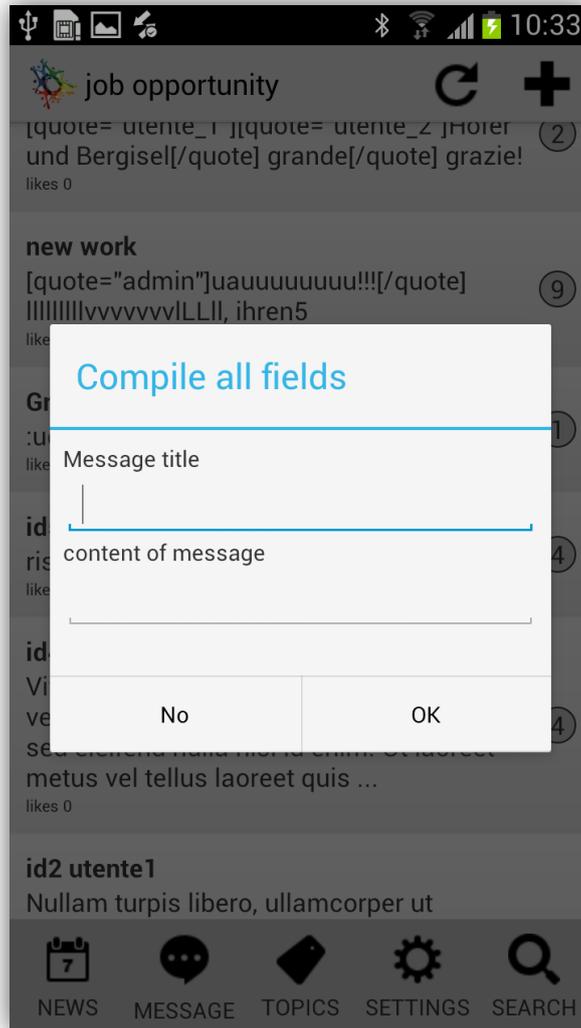


Figure 37: Create new thread.

Compile the form and tap OK to create new thread.

3.3.5 TOPICS: LIST OF POSTS WITHIN ONE THREAD

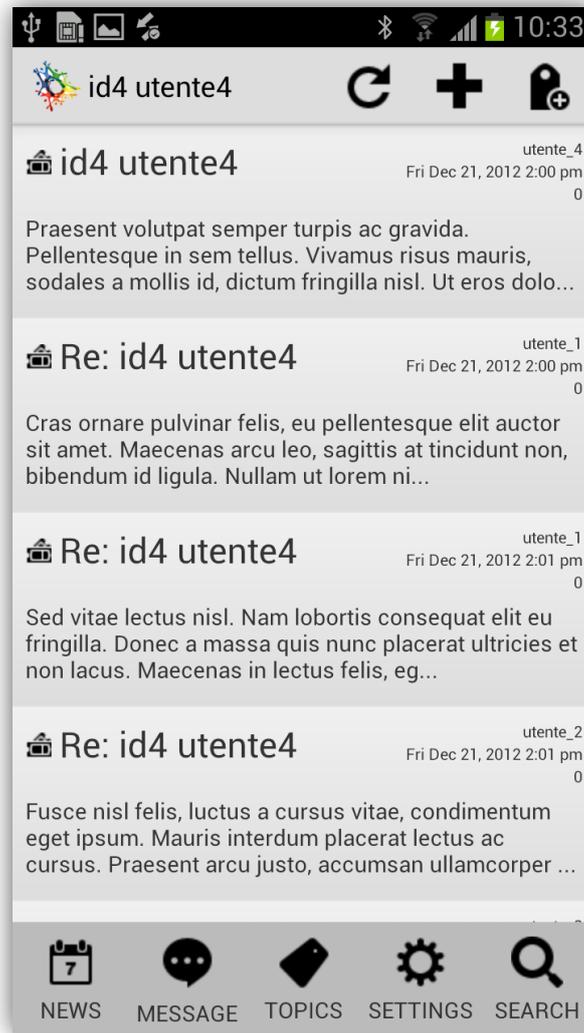


Figure 38: Tread: list of posts.

From list of threads (the example shown is about ‘id4 utente4’), users may select a specific thread. It provides the list of posts that compose the thread. Single post in list shows summary information: title, name of author of post, post excerpt, number of ‘like’ received:

- Tap on reload button to refresh the list
- Tap on plus button to reply this thread
- Tap subscribe button to follow this thread (or unsubscribe if already following)
- Tap on a single item to view single post detail.

3.3.6 TOPICS: CREATE NEW POST IN A THREAD

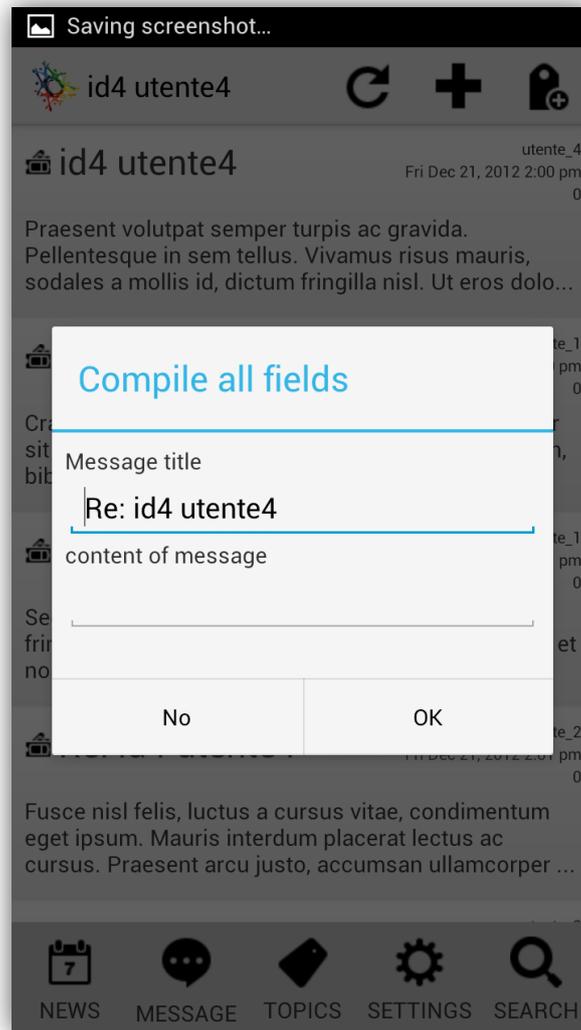


Figure 39: Tread: create new post.

Compile the form and tap OK to send new post.

3.3.7 TOPICS: SINGLE POST DETAIL

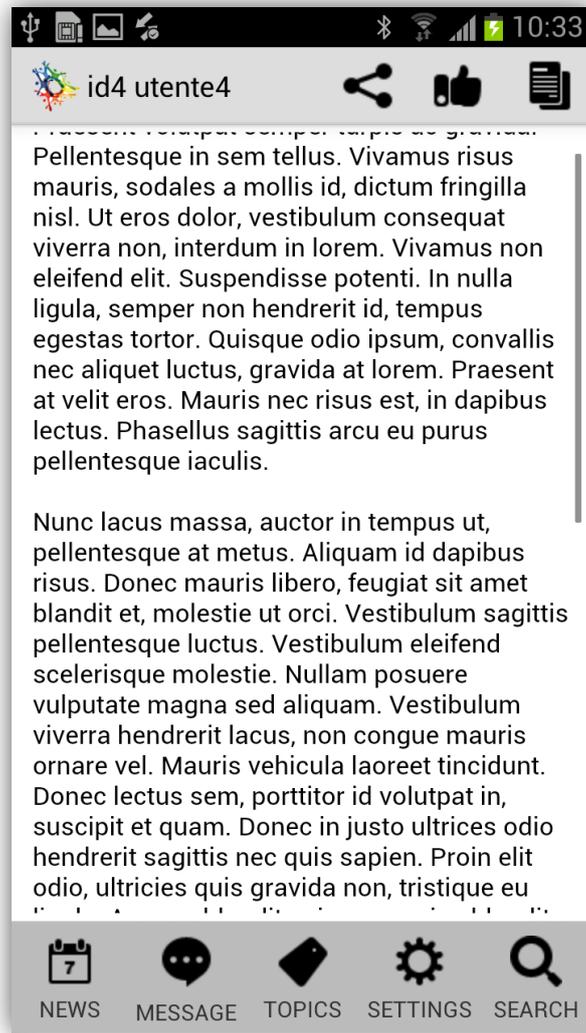


Figure 40: Post detail.

From thread detail, user may select the single post detail of each post in the discussion. In this case user may quote, share, like (or cancel previous ‘like’) and send a private message to the post author.

3.3.8 TOPICS: OPTIONS FOR SHARING A POST

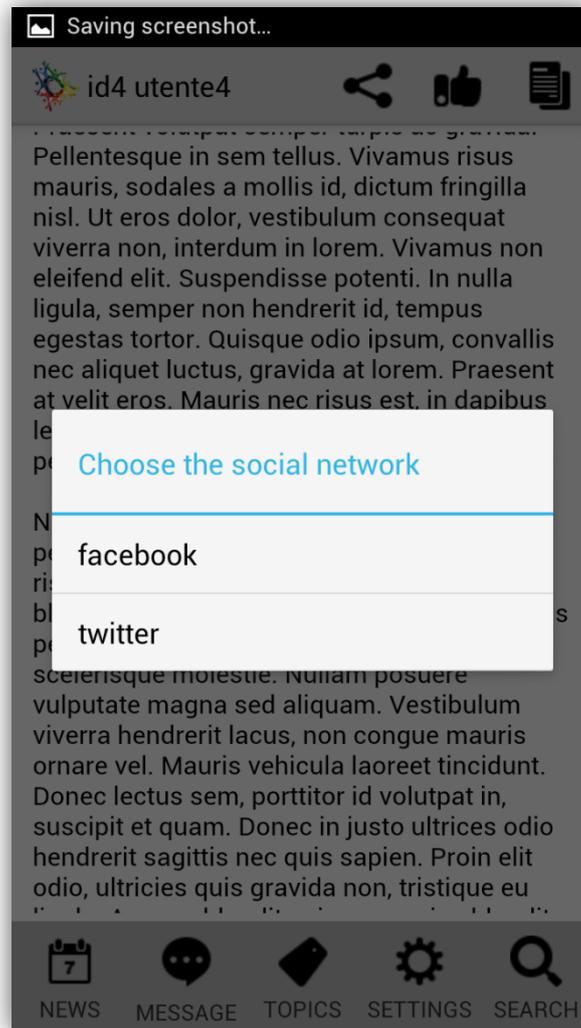


Figure 41: Sharing post options.

After tapping at the Share button users can select between Facebook, Twitter or further social networks to share a post.

3.3.9 TOPICS: SHARING DETAILS

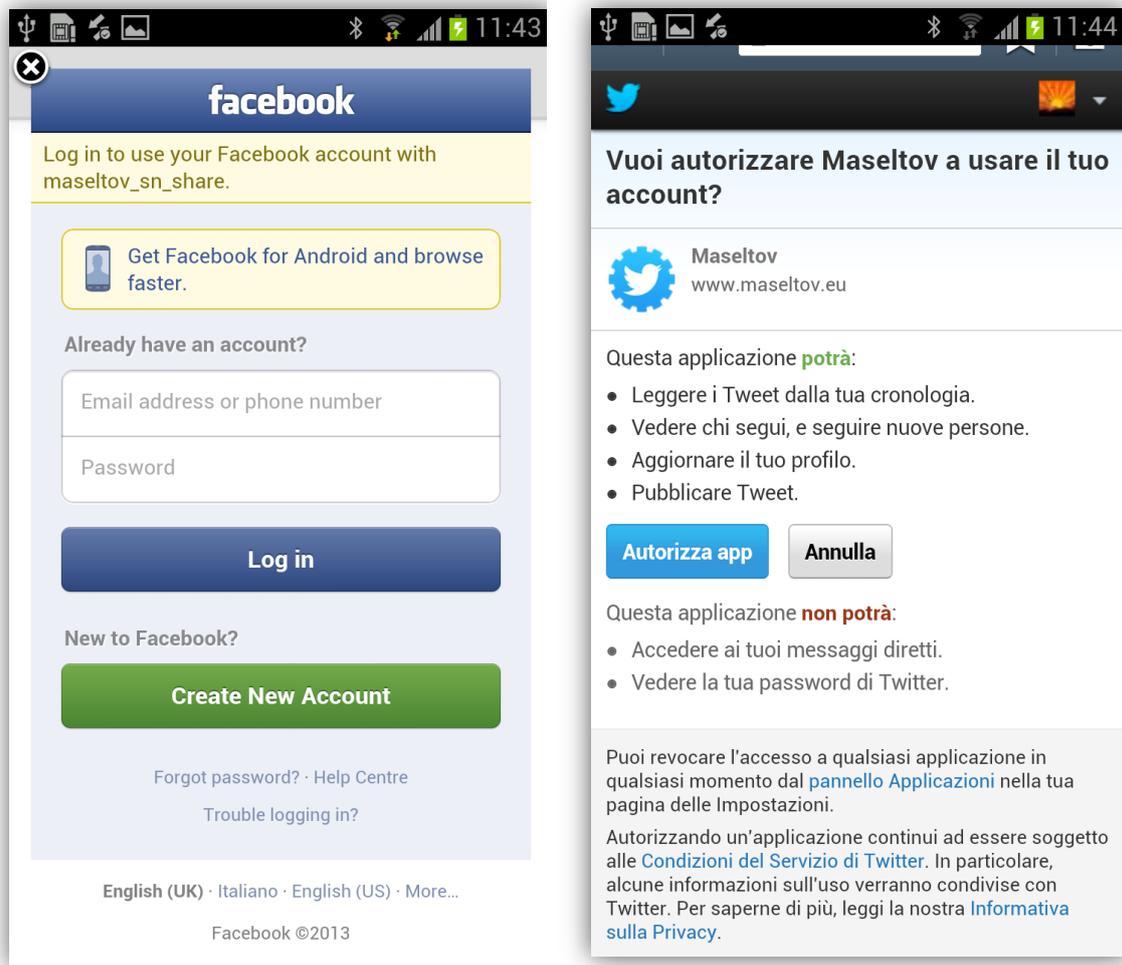


Figure 42: Sharing details.

User must login into Twitter or Facebook and authorize the MASELTOV app (only the first time).

3.3.10 PRIVATE MESSAGING: OVERVIEW

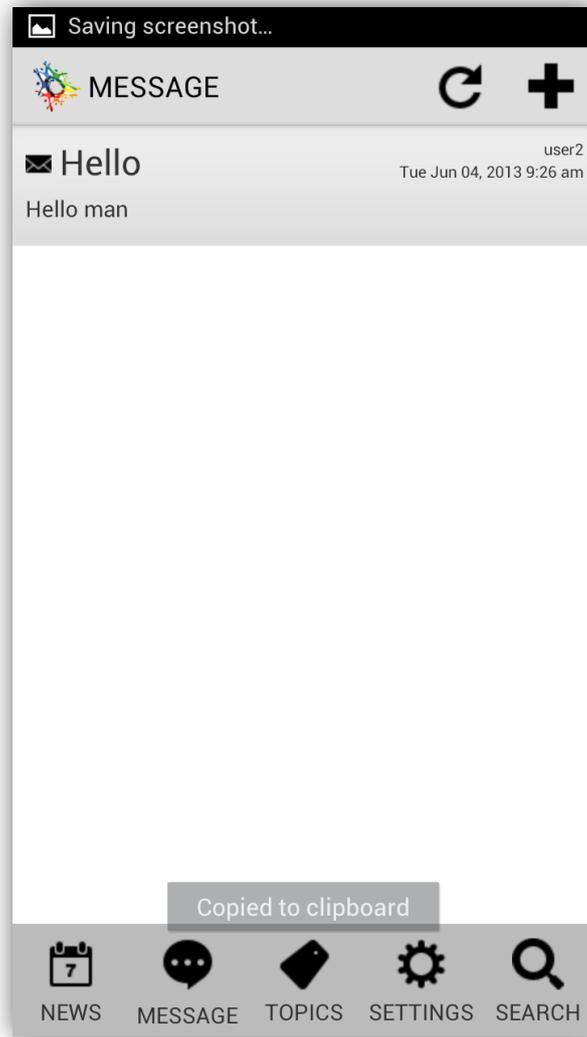


Figure 43: Private messaging: overview.

Pressing the message button in the application main menu bar (highlighted in red in the previous picture), user can access to the message list.

In this section, user may: compose a new message, require a list refresh, read a received message.

3.3.11 PRIVATE MESSAGING: MESSAGE DETAILS

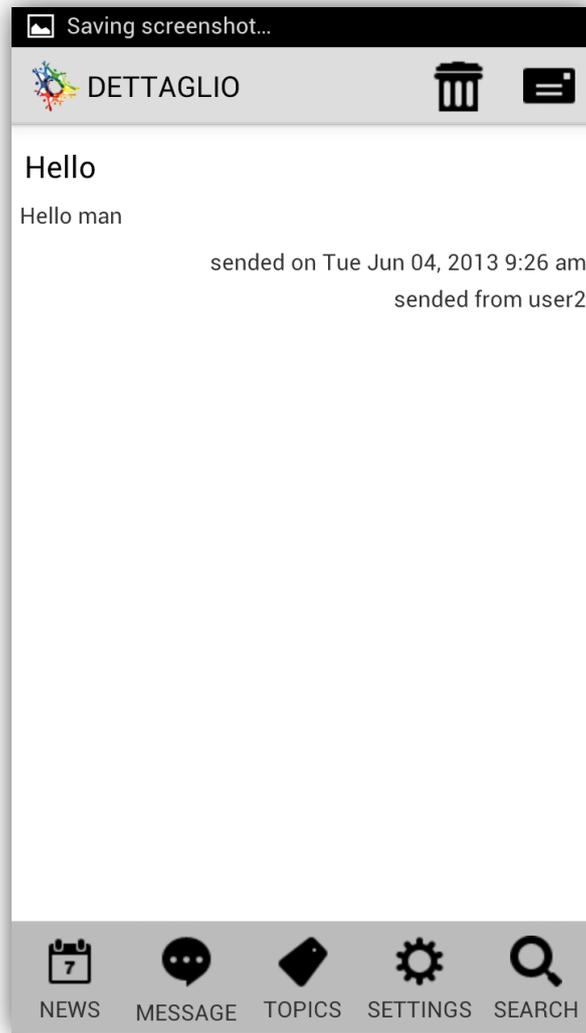


Figure 44: Private messaging: message details.

This screen provides the message detail view. Here user may reply or delete the received message.

3.3.12 PRIVATE MESSAGING: DELETE A MESSAGE

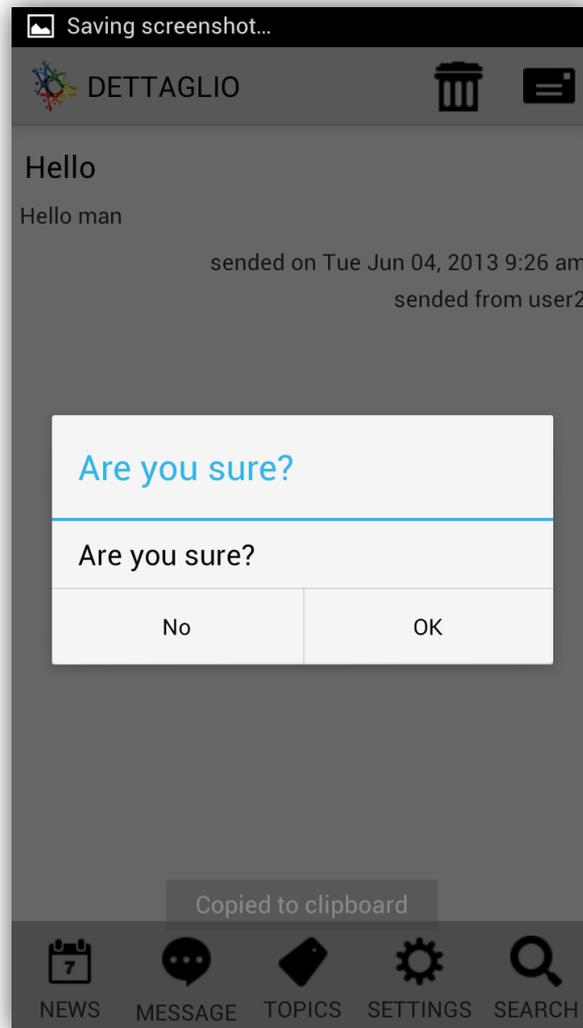


Figure 45: private messaging: delete a message.

This pop-up is shown when a message should be deleted.

3.3.13 REPLY TO A RECEIVED MESSAGE AND COMPOSE A NEW MESSAGE

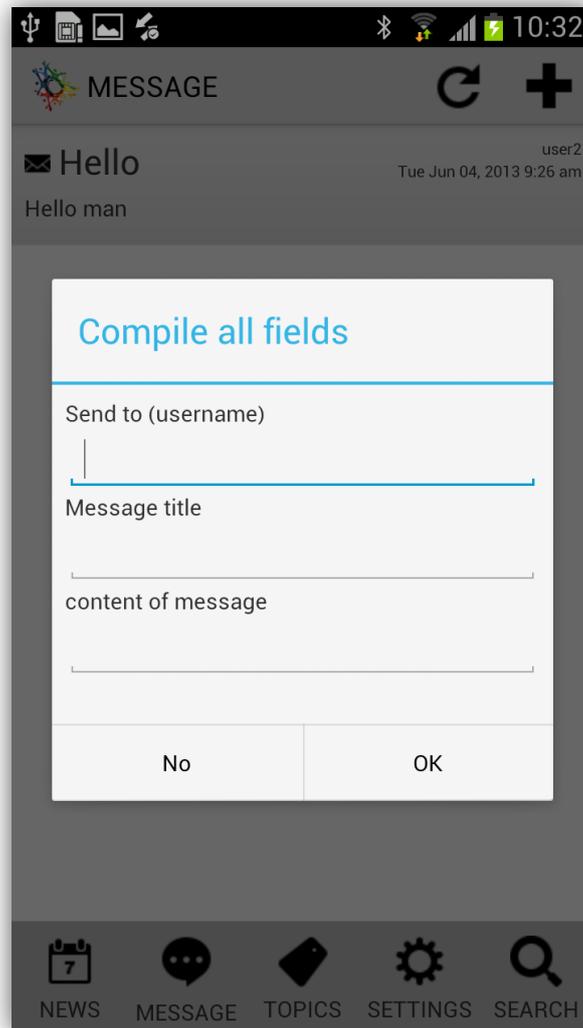


Figure 46: Private messaging: reply and compose new message.

Reply Message and Compose new message offer the same interface. In Reply message case, the recipient is already set with the name of the original message sender. This screen provides an example of how a user can input text and manages the new message. When all input fields are complete the users can tap OK to send a new message.

3.3.14 PRIVATE MESSAGING: CONFIRMATION WINDOW FOR SENT MESSAGE

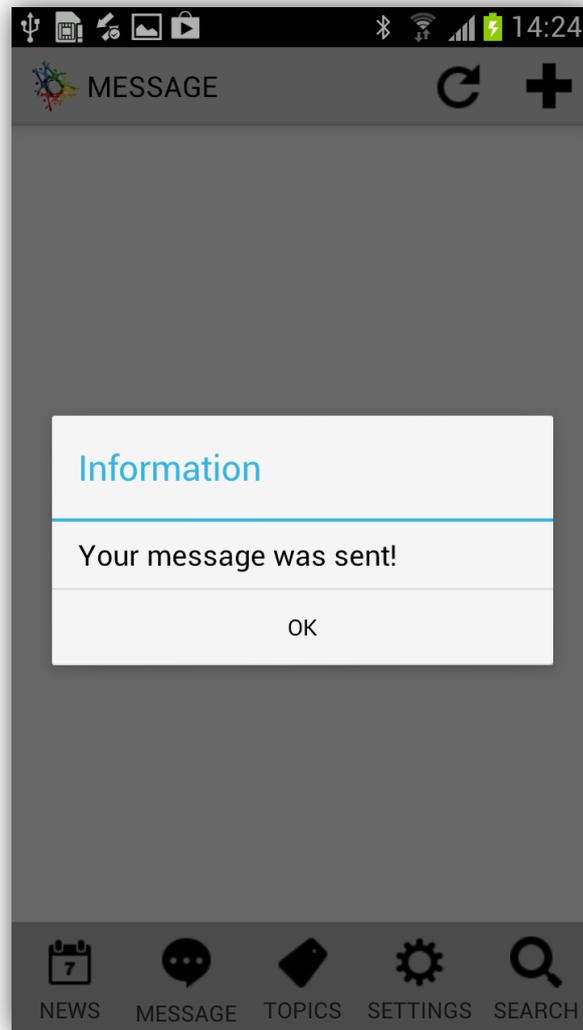


Figure 47: Private messaging: sent confirmation.

The system confirms if the message was sent correctly or informs the user if an error occurred.

3.3.15 SETTINGS

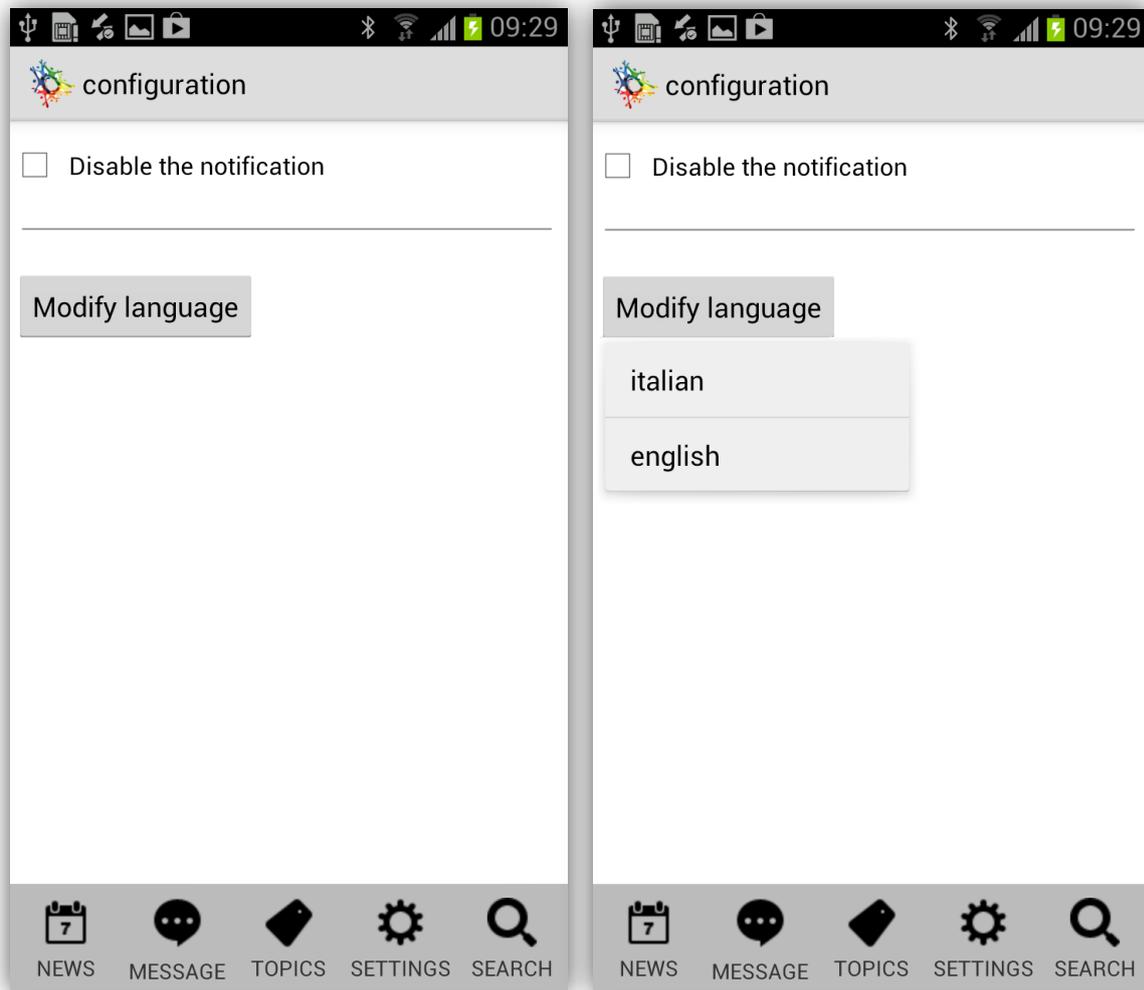


Figure 48: Configuration.

Within Settings users have the possibility to disable notifications of the Social Network Service and they can modify the language.

3.3.16 SEARCH FUNCTION

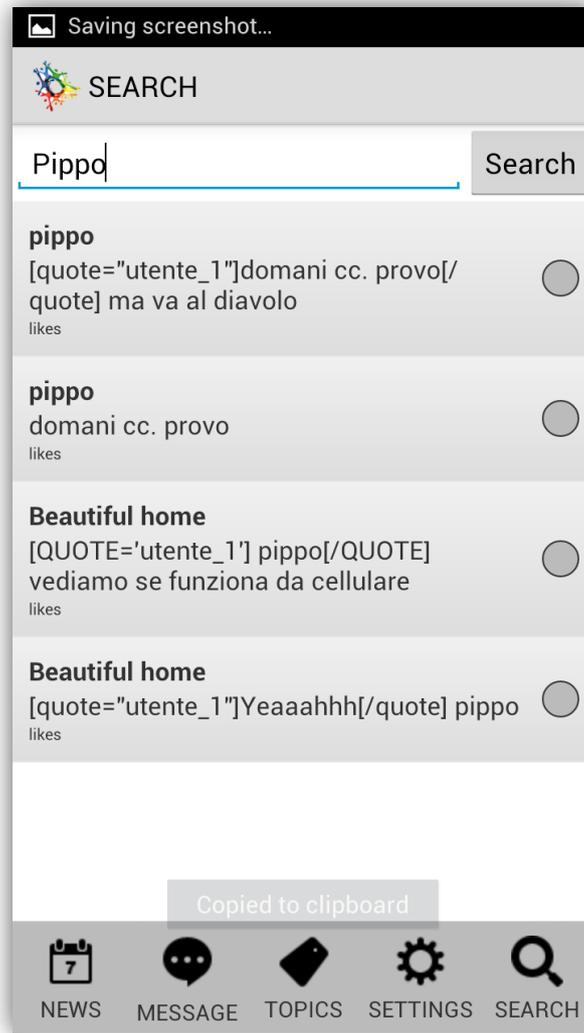


Figure 49: Search function.

Users can insert strings to search (from 3 to 14 characters) and tap Search to search the social network application.

3.4 NAVIGATION SERVICE

The Navigation Service enables the user to request routing information from one place to another. Afterwards, the users get detailed information about route, such as maps of the route segments, time table information for the stations on the way, etc. The user can select start and end points from a map, stops list, history or lines list. Text search will be also possible.

The detailed specification of this service can be found in D3.2.1 and the according user scenario in D2.3.1.

3.4.1 START

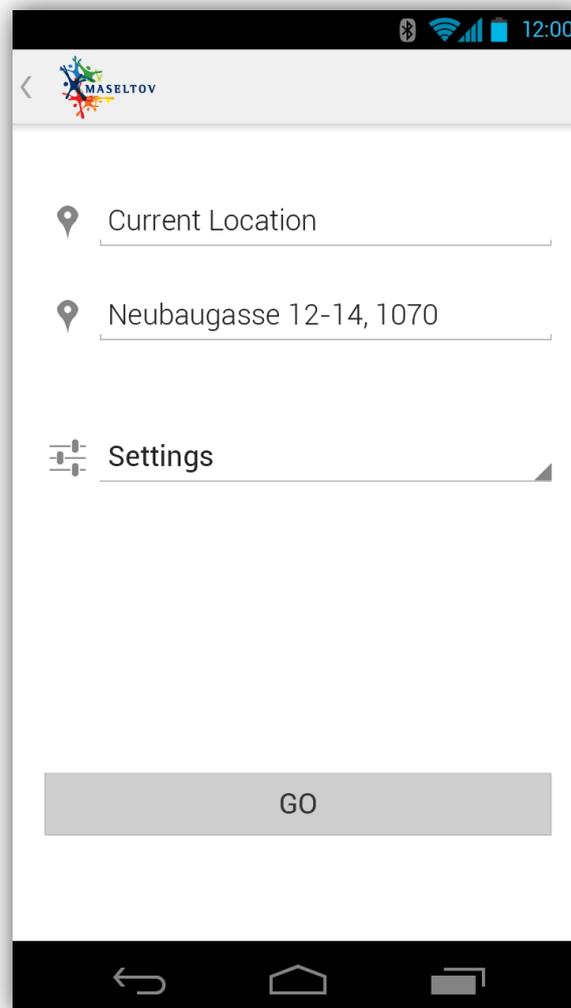


Figure 50: Start.

This is the start screen of the Navigation Service. User can immediately tap on GO to find a trip from his/her current location to the latest one entered. Alternatively, users can change start and end point of their trip and adjust settings.

3.4.2 SETTINGS: SET TIME

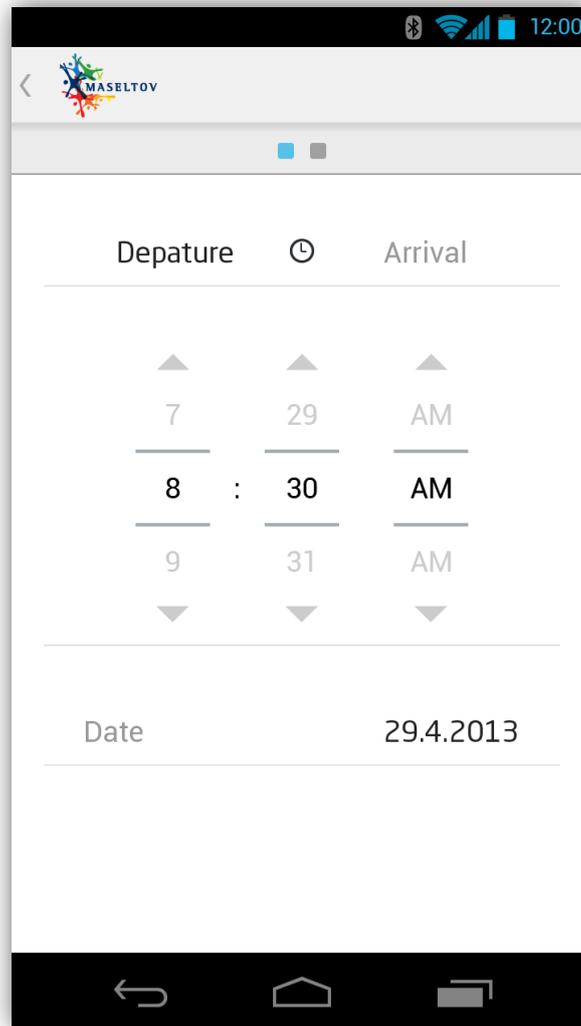


Figure 51: Set time.

To adjust the time three spinners for hour, minutes and AM/PM. By swiping from right to left the options screen about modalities can be reached.

3.4.3 SETTINGS: SET MODALITY

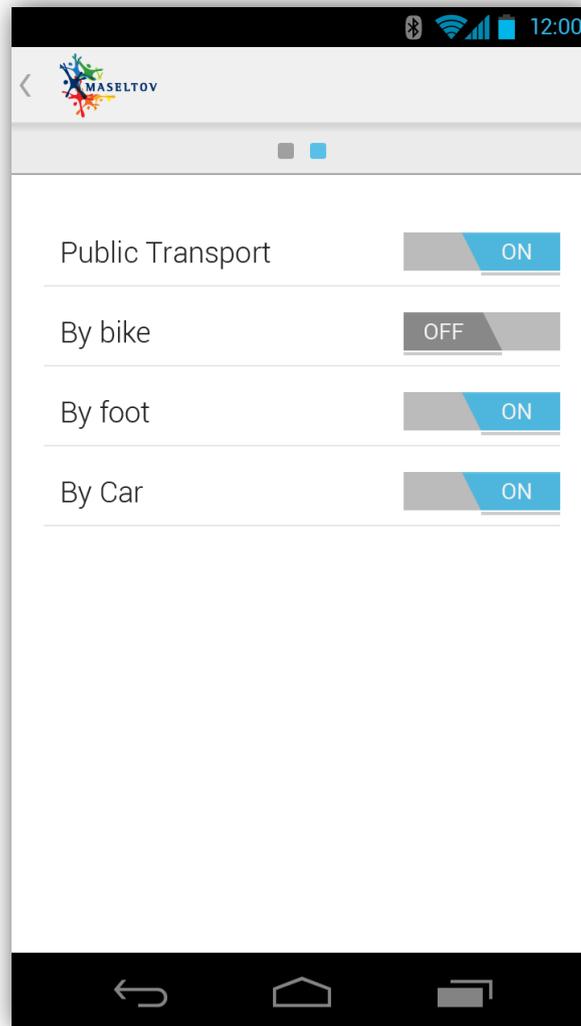


Figure 52: Set modality.

User can activate and deactivate the single modalities with the help of accordant switches. By swiping from left to right the options screen for setting the time can be reached.

3.4.4 ENTER START POINT AND END POINT OF ROUTE

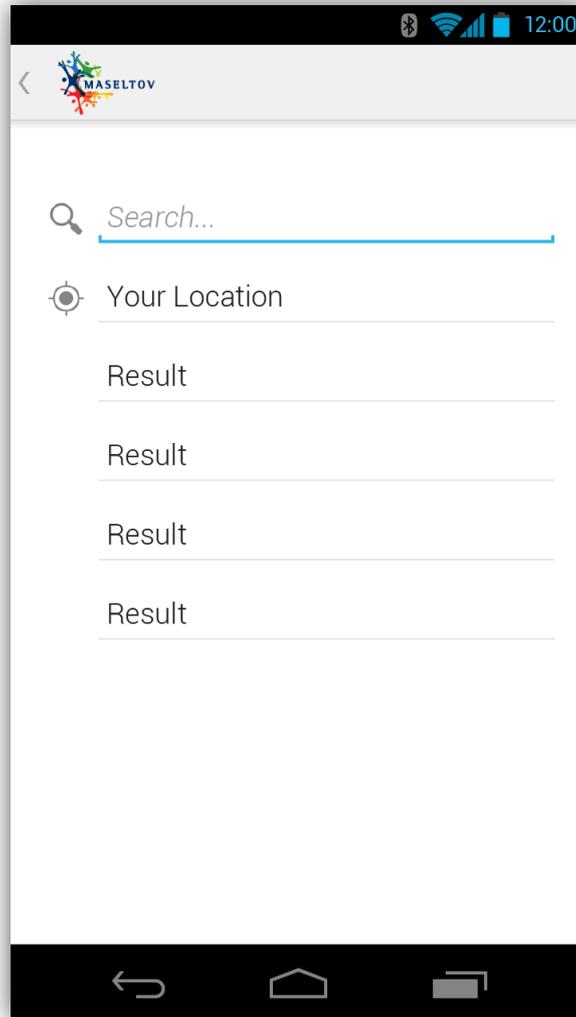


Figure 53: enter locations.

3.4.5 TRIP SELECTION

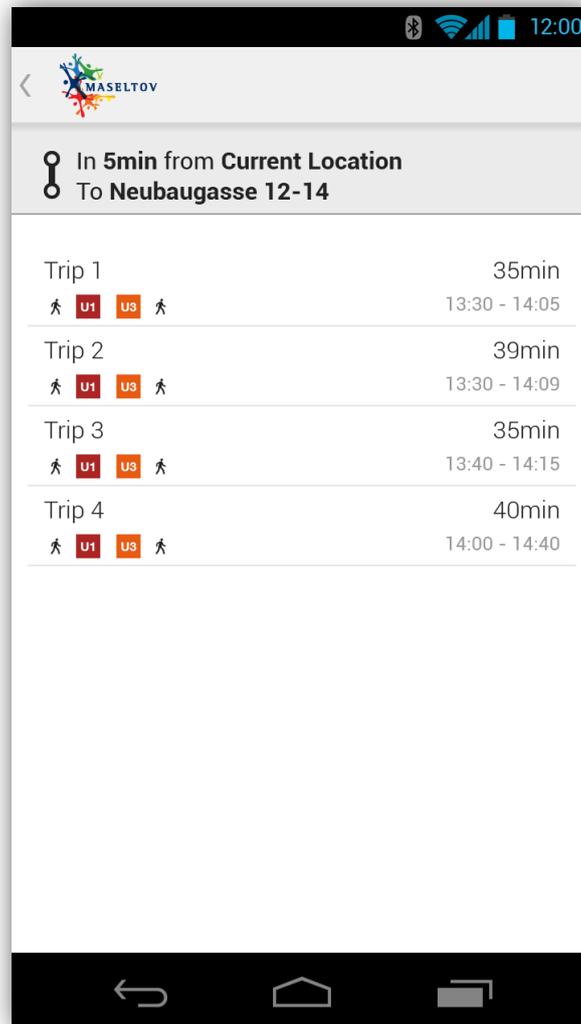


Figure 54: Trip selection.

This screen shows an overview of possible trips to the entered end point. By tapping on a trip the details will be shown.

3.4.6 TRIP DETAILS

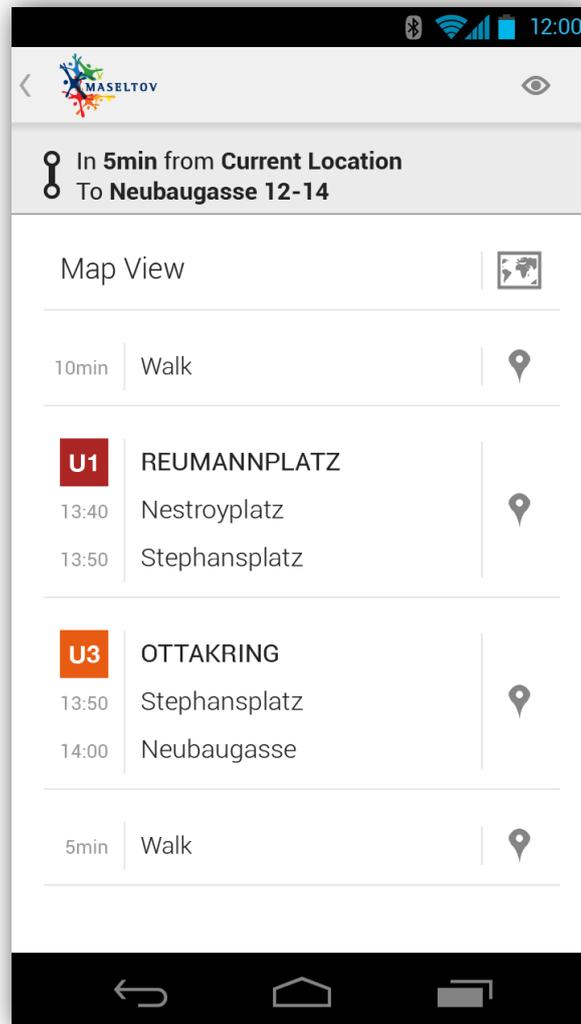


Figure 55: Trip details.

This screen shows the details about the trip. The Eye-Icon at the Action Bar leads to the augmented reality navigation, while the Map-Icon provides a map view of the trip.

3.4.7 TRIP MAP VIEW

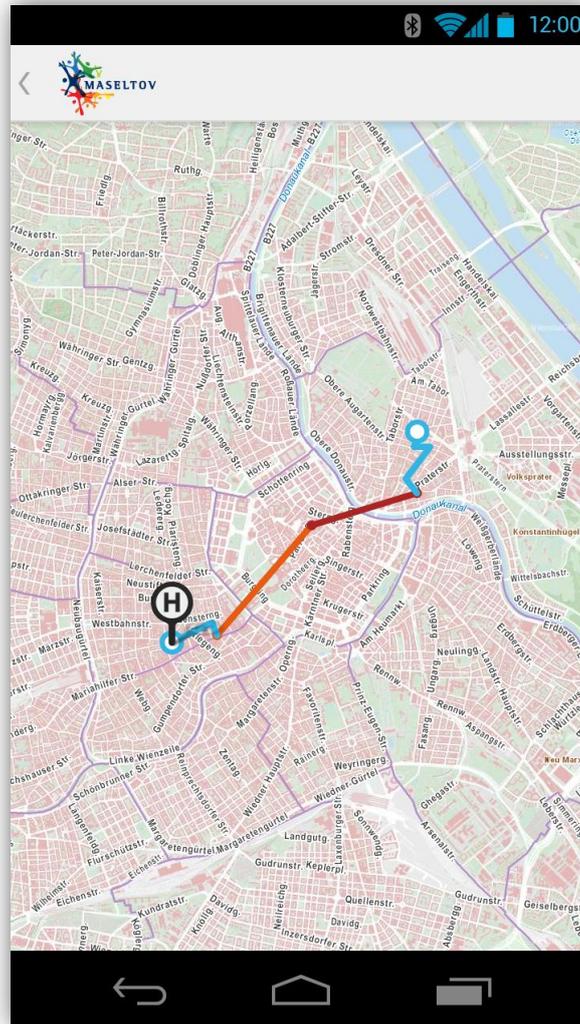


Figure 56: Map view.

3.5 TEXT LENS

The objective of this service is real-time text detection, recognition and annotation using the mobile phone camera. For specific targeted text detection, the service includes specific dictionaries that will support the recognition of the text – which will be further sent to the translation service. The user has the possibility to translate unknown text immediately. Furthermore, users can browse the history of captured texts and translations as well as make use of the text-to-speech functionality. The detailed specification of this service can be found in D3.2.1 and the according user scenario in D2.3.1.

3.5.1 PHOTO CAPTURE



Figure 57: Photo capture.

When the application is started the Photo Capture screen will be shown. The user can move the smartphone to target a text that should be translated. A visual hint at the centre of the screen is shown for some seconds to give instructions. When it disappeared the view looks like the screenshot below.



Figure 58: Taken photo.

3.5.2 PHOTO VIEW

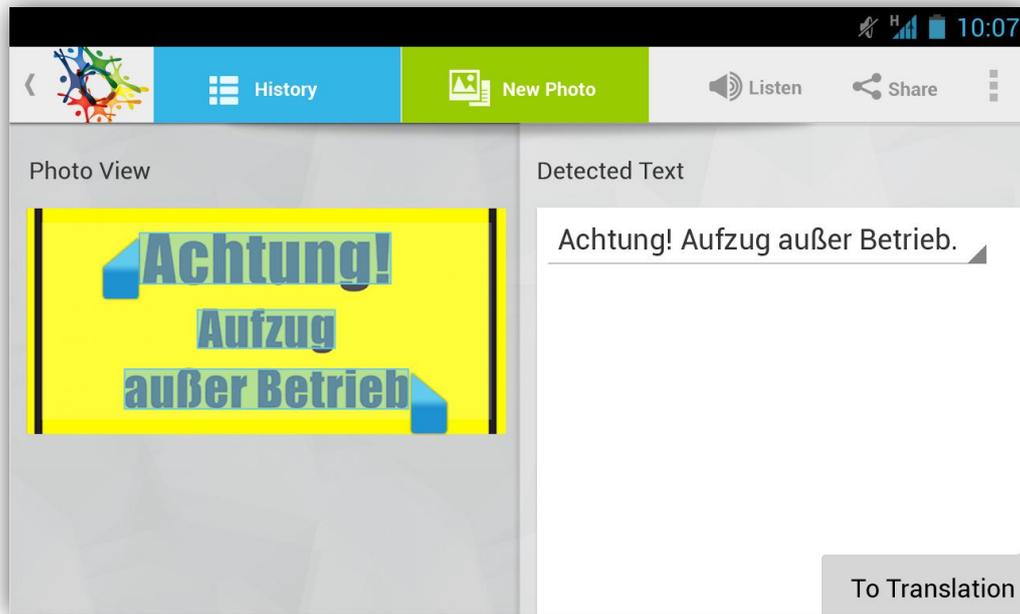


Figure 59: Photo view.

In this view the user has the possibility to deselect parts of the detected text. This might be helpful in cases where a long text has been captured although just one phrase is unknown. By swiping from right to left or by tapping To Translation the translation of the text will be shown.

3.5.3 TRANSLATION VIEW

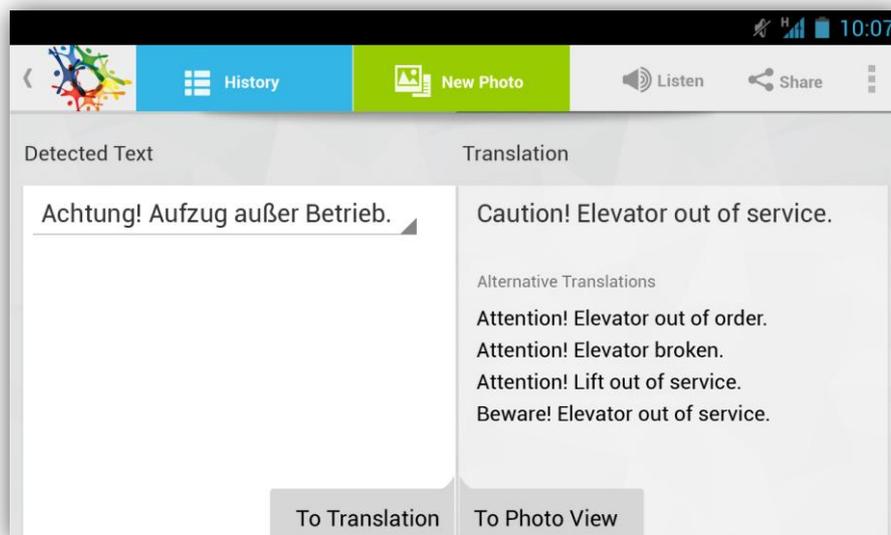


Figure 60: Translation view.

The user can see the translation of the detected text. In addition to a main translation, further alternatives are shown. By swiping from left to right or by tapping To Photo View the photo view with the highlighted text will be shown again.

3.5.4 HISTORY OF DETECTED TEXT

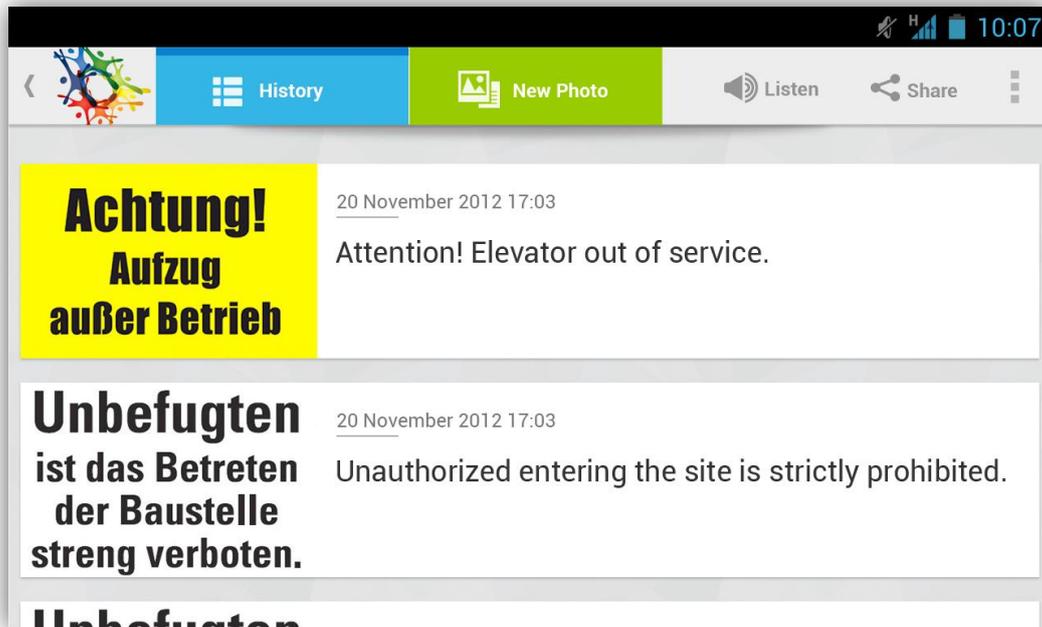


Figure 61: History.

By tapping at History the users can browse their previous captures. Scrolling down shows a list of all photos and the accordant translation of the detected text. A tap at one entry opens the Photo view again (see 3.5.2) again. User can change the selection of the detected text for an updated translation.

3.5.5 LISTEN: TEXT-2-SPEECH

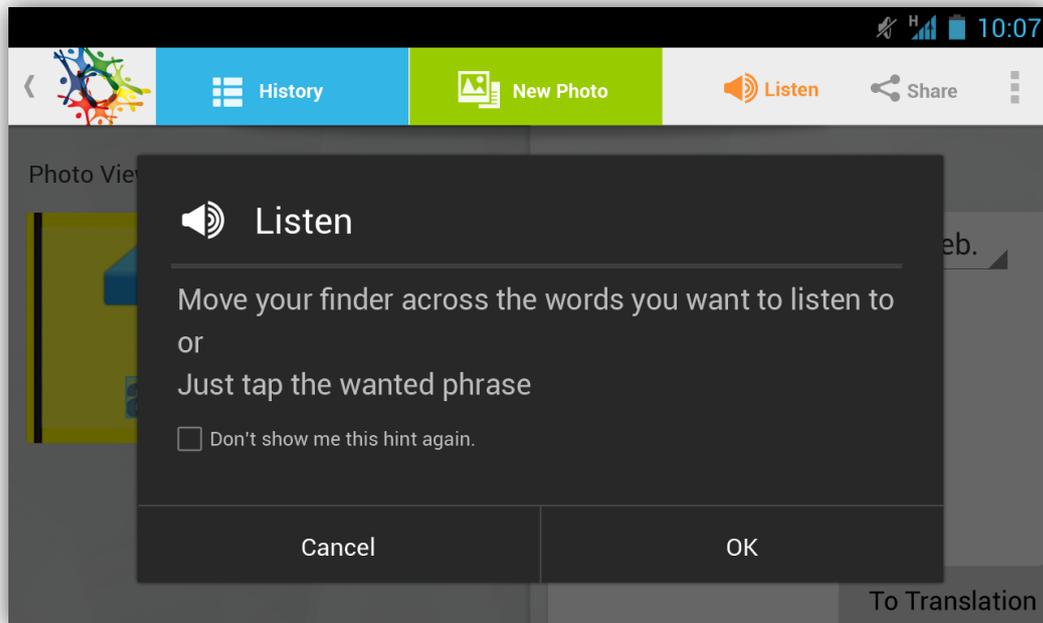


Figure 62: Text-2-speech.

When the Listen button has been tapped this confirmation window pops up. It informs how a word a phrase can be selected for benefitting from the text-to-speech functionality. The user can check the hint if they don't want to see this confirmation window every time.

3.5.6 SHARE: SOCIAL NETWORK SELECTION

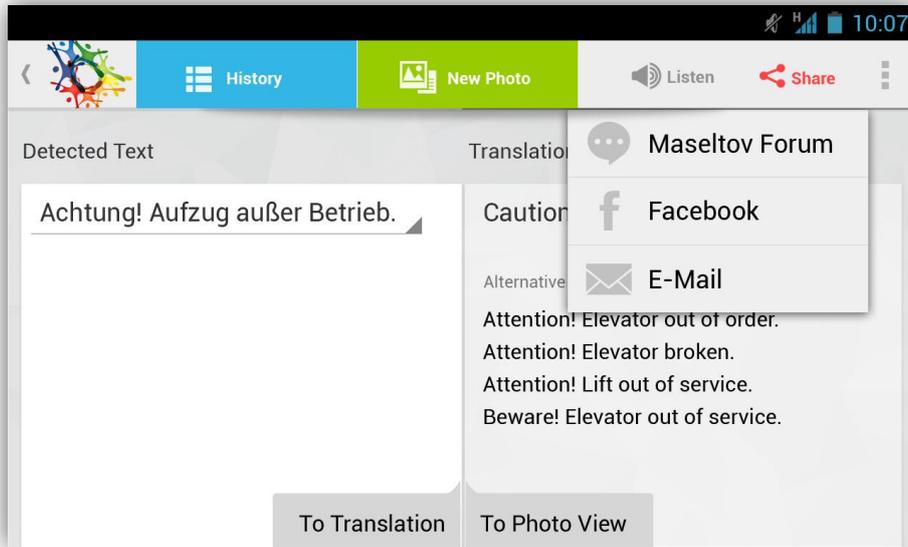


Figure 63: Social network selection.

By Tapping at Share a menu opens with the various sharing options.

3.5.7 SHARE: SOCIAL NETWORK POPUP

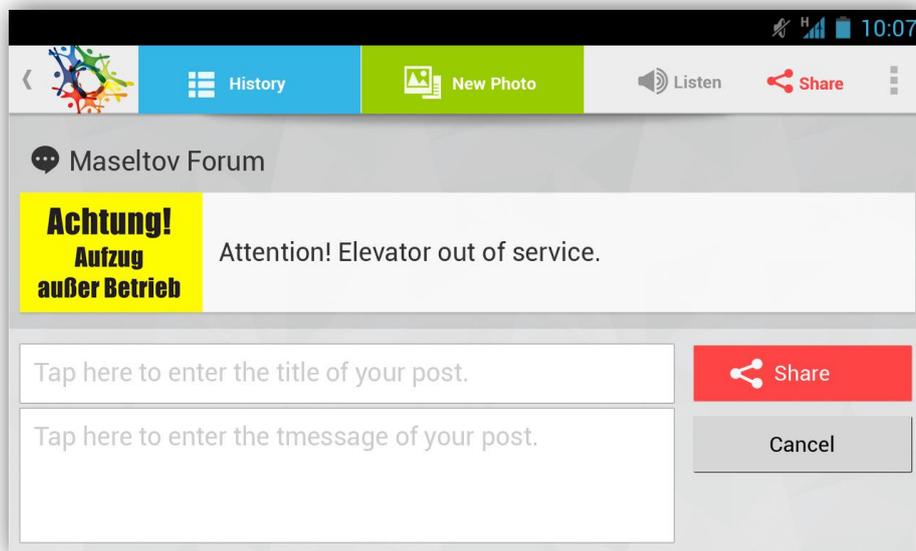


Figure 64: Social network popup.

After selecting the MASELTOV Forum to share a translation the screen above appears. The user needs to enter a title and can add an additional message text. The red Share button submits the translation to the Forum, while Cancel cancels the sharing.

3.6 INFORMATION SERVICE AND POINT OF INTERESTS

This service provides information about various relevant fields of interests of immigrants like legal issues or the health system. Furthermore, users have the possibility to search for specific points of interests (POI) like landmarks or doctor's surgery.

3.6.1 START

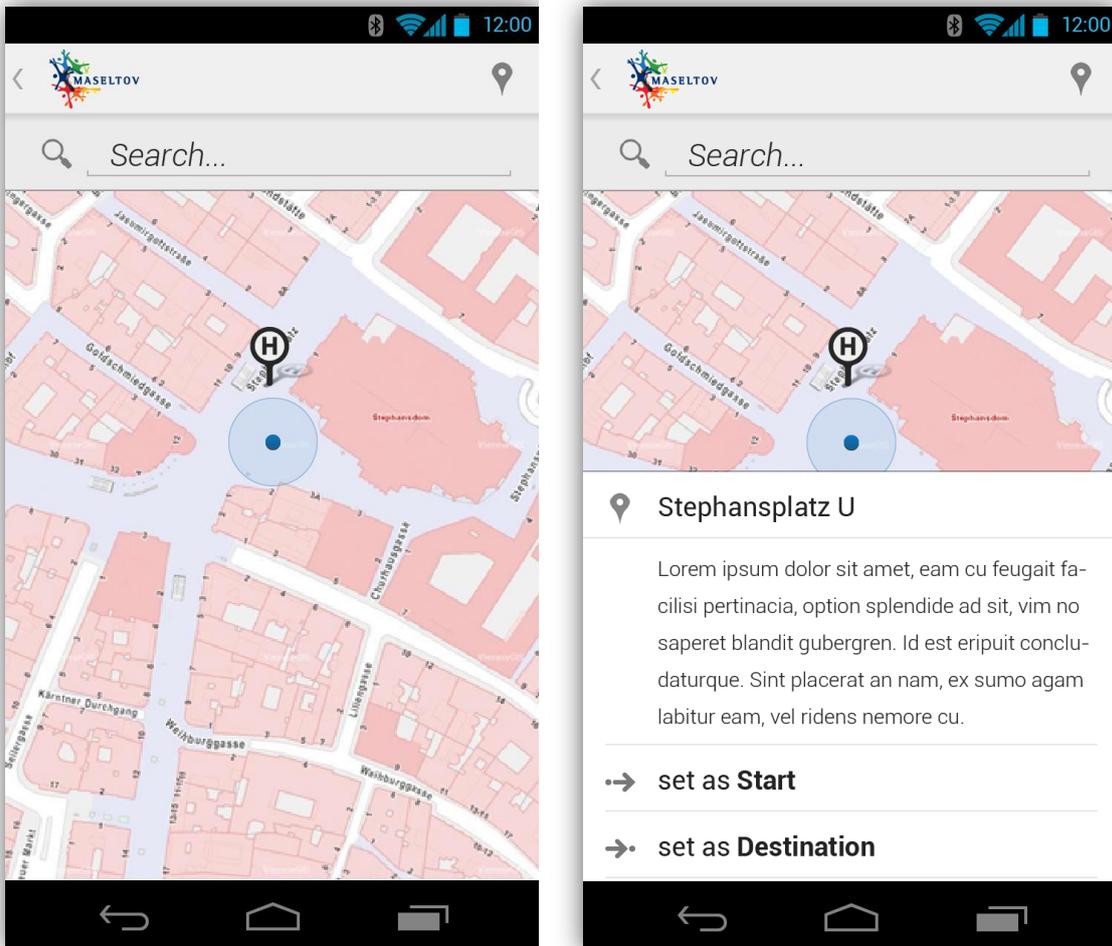


Figure 65: Start view.

When the POI service is started the last search result is shown. By tapping at the accordant icon some information about it will be displayed (see picture on the right).

By tapping at the Search input field users can search for other POIs.

3.6.2 SEARCH

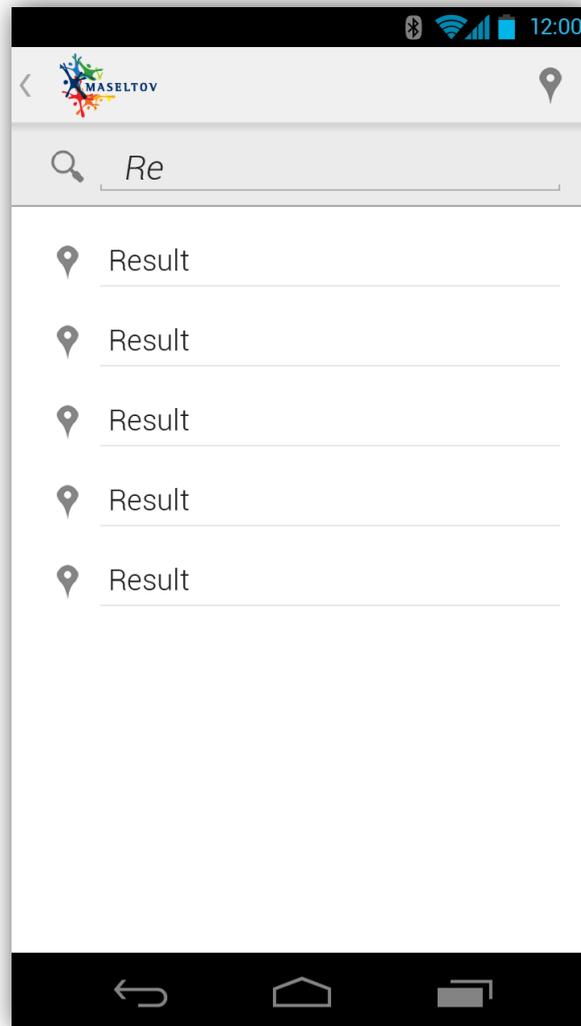


Figure 66: Search.

When characters are entered the database is searched immediately and presents corresponding results (Instant Search functionality).

By tapping at the POI-Icon in the Action Bar the users have the possibility to filter the search results for particular POI categories.

3.6.3 POI CATEGORIES

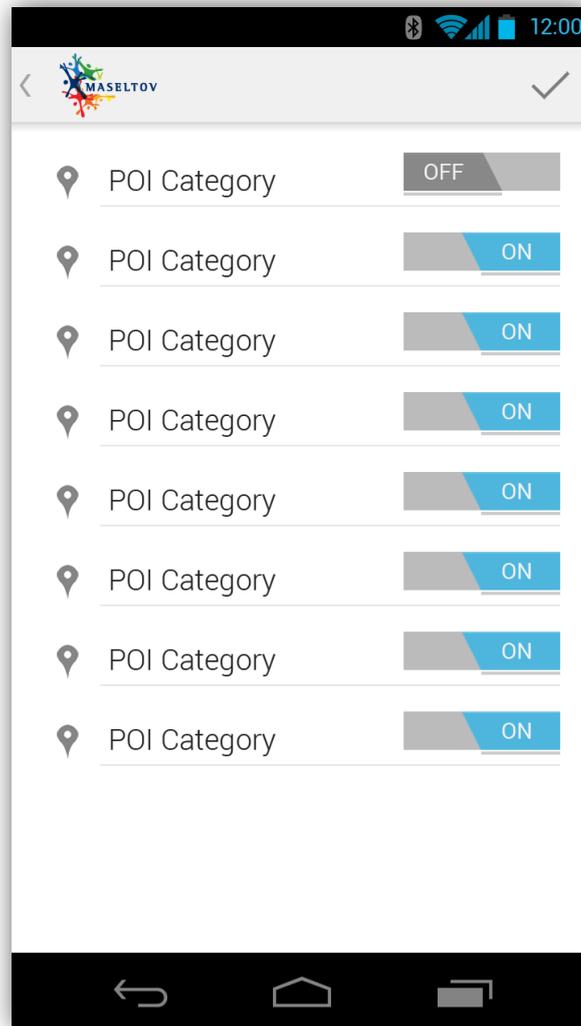


Figure 67: POI categories.

With the help of switches users can activate and deactivate the search for particular POI categories.

3.7 SERIOUS GAME

In this Section, we document the response to first stage usability testing of the game in terms of its impact of development direction, and the addition (or removal) of features from the game. The final game design will be reported in the related deliverable D7.4.

With respect firstly to the feedback on character select, it is important to note the character art in the first trial was placeholder content intended to determine if there was any particularly strong bias or affinity for different avatar types. Since this prototype character concept art has been created for bespoke male and female characters and will be built upon to provide a basis for the upgradable characters within the game (Figure 1).

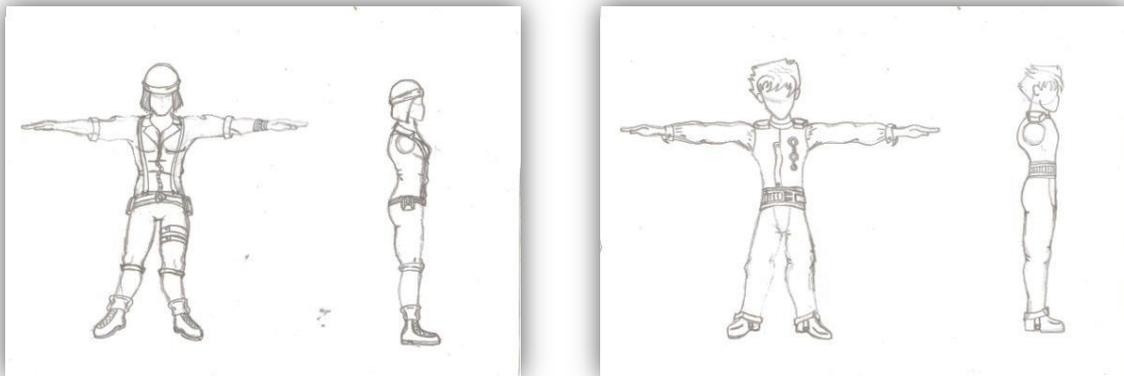


Figure 68: Male / Female character concepts building on reviewer and testing feedback

Similarly, the language selection framework was to test functionality of the translation architecture, as were the language stones. Therefore, whilst the feedback on these components was useful in identifying future considerations (particular whether and how to communicate a choice of language options using flags, text, or an alternative mechanic), they will be substantially reworked for future versions. The majority of user testing feedback immediately actioned, therefore, concerned the usability and difficulty of the game interface. The game font was adjusted to Holo Light's Roboto font. Whilst bespoke icons will still be created for various functionalities, the observation regarding their contrast to the background was observed and higher-contrast solutions will be implemented, for example the coins in Figure 2:

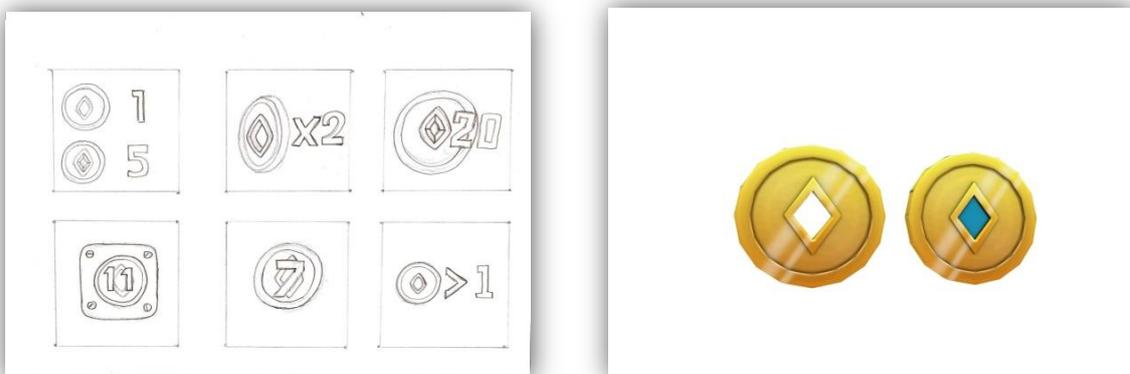


Figure 69: Coin concept and implementation

Another important area of feedback surrounded the use of the thumbstick controls. Increasing the area of operation was recommended as a solution and implemented; however, to further explore this dimension three avatar control options have been implemented:

- A revised version of the thumbstick controls taking into account user feedback
- A simplified version in which the user simply touches to the left or right of the avatar to move themselves
- An accelerometer-based implementation which uses pitching and yawing of the device to control the character

It would be anticipated that in future user testing these methods for control can be comparatively evaluated and either retained as optional control schema, or omitted from the game. An illustration of the selection process and menu (reflecting the Holo light theme) is shown in Figure 3.



Figure 70: User interface in response to user testing feedback

A gradual tutorial is also being implemented within the narrative of the game to introduce the control setup to the user. The help screen will also be replaced taking into account the feedback regarding the first iteration, being simplified substantially and with a clear exit option; however, as it uses static screenshots, this will be at a final stage of development.

The central "hub" area with cultural learning content is being steadily reintroduced, having been removed from the user testing to provide a usable early stage prototype. Figure 4 illustrates the train station backdrop being used for this scenario, reflecting the art style evolved through internal user testing at COVUNI and the need to ground the cultural scenarios in a pseudo-realistic setting, to encourage reflection to real-world scenarios:

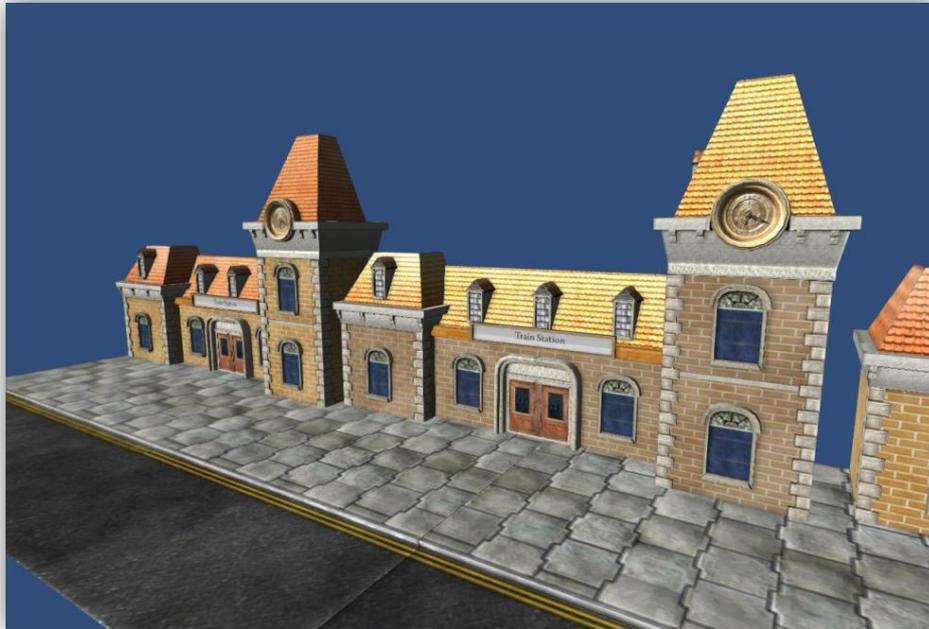


Figure 71: Train station implemented content

The visual style illustrated in Figure 4 is being developed to replace both the central hub area placeholder content, as well as the platform level content in the usability test prototype. It responds to user feedback in providing a high-contrast, relatable illustration of real-world scenarios. Avatars implemented will convey both an introduction to how to play the game, as well as playful cultural learning scenarios. This emphasis on cultural learning will replace the language learning elements in the prototype reported as confusing in terms of content and purpose; however, throughout development ways to introduce additional learning content (for example, having words in two languages as backdrop 'graffiti' rather than foreground content), will be considered, explored, and fed back on through user testing.

A future challenge for user testing is aligning the asynchronicity of game development and need for placeholder assets and content, with the need to provide stable and reflective platforms for frequent user testing. For example, developing an animated character is one of the most time-consuming tasks; however, to develop the other aspects of the game a character for testing is required. Such placeholder content can skew or confuse feedback from study participants. Therefore, future implementations for testing will attempt to reflect this and perhaps include concept artwork as well as completed features. Overall, however, the first iteration of testing has provided useful feedback informing the game's design as communicated throughout this section.

4. SUMMARY AND OUTLOOK

In this deliverable updated and finalised screen designs for the user interface screens of the MASELTOV services were presented taking recommendations of the expert review (D9.2.1) and the first usability testing (D9.2.2) into account. This document marks the end of Task 2.5 and demonstrates the successful evolution of the design of the various services within MASELTOV. While in D2.5.1 services looked very different and included some severe usability issues, the final user interfaces of the services presented in this deliverable are much more consistent and easy to use. The next step will be to conduct the final usability evaluation study of these screens in the lab within WP9 by anticipating and discussing the usability and user experience of the interfaces with potential end users (D9.2.3). Afterwards, the complete functionality will be added to the screens to make the services ready to use under real life conditions which will be assessed in the first (T9.3) and the final field trials (T9.4).