# UNITED WITH AZERBAIJAN Application Project

# **UWA NOTIFICATION APP**

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# **Document Control**

# **Change History**

Revision	Change Date	Description of changes
V1.0	15.11.2017	Initial release

### **Document Storage**

This document is stored in the project's SVN repository at: http://

### **Document Owner**

Murad Eminov is responsible for developing and maintaining this document.

# **Table of Contents**

1 Project Case Statement

The United With Azerbaijan is an software application project which enables the

Azerbaijani citizens, Azerbaijanis with a different citizenship as well as the nationals of other

countries to stay connected with each other as well as with United With Azerbaijan. The United

With Azerbaijan application offers several useful functional features for users. The app consists

of Chatting, Events, Hosting, SOS, Broadcasting and Donations modules. The users can

communicate with each other via instant messages provided by the Messenger feature, which

allows them to chat in P2P mode as well as in user groups. The Events feature allows the users

to create user events such as travel, social event, business event, party etc. They can see the other

system users at their locations. The users can also see the businesses owned by the users of the

system.

The Hosting module allows the users to visit and stay abroad at the other users'

compartment or be a host for other user.

The SOS module can notify United With Azerbaijan about the emergency help requests.

The users also can provide complains and feedback to United With Azerbaijan about misuses in

the system.

The Donation module allows the users to make donations to United With Azerbaijan

project.

1.1 Definitions, Acronyms, and Abbreviations

UWA: United With Azerbaijan

HQ: Headquarter

OTP: One-time-password

SMS: Short message service

IM: Instant message

SSL: Secure socket layer

GUI: Graphical user interface

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#### 1.2 References

To added later...

# 1.3 Vision Statement and Description

For mobile device users of all ages who want to socialize and keep in touch with UWA provided events, friends and associates living abroad. This application is a social networking application that allows users to socialize, find information they are looking for, create and share their events, discover businesses, become a guest of another user when visiting another country or provide hosting accommodation for other user when they want to visit another country.

This app unites several application features in itself. It acts as a unique platform which enables the users to get access and benefit from several applications at one-time registration.

The Diagram 1.1 below shows the general structure of the application:

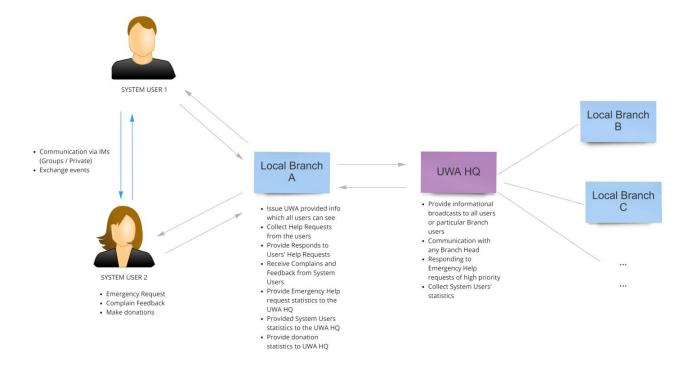


Diagram 1.1: Vision of the proposed System

In the Diagram 1.2 below it is shown the organizational structure for United With Azerbaijan Branches.

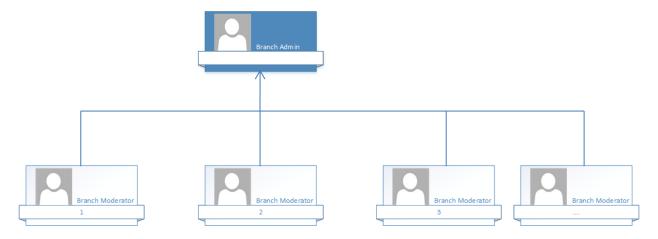


Diagram 1.2: Organizational structure of the system to be used in the UWA Branches

The structure of the system's organization to be used in the Headquarter is shown below at the Diagram 1.3.

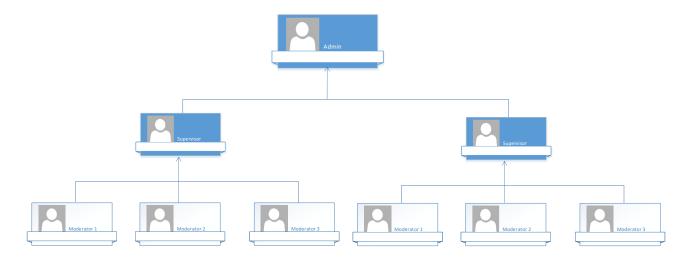


Diagram 1.3: Structure of the system used in the Headquarter

#### 1.4 Detailed System Description

The system is composed of the following parts:

- ➤ User registration
- > Sending UWA provided broadcasts to users
- ➤ Instant messenger for users (Contacts/Groups)
- Emergency help request gathering from the users via local branches

*User registration* is the process, where the user registers him/her to the system. During this process, the user is asked to fill in the form with his/her personal user data, i.e. name, last name, birth date, country of residence (where he/she is currently residing), his/her address, phone number (provided phone number country prefix and the actual number), his/her e-mail. Depending on how the user is going to register (which registration option the user selected for the question "Are you Azerbaijan Republic citizen?: *yes* or *no*), "Are you Azerbaijani: yes or no".

*User types*. There are three different types of users: Citizen of Azerbaijan Republic, Azerbaijani (non-citizen of Azerbaijan Republic) and Other (non-Azerbaijani, and non-citizen of Azerbaijan Republic). The detailed table with user privileges is given at the User Privileges section.

If during the registration the user selects the option yes for the question "Are you Azerbaijan Republic citizen?" then he/she will be asked to provide his/her national Id number of Azerbaijan Republic. His/her Personal Id number will be verified by the passport verifying authority system of Azerbaijan Republic. If citizen user data is verified by the authority, then user will receive OTP SMS pin to his device. At this moment, his/her user data is stored at the Users Database. He/she can enter this OTP SMS pin to start setting up his account password. The user provided new password will be stored at Users Database. If the user selects "no" option, then he/she is being asked "Are you Azerbaijani?". In this case, the user can choose yes or no. If the user chooses "yes", then the user will be registered as Azerbaijani with other citizenship. In this case he can provide his passport data to the system in order to be verified by the Moderator. Until the Azerbaijani type is verified by the Moderator, this user will have limitations in system usage. "Azerbaijani" type users will also receive OTP SMS verification code to set their username and password and register at the system.

Broadcasting UWA provided events to users are a process where UWA Admin or Moderator are broadcasting UWA provided information. This broadcast will be visible to all users and bear official information.

*Messenger is* an integrated communication tool for users to communicate with each other via instant messages. Using this feature they can send and receive the instant messages in P2P (peer-to-peer) mode while able to share photos, videos and audio as well create groups for instant messaging.

Emergency help request gathering from the users is a feature that enables the user to ask UWA to help them in difficult situations. The reasons for emergency request can be different. For example, user may need help from United With Azerbaijan when he/she is in difficult situation. This feature provides a direct communication channel between the user and the representative of United With Azerbaijan.

Complains and feedback gathering from users is a feature where users can provide their complains about abuses, technical issues or give their feedback with suggestions about UWA App. The Branch Moderator can view those complains and feedbacks and moderate.

Events. This feature allows users to create an event which can be visible to other users if the user wants to. The user can create a new event, set the type of the event, set the date and the time for the event. The user can set the start and end date for the event. The user can give the description of the event. The user can create multiple events for the same day. The user can select to create various events, such as travel event on plane, travel by car, which would enable the other users to see that event and sign up, or ask to be involved in that event.

Guest Hosting. This module allows the users to find hosts when travelling abroad. The users can either find the hosts at the countries where they plan to visit and stay at the hosts accommodation, or they can themselves be hosts for the guests visiting their country. The users can make a search for a host based on the criteria they specify in the system.

*Map (Main Screen)*. In the main screen the user can see a World map, where he can focus on the country he/she is. The Map reflects the number of users as well as the businesses around the location where the users currently is. My zooming in the map the user can see the list of users who are currently in the country. The user can switch to see the businesses list, which show the businesses added by the users.

*Broadcasting*. Broadcasting is the feature, where the users can ask questions, get information or review for fun section. Broadcasting is similar to forum, where users can post questions which can be answered by other users. Broadcasting consists of Questions, Answers and For Fun sections.

*Donations* feature allows the users to donate the United With Azerbaijan project. The users can make donations over the internet.

#### 1.4.1 User

User is the person who uses the system from by downloading and installing it to his/her hardware device (smartphone or tablet). This person can either be a citizen of Azerbaijan Republic or Azerbaijani with a different citizenship or Non-Azerbaijani with other citizenship. The user participates in the system by having registered at the system first.

#### 1.4.2 User Registration

The user can register at the system when he/she has installed the app to his/her device. During the registration, the user is asked to fill in the form with the following information: First name, last name, Date of birth, E-mail, Country of residence, Telephone number with phone number extension. The user must agree the Terms and Conditions by ticking the box. Then the user taps the Register button. The user is supposed to receive an OTP SMS which he/she can insert for verification. If the SMS wasn't received by the user, then he/she has two options: Change Number or Resend SMS. The user is also asked to select the answer for the question "Are you citizen of Azerbaijan Republic?". If the user is a citizen of Azerbaijan Republic, then he/she enters serial number of his/her National Id, and the Pin (7 last digits before the very last). Answering this question will define what will be the type the user: a citizen or guest. By Tapping "Register" button the user submits his personal data to the system.

- 1) If the user selected to be registered as Citizen, then his/her data will be processed via the passport verifying authority of Azerbaijan republic. This will be done by secure socket channel SSL. If user was identified by the passport verifying authority system, he/she will be asked to insert the passport for his/her account.
- 2) If the user chose the option Azerbaijani (apart from Azerbaijani citizen), then the user will be registered as Azerbaijani type, and will have limited access to the

- features, until he/she verified by the Administrator. After being verified, Azerbaijani user can have the same privileges as citizen user.
- 3) If the user selected to be registered as Guest, then he/she is not asked to enter the National Id number and the Pin additionally. In this case the user will be registered with limited features for Others type user.

The mock-up views as well as prototypes for Registration process of a new user is given below:



Picture 1.1: Registration process mock-up



Picture 1.3.: Registration process prototype

### 1.4.2 User Privileges

According to the preliminary agreement with the Product Owner, as well as based on the business requirements analysis, the following roles for the System User types were defined:

- Citizen of Azerbaijan Republic
- Azerbaijani (non-citizen of Azerbaijan Republic)
- Other (non-Azerbaijani, non-citizen of Azerbaijan Republic)
- 1) Citizens of Azerbaijan Republic, who get verified through the official verification system, can use the app with complete list of features available.
- 2) Azerbaijanis, who are not the citizens of Azerbaijan Republic and who hold the other citizenship than Azerbaijan Republic can use the system with limited access unless their identities are verified by the Moderator. After being verified by the Moderator, the Azerbaijani users (non-citizens of Azerbaijan Republic) can be given the same privileges as the Citizen users (transfer of privileges).
- 3) Other users: Non-Azerbaijanis and Non-citizens of Azerbaijan Republic have limitation of usage of the features.

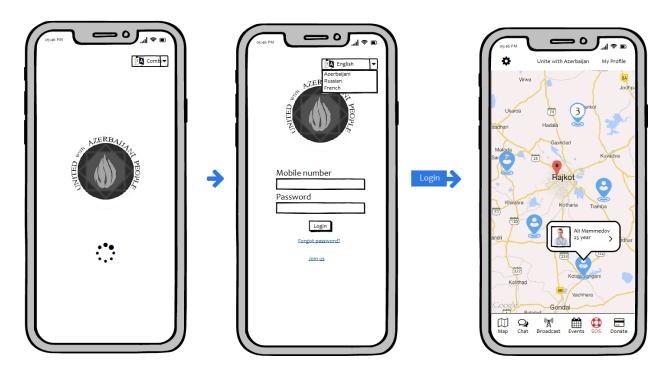
Feature	Action	Citizen	Azerbaijani (waiting)	Other	Notes
Messenger					
	Available	✓	✓	✓	
	Peer-to-peer chatting	✓	✓	✓	
	Sending media files	✓	✓	✓	
	Creating user groups	✓	×	×	Only citizens can be added
	Groups Messaging	✓	×	×	
Events					
	Available	✓	×	×	
	Create a new public event	✓	×	×	
	Create a new private event	✓	×	×	
	Trip event				
	Concert event Meeting event				
	Make event visible to everyone (share event)	<b>✓</b>	×	×	
	Join public events	✓	✓	×	
	Report an event	✓	✓	×	
	Invite somebody to event	<b>✓</b>	×	×	Only citizen and Azerbaijani users
	Comment on event board	✓	×	×	
	See event participants	<b>✓</b>	×	×	5 of your friends and others (no detailed description for "others")
Broadcasting					
	Available	<b>√</b>	×	×	
	Create and send a broadcast	✓	×	×	
	Add media file to broadcast text	✓	×	×	
	See all broadcasts	✓	×	×	
	Comment on broadcast	✓	×	×	
	Add media files to broadcast comment	✓	×	×	

	Complain on broadcast (to Moderator)	✓	×	×	
Guest Hosting					
	Available	✓	×	×	
	Being Guest	<b>√</b>	×	×	
	Being Host	$\checkmark$	×	×	
	Report guest	<b>√</b>	×	×	
	Report host	✓	×	×	
	Rate guest	✓	×	×	
	Rate host	✓	×	×	
	See guest rating	✓	×	×	
	See host rating	✓	×	×	
	See guests location before approval	✓	×	×	
	Contact host before approval	✓	×	×	On demand
	Cancel approved host request	✓	×	×	Both sides
Map and the Main Screen					
	Available	✓	✓	✓	
	See the users in the location	✓	×	×	
	See users exact location	×	×	×	
	Search users in location by criteria	✓	×	×	
	See the businesses in the location	✓	✓	✓	
	Contact the users in the location	$\checkmark$	✓	✓	
Donations					
	Available	✓	✓	✓	
	Make donation	✓	✓	✓	One time charging and recurring charging
	See how much donations were made by exact user	×	×	×	
	See my donation history	✓	✓	✓	
SOS					

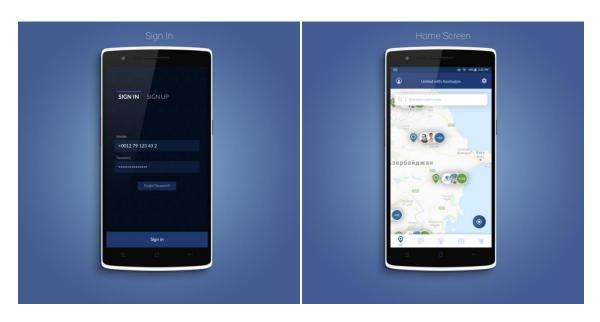
Available	✓	✓	✓	
Ask for help	✓	✓	✓	
Receive respond	✓	✓	✓	

### 1.4.3 User Login

During the login process the user enters his/her mobile number and the password set during the registration. If the user entered the mobile number and password correctly, then the user can enter the initial screen. If the user have problem with login, then he/she has an option to tap 'Forgot password' and enter his/her e-mail to restore the password. The user login process mock-up is shown at the Picture 1.2 and Prototype view is shown at the Picture 1.3 below:



Picture 1.2: User Login mockup

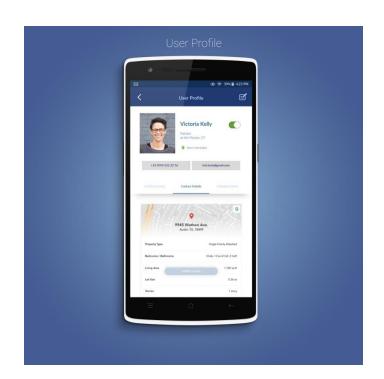


Picture 1.3: User Login prototype

#### 1.4.4 User Profile

This is the feature where the user can view his/her personal details. The user can see the Phone number, E-mail, Status and Visible on Map option. The Phone number is the phone number the user used during the registration. E-mail is the e-mail the user specified during the registration. Status indicates if the user a verified user or not. Visible on Map: the user can chose to be either visible on the Map or not. The Picture 1.4 and Picture 1.5 below show the My Profile view of the user (mock-up and prototype respectively):





Picture 1.4: User Profile mock-up

Picture 1.4: User Profile prototype

# 2 App provided features and User Stories

Messenger, Events, Hosting, Map view(Main screen), SOS, Broadcasting and Donation are features which the United With Azerbaijan app provides. Detailed table, which represents Features and User Stories for them is given below at the table:

#### 1. MESSENGER

As a/an	I want to	So that
User	Add new contacts	I can contact them
User	See contacts in alphabetical order	I can easily find them: by country
User	Remove contacts	I don't see the contact
User	See all my contacts on the list	I can select to view messages from them /send them a message
User	Type in the contact name into search box	I can easier add the recipient contact
User	Create a peer-to-peer instant message	I can directly contact the other user
User	Create a group and become Admin of the Group	I can add several users to send Instant Message/add new users to Group/Remove users from the Group/Edit name of the Group. Permanent deletion of IMs by users is not possible. Other users can report the IM.
User	Block the users	I don't receive IMs from them
User	Unblock the users	I can receive IMs from them again
User	See the timestamp for messages	I know when the message was sent on
User	Send/receive photos, videos, files, links, locations	I interchange files with contacts
User	Remove wrongly sent comments	I don't have misunderstanding about wrongly sent message
User	Remove wrongly sent photos, videos, files, links, locations	I don't have wrongly sent files

### 2. EVENTS

As a/an	I want to	So that
User	Easily find the events Icon(calendar) on my screen	I can use it in comfortable way
User	Create a new event	I can share the event info with the other users
User	Turn on/off visibility of my events to contacts	I can decide if I want this event to be visible to others ( <b>customize</b> )

User	Set event type	I can set the parameter for that event type
User	Set start date for the event	Other users(or only me) can see when this event will take place
User	Set end date for the event	Other users(or only me) can see when this event will finish
User	Give description for the new event	Other users(or only me) can read about the proposed event
User	Be able to set multiple events for one date	I can handle several event on same day
User	Be able to view multiple events set for one date	I know which events will be on the same date (sequentially)
User	Set travel (by plane) event	My contacts(or only me) can see I will travel on plane
User	Set travel (by car) event	My contacts(or only me) can see I will travel by car
User	Set party event	My contacts(or only me) can see I will arrange a party
User	Set business meeting event	I can arrange a meeting with one or several of my contacts
User	Have an option to take extra luggage from my person in my contact	I can take it with me for him
User	I will be notified about risks and pre-condition for accepting to take other person's luggage (TRAVEL BY PLANE)	I will be on safe side while helping another person
User	Take some of my contacts with me while I drive some other place (TRAVEL ON CAR)	I can take someone with me and earn some money
User	See ratings given to the drivers (with Likes and Dislikes)	I can judge on safety of travelling with that person
User	Be given a rating	Others can judge on safety of travelling with me
User	Edit any event for any date	I can control scheduling of my events

User	Remove any event(s)	Other people will know that I will not hold this event(s): cancelling the events
	Control the visibility of	I decide which events are for
User	my event(s) to my	private usage and which are
	contacts	publicly accessible

# 3. Guest Hosting

As a/an	I want to	So that			
	When opening the app(main screen):				
User	See a Dashboard	I can see all available options			
User	See an option button for being a Hosts or a Guests	I set a correct option			
User	Be able to access my preferences	I set my personal preferences for the profile			
Loo	king up for Hosts when I wa	ant to travel			
User	To Select a City, Region or Address for country I want to visit	I can see a list of Hosts for that location			
User	To add my arrival and departure dates for my visit	I can see a list of Hosts who can host me for that period			
User	To see the languages the Host can speak	I make sure I will be able to speak with the Host			
User	To see when the Host was last active	I know if he is an active user or not			
User	See the profile picture of the Host	I have an impression on him/her			
User	See if the Host is accepting the Guests	I can get in touch with him/her			

	(when the user is free to	
	accept the guest)	
User	See if the Host maybe accepting the Guest	I can try to get in touch with him/her
User	I can view "About me" section of the Host	I can have more information about him/her
User	See if the Host a verified member	I make sure it is not a fake account
User	See the Countries where the host lived	I can talk with Host on his/her experience
User	Send the Host a stay request	I can let the Host to know I want to stay at his/her home
User	Receive a request from Host	I know what the Host responded back
User	To set filtering parameters for Hosts ( Gender ? Language? Accommodation offering (private room, public room, shared room) ? smoking allowed ? suitable for children ? Pets allowed ? Wheelchair accessible ?	I exactly match the Host I need
Offering a Ho	st(Accommodation) to Guest	who travel to my city
User	To Select a City, Region or Address where the Guests want to travel	I can offer them an accommodation for my city
User	See the Guest's arrival and departure dates	I know for how long the user will stay in my accommodation
User	See the Guest's portfolio picture	I have more information about the Guest
User	See where the Guest is coming from (country)	I have more information about the Guest
User	See what languages the user can speak	I can decide if the user will be able to communicate with me
User	See the "About me" description of the Guest	I have more information about the Guest
User	See for what period the user wants to stay	I decide if I can offer him/her my accommodation

My personal preferences			
User	Set my preference on accepting or not accepting Guests	I can decide if I want to accept a Guest	
User	Set type of Guests I can host (gender, single? group? family, with pet/without?)	I can decide on the type of Guests I can Host	
User	Set for how long I can host Guest(s)	I can allocate them accommodation	
User	Set what languages the Guest has to speak	I make sure we can communicate	

# 4. Map and the Main Screen

As a/an	I want to	So that
User	See and be able to access different features from my Main Screen	I can have a good User Experience
User	See a map to with indication of number of user around my location (city, country)	I know how many users are near me

Interaction with the Map				
User	See map that can turn into a list with users who live in that location when zoomed in (map when zoomed out)	I can see in details who are the users living in my area		
User	See a list of users with their profile pictures	I know who live near me		
User	See the list of business the users had added (Optional)	I know which businesses belong to the users		
User	Be able to view more the other users when tapping on them	I can open an option for interaction with that user		
User	To see the number of the users when I zoom out the map	I know the exact number of users near my location		
User	To see the number of the businesses when I zoom out the map	I know the exact number of businesses near my location		
User	Tap on business asses	I can get more information about that business		
User	To be able switch between the list of users and businesses	I can select what I'm searching for		
	MAIN SCREEN INTERAC			
User	To have a settings icon	I can access the settings		
User	To have add contacts input field where I can look up for system users	I can add new contacts to my contacts list		
User	To have "contacts" icon	I can look-up all my contacts		

# 5. Broadcasting

As a/an	I want to	So that

User	To view broadcasts from other users	I be aware of important information
User	Comment on broadcasts from other users	I express my opinion, knowledge on the issue
User	See when the broadcasts was sent	I can judge if the broadcast is new or old
User	See broadcasts that are from the United With Azerbaijan	I receive an official information (trustworthy information)
User	Create my broadcast	I let the others to get informed about the issues
User	To be able to report the broadcast to the Moderator, if I think the broadcast is bearing a false information, insulting or dangerous	Moderator can moderate the broadcast
User	I can select from different categories (information, question, for fun) of broadcasts to view	I have an option to select what category of broadcasts I'm interested
User	I can select from different categories (information, question, for fun) for broadcasts I create	I can give a category for my broadcast
User	Edit my broadcast	I can correct my mistakes
User	See the date and time for my broadcast	I know when my broadcast was sent

# 6. Donations

As a/an	I want to	So that
User	Be able to donate (at least 1USD) to United With Azerbaijan	I can support United With Azerbaijan project

User	Be able to use different ways to pay donation (Visa/Master Card/American Diner etc.)	I can donate in my favorite way
User	Know how much I donated up to day	I know how I support United With Azerbaijan
User	I get notified about successful/unsuccessful donation attempt	I know that I have donated

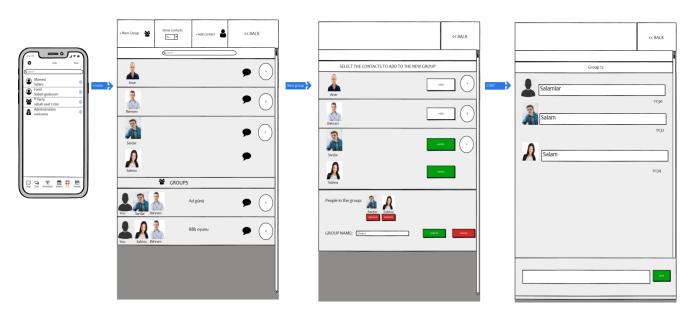
# 2.1 Feature: Messenger

This feature allows the connected users to send instant messages to each other. The users can send each other individual instant messages or create groups. When a user created a group, all members of the group will see the message sent by the user. The Chat view is given the Picture 1.5 below.



Picture 1.5: Chat screen view

The user can create a new message, either individual or group message. In the picture 1.6 below it is shown the process for creating an instant message to a person or a group.

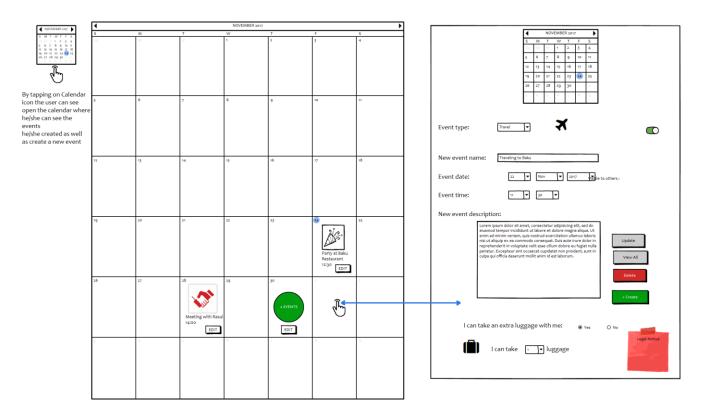


Picture 1.6: Chat screen view

#### 2.2 Feature: Events

The user can create personal events. The events can be of different nature, for example, travel, business meeting, party etc. Creating an event the user can describe it, give it a title, so the other users can see it. The user can set the visibility for the event via "Visible to others" toggle button. The user can describe the event, update it, view all events, delete the event and create an event. If user selects to create a Travel type event, he can have an option to take somebody else's luggage with hum/her, if he/she wants to. In this case he may specify how many luggage he/she can take. The other users need to read the Legal Notice about the terms of sending luggage with another person.

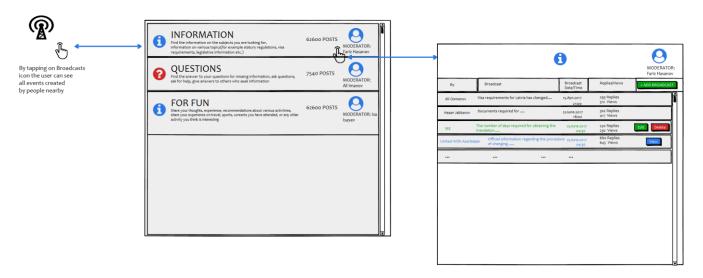
The mock-up for personal events creation by user is given below at Picture 1.7:



Picture 1.7: Events mock-up view

# 2.3 Feature: Broadcasting

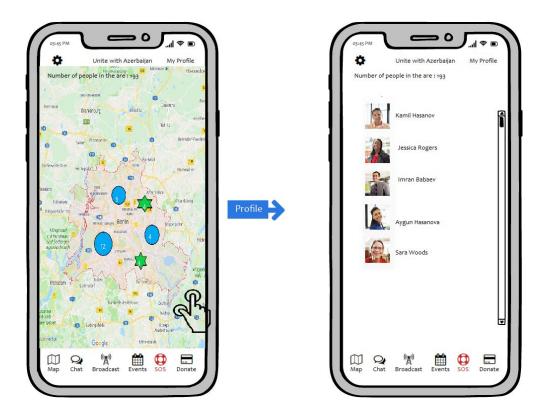
Broadcasting is the feature similar to forums, where the users can ask questions, find information or read fun for section. The users can post important information, such as changes in legislation, law, visa procedures etc. The questions posted by the users can be moderated by the moderator. The picture below shows the mock-up view of Broadcasts feature:



Picture 1.8: Mock-up view for Broadcasts view

### 2.4 Feature: Map (Main screen)

The main screen of the app represents a map, which shows the location where the user currently is. The user can see the location country where he is. The main screen view with map allows the user to see both the number of other users as well as the number of businesses added by the users on the map. By zooming further in, the user can see the list view of users in the location. The user can switch to see the businesses as well. The mock-up view of the main-screen map view with zooming in functionality is given below at the picture 1.9 below:



Picture 1.9: Main-screen map and zoomed in view (list of users)

#### 1.4.2 UWA Local Branch Head

UWA Local Branch Head is a person who is in charge of Local Branch issues. This person can moderate the events concerning his/her branch. For example, UWA HQ updated the event list with events, where there are events for Germany. In this case, the Local Branch Head for Germany can moderate the events for Germany (edit event information, edit event start date and time, event title). Branch Head can also create branch broadcasts that the branch users can receive. Branch Head can view reports on branch users' emergency requests, user complains and feedback received from Branch Reporter and forward this information to the UWA HQ Reporter. Branch Head can create new Branch Reporter in the system, edit Branch Reporter info and delete the Branch Reporter if necessary.

#### 1.4.3 UWA Local Branch Moderator

UWA Local Branch Moderator is the person who can moderate moderate the Local Branch events, moderate emergency help request from the users, gather complains and feedbacks. The Branch Reporter can forward this information to the Local Branch Head.

Different feature available for Branch Head and Branch Moderator are give below at Table 1.2:

Features list	Role: Branch Head	Role: Branch Moderator
View all Events List		

Create a new Local Branch Event	$\square$	lacksquare
Update Local Branch Event	$\square$	lacksquare
Remove Local Branch Event	$\square$	×
Broadcast Local Branch Event	$\square$	$m{\varnothing}$
Receiving compliances from Users	×	$m{\varnothing}$
Receiving feedback from Users	×	lacksquare

Table 1.2: Available features for Branch Head and Branch Moderator.

#### 1.4.3 UWA HQ (Ministry Committee) Admin

UWA HQ (Ministry Committee) Admin is the person who can view the list of available branches, manage individual branches (create a local branch, or edit the existing), view and edit events assigned to every branch, view user statistics (emergency request, complain, feedback) for any branch, establish direct communication with any Branch Head. The Admin can manage the events (add, remove, edit, categorize events per type and UWA Branch). The admin can manage broadcasts of UWA HQ. The Admin can edit (add, remove, edit) UWA Moderators and UWA Reporter.

# 1.4.4 UWA HQ Moderator

This person moderates the events provided by UWA HQ to Local Branches. The Moderator also can moderate the Emergency Requests, Complains and Feedback.

# 1.4.4 UWA HQ (Ministry Committee) Reporter

UWA HQ (Ministry Committee) Reporter collects the user statistics information (emergency help requests, complains and feedback) from the Branch Heads. The UWA Branch Reporter can forward this information to the UWA HQ Admin.

The feature available for Branch Head and Branch Moderator are give below at Table 1.3 below:

Features list	Role: Admin	Role: Moderator	Role: Reporter
View all Events List	Ø	Ø	Ø
Create a new Event	$\square$		×
Update Event	$\square$		×
Remove Event	$\square$		×
Receive Citizen complains	×		

### 2. Project Goals

- 1. Create a mobile app that provides event notification to the users (from local UWA branch.
- 2. Create a mobile app that allows users to create personal events so that the other users can see. For example: a users created an event "Travelling to Baku". In this case the other users can see it, and see if this user could take their luggage when travelling to Baku.
- 3. App allows the users to see the users in contacts on the map
- 4. App allows the users to see the properties (business, restaurant etc.)
- Create a mobile app enabling users to communicate with each other by instant messaging
- 6. Create UWA HQ Admin to edit (add, remove) local branches, view the branch provided statistics
- 7. Create Emergency Notification feature that allows citizen users to send emergency help requests to the UWA Branch and receive response.
- 8. Create Complain/Feedback feature that lets UWA Branch to receive complaints and feedbacks from the users
- 9. Create a feature to track the users statistics such as total number of users, users type: citizen, guest, number of emergency requests, users subscribed to the events.

#### 2.3 Project Deliverables

TO BE DEFINED LATER ....

#### 3. ASSUMPTION AND CONSTRAINTS

#### 3.1 Assumptions:

- 1. The whole system is installed and configured.
- 2. The app is download and installed on User's hardware (e.g. Android OS or iOS)
- 3. The application available for download from Google Play Store as well as from the UWA web-site download link
- 4. The API Location is enabled on the User hardware

# 3.2 System Constraints and Technical Requirements:

### Client-side app:

- 1. The app downloaded and installed on user's device
- 2. Wi-Fi or 3G, internet and Geolocation is available on User's hardware
- 3. User Passport No.-based verification service is available from the verifying agency-side server (using secure SSL connection protocol)
- 3. OTP SMS service is available

#### 4. Users Database is available

# DETAILED SOFTWARE AND HARDWARE REQUIREMENTS TO BE DEFINED LATER ....

#### 4. Workflow

- 4.1 Functional Requirements :
  - User
- 1. On first install and launch of the app, the User can input his/her credentials (login and password) if he/she had previously registered. If the user is not registered, then he/she can tap on "Sign Up" button in order to register.
- 2. In Sign Up page the user is asked to input the following information into fields and tap "Register" button:
  - First Name\*
  - Last Name \*
  - Date of birth
  - E-mail\*
  - Country of residence\*
  - Telephone number (prefix and number)\*
  - Terms and conditions agreement\*
  - Azerbaijan Republic citizen or not\*
  - Azerbaijan Republic passport number
- 3. If all required fields are completed correctly, depending on "Azerbaijan Republic citizen" or not selection the user processed as:
  - 1) Citizen: Via Passport verifying authority provided API, if the user identified himself/herself as a citizen of Azerbaijan Republic:

Pass Case	Fail Case
User form input data is validated	User form input data is validated

User is sent OTP SMS with pin	User is not identified via the Passport verifying authority
User is redirected to set his username and password	User is not sent OTP SMS with pin
User's username and password is sent to his/her E-mail account	User is notified about passport verification failure
User data is written to the Users Database	User is offered to be registered as Guest user
User is forwarded to his new account	

**2) Guest:** All User data collected (except Passport no.): Guest users don't get verified via Passport verifying authority provided API.

Pass Case	Fail Case
User input data is validated	User form input data is not validated
User is sent OTP SMS with pin	User is not sent OTP SMS with pin
User is redirected to set his password	User is notified about form validation failure
User's username and password is sent to his/her E-mail account	User is offered to recheck error fields
User data is written to the Users Database	
User is forwarded to his new account	

User's registration in the system is shown below in the Image 1.1:

Image 1.1: User registration: entering user data



Image 1.2 below shows confirmation of the OTP pin received upon successful registration.

Having successfully logged in the user, he/she can see the list of UWA HQ provided events list, the icon for messaging, the icon for seeing the broadcasts as well as the icon for viewing the events he has subscribed to attend. The user can select the upcoming event from the event lists and subscribe to the event. This process is shown in the Image 1.3 below.

The user can use the Messaging module in order to communicate with the other users. The other users can be the users who have registered in the UWA Branch as the User. The branch User can send an instant message to an individual user or create a group of multiple users. Only citizen users can create user groups. In the image 1.4 below it is shown the process of messaging.

The new contacts may be added from the Messaging icon, by tapping on 'Manage Contacts'. From here the user can input the user name of a new contact and add him as friend. In this case the other user will receive a requests which he/she can accept or deny.

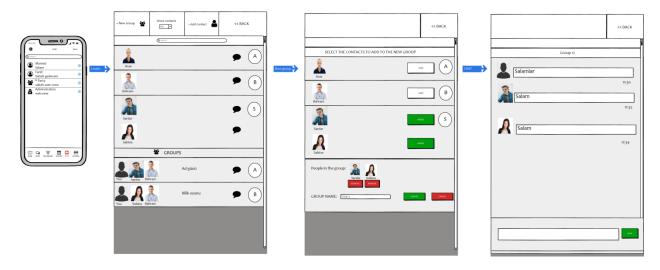


Image 1.4: Messaging between individual users and groups

#### Local Branch Head

Local Branch Head interacts with the system in the following way:

- Local Branch Head logs into the system providing his/her credentials: login and password
- 2. Local Branch Head can view all the upcoming events provided from UWA HQ.
- 3. Local Branch Head can edit the events which are designated for his/her branch with the following options:
  - Event category types (ex.: Event A is no longer a Sport event, it will be a Concert event )
  - Event title (ex.: Event A is no longer called "Celebration of Novruz Bayram", now it to be called "Novruz Bayram 2018 Estonia")
  - Event date (ex.: Event A will be on 05.10.2019, instead of 04.09.2019)
  - Event location (ex.: Event A location will be in Tartu city of Estonia instead of Tallinn city of Estonia)

- 4. Local Branch Head can initiates branch broadcasts, so that the users who registered at the local branch can view those broadcasts. The broadcasts can be of different title, delivering useful and important information to the users.
- 5. Local Branch Head can view statistics reports regarding the events (number of subscribed attendees, number of actual attendees, attendees' details).
- 6. Local Branch Head can view the Emergency Requests from users, he/she can change the priority of the emergency request. Those special categories are set by Branch Moderator who thinks that these requests need special attention by Local Branch Head.

The Image 2.1 below shows the GUI for Local Branch Head.

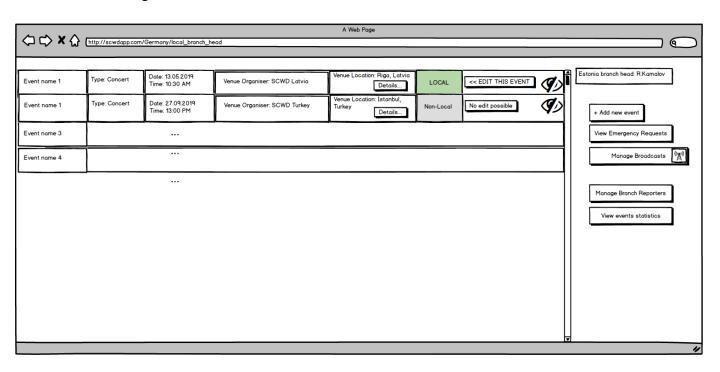


Image 2.1: GUI for Local Branch Head initial screen

The Image 2.2 below shows the GUI screen for viewing the Emergency Requests:

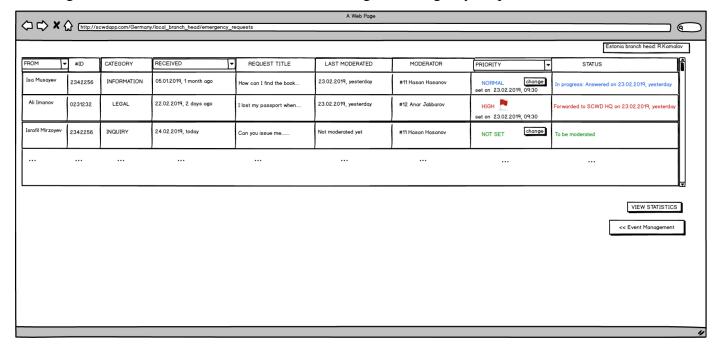


Image 2.2: GUI screen for viewing Emergency Requests by Local Branch Head

#### Local Branch Moderator

- 1. Moderator can log into the system using his/her login and password
- 2. Similar to the Local Branch Head, the Local Branch Moderator views all events as well as the events concerning his/her branch
- 3. He/she can edit the events in similar way to Branch Head.
- 4. Local Branch Moderator views all emergency help request received from the branch users, moderates those requests and can set the special flags in order to prioritize those requests.
- 5. Moderator can view feedbacks and complains received from the branch users.

# Admin of UWA HQ Ministry Committee

1. The admin logins the system providing his admin credentials to the system, his/her admin login and admin password.

- 2. Can view the list of all available branches by branch countries (see image 2.3 below). By selecting(clicking on) a branch from branches list, the admin can view all the specific events for that branch, watch the branch broadcast of that branch, see number of users registered at that branch, see the number of active users at that branch (who are chatting or watching the broadcasts). The admin can also add a new branch to the list, if a new UWA local branch was organized in a new country.
- 3. Can use UWA Events Management option in order to create a new event or edit the existing event.
- 4. Can manage broadcasts, which are from UWA HQ. The Admin can initiate a new broadcast, view stored old broadcasts (archived). The UWA HQ provided broadcasts can be informative, bearing information of special importance to users (ex.: the information concerning legal updates, information of extreme nature: fire event in Oslo, extreme evacuation of Azerbaijani nationals etc.)
- 5. Can view and respond to the Emergency Requests that have very special priority.
- 6. Can view Users Statistics: can see complete statistics on the number of system users, active users, users' branches, number of complains and feedbacks received.
- 7. Can manage the UWA Moderators, for this option he/she needs to click on UWA Moderator Management button and open the Moderator's Management screen. This way, the admin can create a new Moderator (give his/her name, last name, login and password)
- 8. Can manage the UWA Reporters, also by clicking on UWA Moderator Management button. This way, the admin can create a new Moderator (give his/her name, last name, login and password)

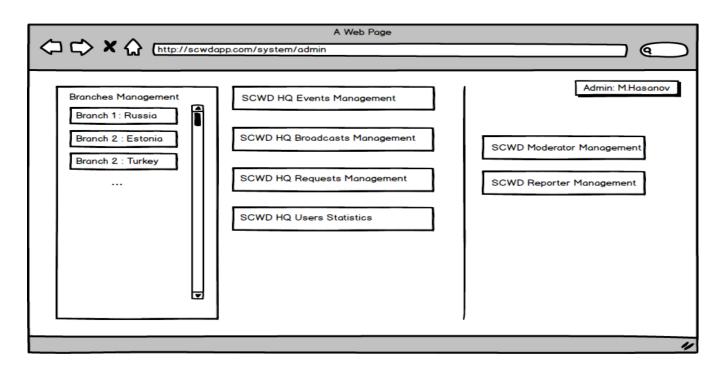


Image 2.3: UWA HQ Administrator's GUI

### Moderator of UWA HQ Ministry Committee

- 1. Logins the system providing UWA HQ Moderator login and password.
- 2. Can moderate (view, edit, delete) the events provided from UWA HQ.
- 3. Can manage broadcasts that the end-users will receive
- 4. Can moderate the Emergency Requests that have very special priorities.
- 5. Can moderate the complains and feedback

#### 6. Constraints

#### **Time Constraints**

To be edited later.....

Funding Constraints	
To be edited later	
7. Database Requirements	
These are general requirements about program database:	

- The database needs to be installed to the databases server of the UWA Local Branch. This can be done during the installation of the system.
- O System crashes and slowness due to large number of database requests can be avoided by separation of the database into 'Current' database and "Storage" database. The 'Current' database can store daily information on addition of new user,