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Google Workshop

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\$aveZone



User Manual

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1. Introduction

Welcome to \$aveZone, android application that will help you to save time and money, and enjoy the best deals around you.

Why should you pay a full price for your lunch, if a restaurant around the corner offers business lunch deals? And why should you go to that pub, if after walking 3-5 more minutes you can get a free chaser?

But how can you find all these deals? Here \$aveZone comes to help you! \$aveZone is android application that allows you to find in **real-time** profitable **deals** according to your **location** and **needs**.

It's not another bad version of eBay. Don't look for a new camera or fashion clothes here. \$aveZone offers you only the products of *immediate consumption*. With us you can find discounts on drinks, food or deals on the parties.

In this document you will find explanation on all \$aveZone features.



2. Main Features by Screens

The main goal of \$aveZone is to allow the user to find in real-time profitable deals according to location and needs. The following section will review the application features screen by screen.

2.1. Opening Screen

2.1.1. Overview

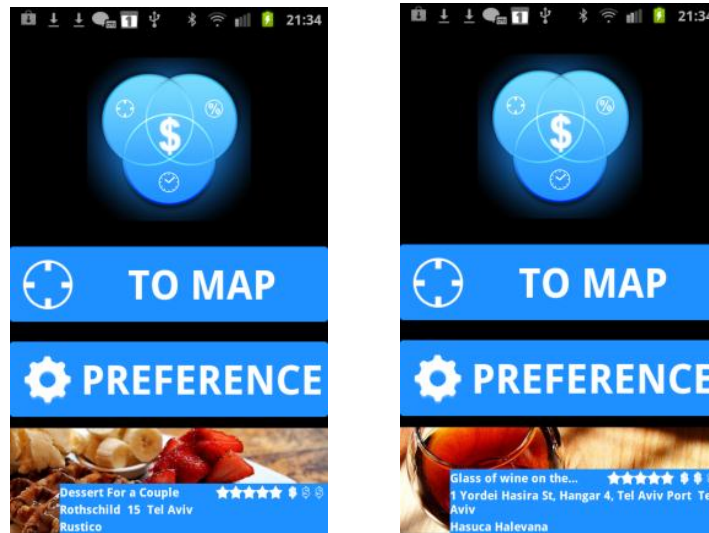


Figure 2.1.1.1 Opening screen example – two different deals presented on the banner

\$aveZone application starts with a very simple and easy to use screen. From this screen the user can navigate to map, where he/she will find the relevant deals, or preferences screen, where the application could be customized. In addition, on the banner at the bottom of the page the [most relevant](#) deals will be offered to the user. By clicking on the banner the user can find more details on these deals.

2.1.2. Reference Screens

- [Map Screen](#)
- [Preferences Screen](#)
- [Deal Screen](#)

2.1.3. Features

- Banner:
We are **targeting** the deals \$aveZone offers to the user. Our algorithm will sort the deals on the banner according to [targeting attributes](#).






2.2. Map Screen

2.2.1. Overview





Figure 2.2.1.1 Map screen example


This is the main screen of the application. As soon as the user's location is detected, the deals nearby will be shown on the map. Each deal has its type and a different icon on the map according to its type:

- Restaurant 
- Pub 
- Party 

This will help you easily to locate the deals you are most interested in. In addition, deals that were added by our [parsing scripts](#) and deals that were [added by users](#) could be distinguished by the symbol on the bottom right corner:

- Added automatically by the system 
- Added by the user 

Tapping on each of the deal icon will open a pop up with a briefly description of this deal. Tapping on the popup will open a screen for full description and information on the deal.

\$aveZone application supports an alternative presentation of the deals. By clicking the list icon () at the left bottom corner of the screen open [Deal List](#) presentation window.



Menu has three buttons:

- Double Time Scroll – feature that lets you to find the relevant deals at a specific period of time.
- [User Preference](#) – allows you to customize the application
- Add – [singd in users](#) can add deals to our database. Long Click on the map or Add button from the menu followed by tapping on the map will open [Add New Deal](#).

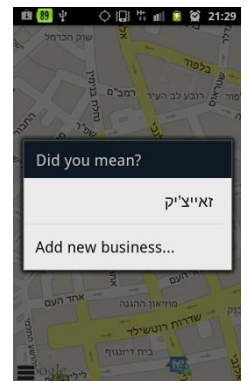


2.2.2. Reference Screens

- [Deal List Screen](#)
- [Preferences Screen](#)
- [Add New Deal Screen](#)
- [Deal Screen](#)

2.2.3. Features

- Per Zoom:
In order not to overload the map with the deals, only limited number of deals will be presented per map zoom. Our algorithm will give a priority to the deals with higher rating and to [user preferences](#).
- Time Scroll:
By default \$aveZone will present the deals relevant in two hours from the current time. The user can change the time period, to check deals in the close future.
- Add:
Only singd in user are allowed to add new deals to the database. In order to prevent spam the number of additions is limited to **5 per user per day**. In addition, \$aveZone will check the database and will **suggest** to add deal to already existing business near the point chosen on the map. This will prevent creation new business for each new deal and will help to arrange the deals under existing businesses.





2.3. Deals List Screen

2.3.1. Overview

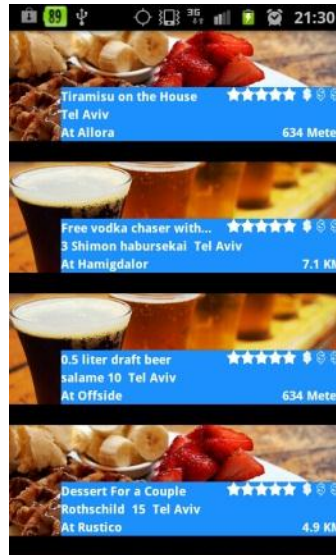
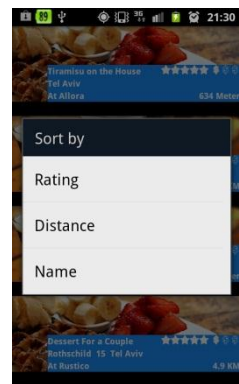


Figure 2.3.1.1 Deal List screen example

\$aveZone allows alternative presentation of the deals. The user who prefers Deals List presentation will enjoy attractive and clear banners with short information on each deal. Sorting feature will allow user to sort deals according to:

- Name
- Rating
- Distance from current location



By clicking the banner more detailed information on each deal will be presented.

2.3.2. Reference Screens

- [Map Screen](#)
- [Deal Screen](#)

2.3.3. Features

- Sorting



2.4. Deal Screen

2.4.1. Overview

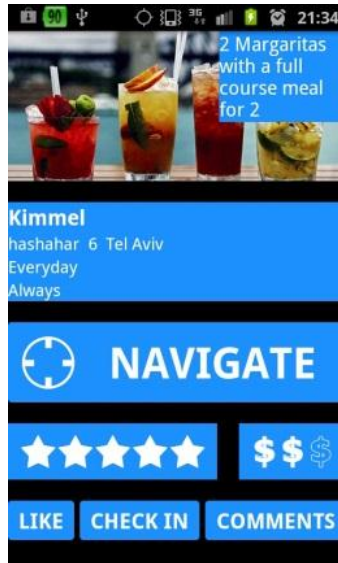


Figure 2.4.1.1 Deal screen example

On the deal Screen more detailed information on the deal could be found: deal description, business offering the deal, deal hours, rating and profit level. *Navigate* button will help you to find the deal on the map, opening Map Screen and focusing on the deal. In addition, signed in user can post Likes on Facebook wall or [Check-In](#) to the business. *Comments* button will open [Comments Screen](#) where user can leave feedback on the deal and see other user's comments.

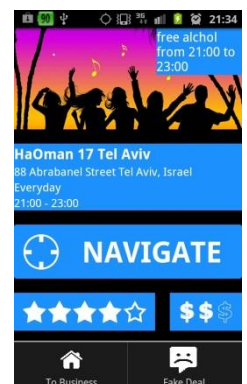
From menu user can check all deals and get some extra information about business that suggests the deal or report Fake Deal.

2.4.2. Reference Screens

- [Map Screen](#)
- [Business Screen](#)
- [Comments Screen](#)

2.4.3. Features

- ***Fake Deal:***
Signed in user can report fake deal. Deal that accumulates number of fakes from different user will be deleted automatically by database [scheduled maintenance scripts](#). Moreover, reporting fake will add comment and low rating to deal.
- **Deals Pictures:**





We assign sub-type to the deal, each time the new deal is added to our database. Sub-type is assigned automatically by parsing deal's info. We have more than 20 logo pictures for each deal sub-type. Deal sub-type is also used in our targeting algorithm.

- Facebook Likes:

In addition to post, the application will gather statistics on users Likes. Our targeting algorithm is based on these statistics. Using the application next time, the user will find relevant deal on the opening screen. In addition, when [filtering deals according to map zoom](#) preference will be given to deals the user Like.

2.5. Comments Screen

2.5.1. Overview

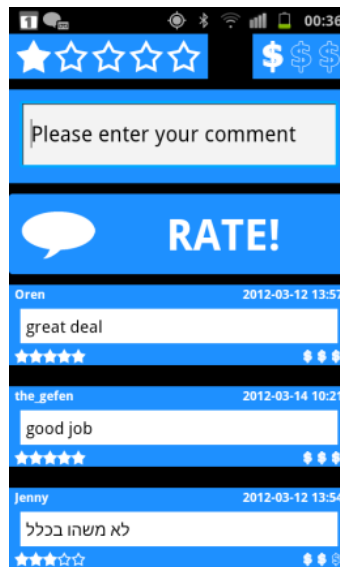


Figure 2.5.1.1 Comments screen example

Here you can leave comments, rate our deals and see comments left by other users. Only singed in user can rate deals.

2.5.2. Reference Screens

2.5.3. Features

- Statistics:

We hold statistics for our deals. Deals with high rating are most likely to be shown on the map when the map is overloaded. More on statistics could be found [here](#).



2.6. Business Screen

2.6.1. Overview

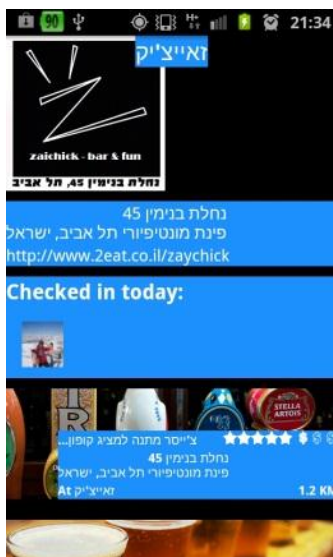


Figure 2.6.1.1 Business screen example

On the map or in the deal list only one deal is presented per business. This deal is chosen according to user's statistics, information from user's Facebook (if available) and deals rating and popularity. On this screen you can find all relevant information on the business: address and internet page, list of **all** available deals and list of Checked-In users (you can see user's Facebook page by clicking on the icon).

2.6.2. Reference Screens

- [Deal Screen](#)

2.6.3. Features

- Custom images:
While adding new business we try to parse business's web page to find a logo. If no logo is available, we use our bank and algorithm similar to deal's logo assignment.
- Check-In:
User can check-in to the business on the Deal Screen. A message will be posted on Facebook wall and business check-in list will be update, making the information available to other application user on the next synchronization.



2.7. Preferences Screen

2.7.1. Overview

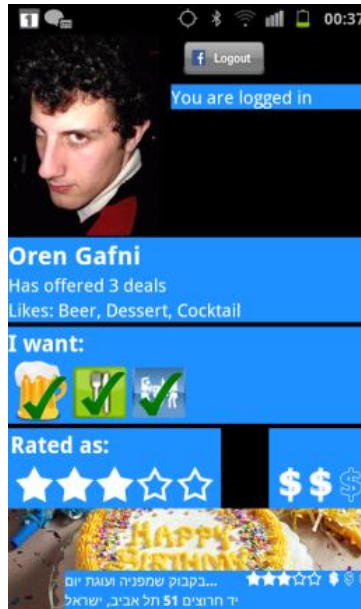


Figure 2.7.1.1 Preferences screen example

Preferences let you filter deal, see and edit the deals you've added and sign to your Facebook account. Our filtering mechanism is very simple. With only few clicks you can filter irrelevant deals and find the deals you like. You may choose between 3 types of deal:

- Pubs
- Restaurants
- Parties

You can also choose minimum deal rating and deal profit.

At the bottom of the page you will find the list of deals you've added. By clicking one of these deals, you will be able to delete it.

Only authorized users can add deals, leave feedback, post Likes and Check-In businesses. Signing in with your Facebook account will open these features to you. We use Single-Sign-In Facebook feature, so your Facebook password is not exposed to the application.



2.7.2. Reference Screens

2.7.3. Features

- Facebook:
As the user signs in to Facebook, the application requests for Likes, Interests and recent Posts. All this information is analyzed and added to the [application statistics](#), offering the user relevant deals. Hence the user who opens the application for the first time will be offered with the deals that he/she likes!

2.8. Add New Deal Screen

2.8.1. Overview

Figure 2.8.1.1 Add New Deal screen example

In less than a minute and only a few clicks, these are all that is needed to add new deal to the database. Just enter a business name, business type, deal hours, short description and rating, and your deal will be added to database and shared among other users.

The feature is restricted to [authorized users](#).

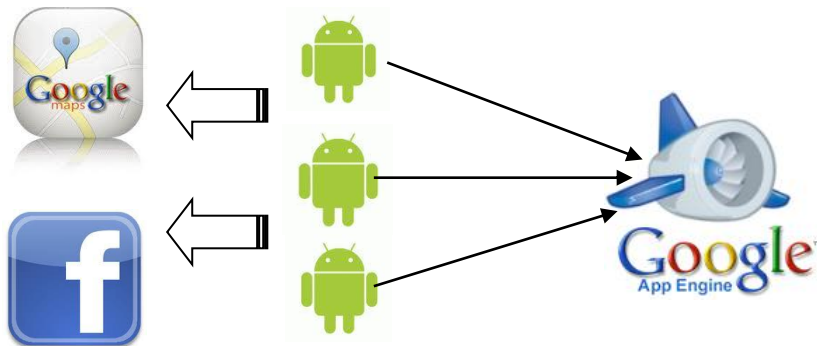
2.8.2. Reference Screens

2.8.3. Features

- [Did you mean?](#)



3. Architecture



3.1.1. Overview

As mentioned \$aveZone client side is an android application and the server side is Google App Engine. Together \$aveZone provides great solution which finds and suggests the best deal suited for you.

3.1.2. Client Side

Our Android application is very simple to use but, on the other hand, includes advanced features. For that reason we are using the following technologies:

- Android SDK 2.3.3
- Google maps
- Facebook SDK
- Google Geo-Coding

Main APIs and overview can be found in [Chapter 2](#).

3.1.3. Server Side

With Google App Engine as a server we supply to the client side all the information needed:

- GQL data base which includes information about business, deals, users, reviews, check-ins and more.
- Cron Processes – runs on daily or weekly basis, handling multiple tasks:
 - Find deals on the web.
 - Delete old or low rated deals and deals which were reported as fake several times.
 - Anti-spam feature which calculate user's credit according to deals, they've added, rating. That credit helps us limit low rated deals contribution to our data base.
- Google Geo Coding – finds business on the map.
- BeautifulSoup – tool which enables us to find and update business, deals, pictures and more.



- Set and get http APIS (implemented as GET and POST):
 - Main query - getting relevant businesses and deals for a specific time, place, types and more.
 - User query - getting business and deals that added by user.
 - Delete deals - getting a deal, validate that it was created by the specific user and delete it
 - Add or Update a deal
 - Review a deal
 - Like a deal – trying to understand user preference and add it to data store
 - Facebook likes analyze – analyze Facebook likes in order to understand user preference and add it to data store
 - User Preference get (for targeting)
 - Check in set
 - Check get
 - Cron Processes mentioned above

4. Compatibility

As mentioned, \$aveZone is an Android application.

Minimum requirements:

- Android version 2.3.3 or above.
- Internet Connection.
- GPS (recommended).
- Facebook account (recommended).
- *\$aveZone app focus as beta version in Tel Aviv area, Israel*

5. Known Issues and Future

- *\$aveZone app focus as beta version in Tel Aviv area, Israel*
- *\$aveZone uses free AppEngine server with limited traffic*

6. Contact us

The application is available on our page - <http://code.google.com/p/save-zone/>

You can contact us by mail - google-workshop-team@googlegroups.com