#1 USER REGISTRATION, #2 SHOP REGISTRATION, #3 CAMPAIGNER REGISTRATION

#1 – This can happen either via social networks or via their personal emails.

#2, #3 – This can happen only via their email address.

Registration is two steps process in general. First anyone registers with the system provides their Name, Email, Password and type(shop/user). Once they receive the registration notification to the given email, they will have to follow the instruction from that email to fill in additional information about them. These additional details vary based on the user type. If the type of the user is individual, he/she will be asked for Location, Preferred categories (select from the list), phone number and ID number. If the user type is shop or campaigner it must provide, business Logo, banner image, contact name, contact number, description of service, opening times.

If the user is registering with their social network, the system must request to access their location, email address and phone number. If that information is available, as the first part of the registration, it must be saved against their profile and returned when they click on the email validation link, so that, retrieved information from the social network can be displayed at UI to be validated from the user.

Registration must be enabled with code received to mobile and verification. This is only for registration and not for login

From the technical aspect, you must use OAuth2 resource owner credential flow. You are welcome to use OIDC. Further, for any users regardless of whether the user is registered from the social network or via their direct email, the access token must be issued via our system (Never use social network access token).

ACCOUNT LOGIN

Registered users/shop/campaigner can login with their credentials. The system must adhere to block the user from login, if the user has attempted and failed to login maximum 10 (configurable) times continuously.

From the technical aspect, though we have different types of users, everyone must be saved in the single table, so that at the login panel, we can avoid asking about the user type to login.

The system must adhere to retrieve access token from the refresh token and the expired access token.

PROFILE MANAGEMENT

As the registration section explains, that basic information must be gathered from both registered users and registered shops. If they want to update any of the provided information, they can do those by themselves. This includes password change and forgot password functionality too.

PERMISSION MATRIX

Based on the roles and responsibilities, our system encompasses six types of users

System Admin	As the name suggest, this person is the super admin for the entire system
Content Admin	This person is responsible for following - Approve/reject/ modify any ad postings - Add keywords to taxonomy list - Review error log - Respond to emails via system - Add/Remove Sponsor content to sites - **Cannot** modify any permission of others - Read/Modify any user profile - READ-ONLY on any type of users' transaction history
Registered Users	Any individuals who registers with the system with the view of posting adverts. - Can only manage their own profile - Can post adverts
Registered Shops	Any businesses those registers with the system with the view of engage their physical business online. - Can manage their own business profile - Can arrange and add adverts to the shop page
Registered Campaigner	Any businesses, those wants to promote their services among the website users. - Can validate campaign id (this will be further explained at #11 #12 #13) - Add/Manage campaigns
Anonymous	Visitors of the site, **cannot** post adverts.

INTERNATIONALIZATION – OPTIONAL REQUIREMENT

From the bird's view, our platform handles translation based on the type of the data. System must translate predefined data such as Keyfacts questions, but not the dynamic data such as description of adverts.

CAMPAIGN CRUD

For any businesses, they would like to make their services visible to the community. They may choose to do a campaign via our platform. This is not a regular banner advertisement or its kind. Distinct types of businesses create their campaign by logging via campaign account. One of this could be an offer from car spare part shop.

In order to create a campaign, campaigner must provide following information

- Campaign image
- Campaign title
- Detail
- Start date
- End date
- Token valid days
- Contact Name
- Contact Number
- Number of allowed tokens

Created campaign must be shown at two locations.

1. Advert submission successful
2. Advert detail view

In order to make the relevance between the campaign to be shown and the location to be shown, each campaign must be marked with class-level-1, class-level-2, class-level-3 by the content administrators. Each field may take more than one value. This information is used to derive the relevant campaign item when the user reaches to above locations.

E.g.: If the user is viewing a car or if a user has submitted an advert to sell his car, campaigns with category vehicles and sub category with car will be read and returned. While reading the campaign data, start date and end date must be considered.

In addition to this, content administrator marks certain campaign items as premium. It will only be shown to those who have posted the premium adverts (paid for the adverts). These will only be visible after the payment page.

GRANT/REVOKE CAMPAIGN TOKEN

In order to make use of the campaign item (discounted service), the website user or advert publisher must claim maximum of one campaign item for the posted advert. Claiming a campaign item returns system generated unique token to the claimant, which then will be taken to the campaigner (service provider) to get that discounted service.

The campaigner validates token and marks token as completed.

VIDEO TO VIDEO HOSTING SERVICE

Videos of adverts must be hosted on Vimeo

Further, deleting videos of those adverts haven't been upgraded to premium. This must be a regular automated job, which cross checks the vimeo and our system to see which videos are not having basic advertId field filled in and remove those from Vimeo. This is to clean up the space on Vimeo

SAVE/CANCEL SEARCH CRITERIA

User must be able to save the search criteria/search results. If any new adverts are added to the search criteria, it must be notified to the user. We do not want to send bulk of emails for every new advert, rather the new adverts for the criteria test must be done every 6 hours (configurable) and send email.

If the user is not interested in receiving the search results, he/she should be able to remove the saved criteria.

PAYMENT GATEWAY INTEGRATION

Payments can be done either via online or via bank transfer.

Online payments can be accepted via paypal and via given payment gateway. Once the user makes the payment, it must be logged and retrievable.

If the user makes the bank transfer, the content administrator enters the information to the same payment log table.

It must have following fields

1. advertId
2. userId (This may not be needed as the advert object will be having the userId. However, if searching the user who made the payment is a big round trip (many joins), make it available her)
3. premiumTypeId
4. paidAmount
5. createdDate
6. modifiedDate
7. createdBy
8. modifiedBy
9. paymentSourceId

WISH LIST

CRUD of a wish list for users

AUTO-COMPLETE

Certain answers of key questions expected to have large number of options, which cannot be accommodated into the dropdown. In this case, we have to store those answers into db and expose it to the front-end via the autocomplete functionality.

EMAIL NOTIFICATIONS

Important information is relayed to the users' email box from the system. Here is the list of events those require email notification. Email templates must be stored in the database for each event, so that it can be reformatted as per the future needs.

Some of the email notifications can be un-subscribed and some are mandatory emails.

1. User/Shop/Campaigner registration – email confirmation
2. User /Shop/Campaigner registration complete

3. User/Shop/Campaigner logged out due to number of attempts exceed
4. Profile update complete
5. Ad posted
6. Daily summary regarding statistics for ad publisher
7. Payment for premium service receipt
8. Ad expiration notice – 2 days prior
9. Ad expired notice
10. Alert subscription email
11. Password update
12. Reset password – request
13. Reset password complete
14. Shop purchase complete – receipt to user
15. Shop order generation – notification to shop
16. Invalidate the order – notification to user
17. Claim a campaign – notification to user and campaigner
18. Invalidate campaign token – notification to user
19. Sold items, of those are added into watch list
20. Contact us email copy for user and admin

Please note, this list of emails may slightly increase or decrease. Im expecting +/- 5

SMS NOTIFICATIONS/ACTIONS

SMS is sent when any super important event occurs. This is a subset of email notification. I will provide the exact list later on.

REPORTING

Number of views per advert by day. This should be available per user basis as well.

Payment list by userId

Payment list of everone

Get adverts for shop

Please note, the list of reporting may slightly increase or decrease. Im expecting +/- 8

OTHERS

Add number of contactdetails viewers of advert

Get available premium type details