

Online Ads

1 Introduction

XYZ Ads Ltd provides Online Ads applying facilities to Indian citizens.

XYZ Online Ads Ltd plans to develop "Online Ads" - a web application wherein a user can Post Ads

Scope and Overview:

The scope of the Online Ads will be to provide the functionality as described in Functional Requirements below. The system will be developed on a Windows Environment using ASP.Net Core, C#, SQL Server, Entity Framework Core, WEB API, MicroServices etc..

2 Functional Requirements

The users of the Online Ads are:

1. Administrator –
2. User-

Below are the requirements specific to the types of users:

2.1 Administrator

Description
Admin should be able to Add Categories
Admin should be able to Modify Categories
Admin should be able to Delete Categories
Admin should be able to View Categories
Admin should be able to View Ads
Admin should be able to Search Ads
Admin should be able to change status of the Ad
Admin should be able to Search User Details

2.2 User

Description
User should be Register to the application
User should be able to View Ads
User should be able to Search Ads
User should be able to Post Ad
User should be able to Modify Ad
User should be able to Delete Ads
User should be able to View status of his own posted Ads
User should be able to send interest to Ads
User should be able to View interest of his own Ads

3. Sub-system Details

3.1 Administrator

The Administrative User should be able to do the following operations once he has logged in with his unique user id and password

- Add Categories
- Modify Categories

- Delete Categories
- View Categories
- View All Ads
- Search Ads
- Change Status of the Ad
- Search User Details
- Quit Session

Add Categories: As part of this operation, the admin should have the ability to add Categories into the system and get confirmation on successful entry. CategoryID is auto-generated.

Category Details include:

- CategoryID
- CategoryType (MainCategory/SubCategory)
- CategoryName

NOTE: More fields for Categories can be added depending on requirement.

Modify Categories: As part of this operation, the admin should have the ability to modify Category Details by supplying CategoryID.

Delete Categories: As part of this operation, the admin should have the ability to delete Category Details by supplying CategoryID

View All Ads: As part of this operation, the admin should have the ability to view all the Ads posted in to the System

Search Ads: As part of this operation, the admin should have the ability to Search Ads based on Category and Sub Category.

Change Status of the Ad: As part of this operation, the admin should have the ability to update the status of Ad from Active to InActive.

Search User Details: As part of this operation, the admin should have the ability to Search User Details.

Quit Session: As part of this operation, admin should have the ability to quit the session completely.

3.2 User

The User should be able to do the following operations once he has logged in with his unique LoginID and password.

- Registration
- Post Ad
- Modify Ad
- Delete Ad
- View Ads
- View Status of own Ads
- Search Ads
- Send Interest
- View Interest of Own Ads
- Quit Session

User Registration

An unregistered user should be able to register into the system with the following details.

Registration details include (all mandatory):

- FullName
- DOB
- Gender
- EmailID
- Address
- City
- Email
- Password

When the registration is complete, UserID (numeric) will be auto-generated and displayed to the user.

(Refer to section 4. Data Organization → Table 1: RegistrationDetails)

Post Ad

A registered user should be able to Post Ad into the system with the following details.

Post Ad details include (all mandatory):

Ad Details:

- Main Category
- Sub Category
- Ad Title
- Ad Description
- Contact Name
- Contact Email
- Phone Number

Note: Application Form details provided here are indicative. Extra details can be added if required.

When the Ad Posting is complete, an AdID (numeric) will be auto-generated and displayed to the user.

ModifyAd: As part of this operation, the user should have the ability to modify Ad details by using AdID.

DeleteAd: As part of this operation, the user should have the ability to Delete Ad details by using AdID and print the same.

ViewAds: As part of this operation, the user should be View All Ads posted by all Users in the System.

View Interest of Own Ads: As part of this operation, the user should be able to View his own Posted Ads.

Search Ads: As part of this operation, the user should be able to Search Ads based on category.

Search Interest: As part of this operation, the user should be able send interest(response) to particular Ad

View Interests of Own Ads: As part of this operation, the user should be able to View all ads where he has sent his interest.

Quit Session: As part of this operation, the user should have the ability to quit the session completely.

4. Data Organization

This section explains the data storage requirements of the Online Ads application and **indicative** table (database) structure. The following sections explain few of the tables required for the application and the other tables will have to be designed accordingly.

4.1 Table: User Information

The user specific details such as name, address, authentication and authorization / privileges should be kept in one or more tables, as necessary and applicable.

Table 1: RegistrationDetails

Field Name	Data Type	Description
<i>UserID</i>	<i>INT IDENTITY(1000,1)</i>	It will be a numeric value sequentially generated by the system and need not be passed from the client. It will be added by the system whenever a new user gets registered.
<i>Password</i>	VARCHAR(9)	Encrypted Password
<i>Full Name</i>	VARCHAR(15)	First Name of the user
<i>DOB</i>	DATE	DOB of the user
<i>Gender</i>	VARCHAR(7)	Gender of the user
<i>City</i>	VARCHAR(10)	City of the User
<i>State</i>	VARCHAR(15)	State of the User
<i>EmailID</i>	VARCHAR(30)	EmailID of the user
<i>PhoneNo</i>	VARCHAR(10)	Phone No of the user

4.2 Table: Authentication Information

The table contains Authentication Information for Administrator and User

Table 2: LoginCredentials

Field Name	Data Type	Description
<i>UserType</i>	VARCHAR(1)	A-Administrator, U-User
<i>LoginID</i>	VARCHAR(9)	User Identification
<i>Password</i>	VARCHAR(9)	Password

Note: Similarly, create other necessary normalized tables.

