***Swift Entrance Test***

***Nexlesoft Cooperation, May 2022***

# Overview

You need to implement the following screens in this examination using real APIs integration.

|  |  |  |
| --- | --- | --- |
| **Sign Up** | **Category List** |  |
| A screenshot of a person  Description automatically generated with medium confidence | Graphical user interface  Description automatically generated |  |

When the user opens the app, the Sign-up screen will appear. After the user signs up successfully, the app will forward to the Category List screen.

# General examination requirements

* Technologies
  + Use **Swift** language for development.
  + Use **UIKit/SwiftUI** to build UI.
  + Use **Alamofire/URLSession** to call API.
  + Use **MVVM/MVC** design pattern.
  + Use **CoreData/Realm** to save data to local.
  + Using **SwiftPackages/Cocoapod** to import libraries if used.

*Note: - Alamofire, Realm are open sources.*

* Design
  + Follow the design from Figma to implement this test: <https://www.figma.com/file/mC4rPNojziG30e21GcKYcj/Untitled?node-id=0%3A1>
  + Please make sure you follow the design as close as possible.
* API integration
  + You can use the real APIs in our development server to implement the required screens. Refer to the [**API Reference**](#_heading=h.gjdgxs) section
* Others
  + It’s a plus if the code implementation is covered by unit tests
* Test submission
  + The implementation is uploaded to personal GitHub repo. Then send the repo link back to Nexle for review.
  + The repo should also contain the screenshots of the app you did.

# UI Requirements

## Sign up screen

* First name, last name, email, and password are required fields.
  + Email rule:
    - The email is required.
    - The email is valid.
  + Password rule:
    - The password is required.
    - The password must be between 6-18 characters.
    - If the password passes one of 3 following rules, the level is increased one level (weak, Fair, Good, Strong). Default level is weak.
      * Contains both lowercase and uppercase letters
      * Contains at least one numeric character
      * Contains special characters
    - The password level is shown underneath the password field. Refer to the design how it looks
    - The eye icon is to toggle showing/hiding the password.
* If required fields are not entered, validation error messages are shown, and Next button (arrow right icon Icon

  Description automatically generated) is disabled.
* If there’s no validation error, when the Next icon is clicked, the app calls signup API to create a new account. Refer to **API Reference** below for the details.
* If signup is successful, the app then calls the signin API to get the login user info, and the access token, and refresh token. If the signin API call is successful, the app does the following:
  + Gets the token from the signin API and save to the storage. This token is used to call APIs that the next screen needs.
  + Navigates to Category List screen that is defined next.

## Category List screen

* The screen shows a list of categories from GET default categories API.
* Users can scroll up and down to see the whole list.
* Users can do multiple selections.
* When a category is selected, it’s highlighted as shown in the design.
* When at least one category is selected, a Done button in the top right corner is enabled and users can go inside the app
* No need to call APIs to save selected categories to server but save to local storage for reference later.

# API Reference

## Login API

* URL
  + <http://streaming.nexlesoft.com:3001/auth/signin>
* Method: POST
* Request payload:
  + email (string)
  + password (string)

E.g.

**{**

**"email": "test1@gmail.com",**

**"password": "12345678"**

**}**

* Response
  + user
    - id (string)
    - email (string)
    - firstName (string)
    - lastName (string)
  + accessToken (string)
  + refreshToken (string)

E.g.

**{**

**"user": {**

**"id": 2,**

**"createdAt": "2023-06-08T04:56:01.051Z",**

**"updatedAt": "2023-06-08T04:56:01.051Z",**

**"email": "test1@gmail.com",**

**"firstName": "Tester",**

**"lastName": "Mr",**

**"role": "USER"**

**},**

**"accessToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOjIsImVtYWlsIjoidGVzdDFAZ21haWwuY29tIiwiaWF0IjoxNjg2MjAwMTk3LCJleHAiOjE2ODYyOTAxOTd9.a-TQ0MNNwNTczUqcxsDB9Zi748NtrCEgAtgPL98QsEE",**

**"refreshToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWIiOjIsImVtYWlsIjoidGVzdDFAZ21haWwuY29tIiwiaWF0IjoxNjg2MjAwMTk3LCJleHAiOjE2ODY0NTkzOTd9.BsfOo9lqMXIpBE-7b1mAsxo1az5efpaqK0BWKpYQXoc"**

**}**

## Signup API

* URL
  + <http://streaming.nexlesoft.com:3001/auth/signup>
* Method: POST
* Request Payload
  + firstName (string)
  + lastName (string)
  + email (string)
  + password (string)

E.g.

**{**

**"email": "test2@gmail.com",**

**"password": "12345678",**

**"firstName": "Tester",**

**"lastName": "Mr"**

**}**

* Response
  + id (string)
  + email (string)
  + firstName (string)
  + lastName (string)

E.g.

**{**

**"id": 2,**

**"createdAt": "2023-06-08T04:56:01.051Z",**

**"updatedAt": "2023-06-08T04:56:01.051Z",**

**"email": "test1@gmail.com",**

**"firstName": "Tester",**

**"lastName": "Mr",**

**"role": "USER"**

**}**

* Note: since firstName and lastName fields are required, so you can hard code any values to these two fields and send to the API.

## Get list of categories

* URL: <http://streaming.nexlesoft.com:3001/categories>
* Method: GET
* Request header
  + Authorization: {accessToken}
* Response
  + An array of categories

E.g.

**[**

**{**

**"id": 1,**

**"createdAt": "2023-07-04T07:58:36.752Z",**

**"updatedAt": "2023-07-04T07:58:36.753Z",**

**"name": "Relationships"**

**},**

**{**

**"id": 2,**

**"createdAt": "2023-07-04T07:58:46.123Z",**

**"updatedAt": "2023-07-04T07:58:46.123Z",**

**"name": "Family"**

**},**

**{**

**"id": 3,**

**"createdAt": "2023-07-04T07:58:55.888Z",**

**"updatedAt": "2023-07-04T07:58:55.889Z",**

**"name": "Self Harm"**

**},**

**{**

**"id": 4,**

**"createdAt": "2023-07-04T07:59:02.559Z",**

**"updatedAt": "2023-07-04T07:59:02.559Z",**

**"name": "Friends"**

**},**

**{**

**"id": 5,**

**"createdAt": "2023-07-04T07:59:09.822Z",**

**"updatedAt": "2023-07-04T07:59:09.823Z",**

**"name": "Hopes"**

**},**

**{**

**"id": 6,**

**"createdAt": "2023-07-04T07:59:17.774Z",**

**"updatedAt": "2023-07-04T07:59:17.775Z",**

**"name": "Bullying"**

**},**

**{**

**"id": 7,**

**"createdAt": "2023-07-04T07:59:24.010Z",**

**"updatedAt": "2023-07-04T07:59:24.011Z",**

**"name": "Health"**

**},**

**{**

**"id": 8,**

**"createdAt": "2023-07-04T07:59:30.390Z",**

**"updatedAt": "2023-07-04T07:59:30.391Z",**

**"name": "Work"**

**},**

**{**

**"id": 9,**

**"createdAt": "2023-07-04T07:59:33.288Z",**

**"updatedAt": "2023-07-04T07:59:33.289Z",**

**"name": "Music"**

**},**

**{**

**"id": 10,**

**"createdAt": "2023-07-04T07:59:48.724Z",**

**"updatedAt": "2023-07-04T07:59:48.724Z",**

**"name": "Helpful Tips"**

**},**

**{**

**"id": 11,**

**"createdAt": "2023-07-04T08:00:06.246Z",**

**"updatedAt": "2023-07-04T08:00:06.247Z",**

**"name": "Parenting"**

**},**

**{**

**"id": 12,**

**"createdAt": "2023-07-04T08:00:10.476Z",**

**"updatedAt": "2023-07-04T08:00:10.477Z",**

**"name": "Education"**

**},**

**{**

**"id": 13,**

**"createdAt": "2023-07-04T08:00:20.111Z",**

**"updatedAt": "2023-07-04T08:00:20.112Z",**

**"name": "Religion"**

**},**

**{**

**"id": 14,**

**"createdAt": "2023-07-04T08:00:25.020Z",**

**"updatedAt": "2023-07-04T08:00:25.020Z",**

**"name": "LGBT"**

**},**

**{**

**"id": 15,**

**"createdAt": "2023-07-04T08:00:46.951Z",**

**"updatedAt": "2023-07-04T08:00:46.952Z",**

**"name": "Pregnancy"**

**},**

**{**

**"id": 16,**

**"createdAt": "2023-07-04T08:00:54.294Z",**

**"updatedAt": "2023-07-04T08:00:54.295Z",**

**"name": "Positive"**

**},**

**{**

**"id": 17,**

**"createdAt": "2023-07-04T08:01:03.695Z",**

**"updatedAt": "2023-07-04T08:01:03.695Z",**

**"name": "Mental Health"**

**},**

**{**

**"id": 18,**

**"createdAt": "2023-07-04T08:01:17.942Z",**

**"updatedAt": "2023-07-04T08:01:17.942Z",**

**"name": "My Story"**

**},**

**{**

**"id": 19,**

**"createdAt": "2023-07-04T08:01:24.001Z",**

**"updatedAt": "2023-07-04T08:01:24.001Z",**

**"name": "Poetry"**

**},**

**{**

**"id": 20,**

**"createdAt": "2023-07-04T08:01:42.103Z",**

**"updatedAt": "2023-07-04T08:01:42.104Z",**

**"name": "Eating Disorder"**

**},**

**{**

**"id": 21,**

**"createdAt": "2023-07-04T08:01:55.813Z",**

**"updatedAt": "2023-07-04T08:01:55.814Z",**

**"name": "Addiction"**

**},**

**{**

**"id": 22,**

**"createdAt": "2023-07-04T08:02:04.296Z",**

**"updatedAt": "2023-07-04T08:02:04.297Z",**

**"name": "Self-Care"**

**},**

**{**

**"id": 23,**

**"createdAt": "2023-07-04T08:02:16.810Z",**

**"updatedAt": "2023-07-04T08:02:16.811Z",**

**"name": "I Need Help"**

**},**

**{**

**"id": 24,**

**"createdAt": "2023-07-04T08:02:25.882Z",**

**"updatedAt": "2023-07-04T08:02:25.882Z",**

**"name": "New Parents"**

**},**

**{**

**"id": 25,**

**"createdAt": "2023-07-04T08:02:35.963Z",**

**"updatedAt": "2023-07-04T08:02:35.964Z",**

**"name": "Gaming"**

**},**

**{**

**"id": 26,**

**"createdAt": "2023-07-04T08:02:43.628Z",**

**"updatedAt": "2023-07-04T08:02:43.628Z",**

**"name": "Grief"**

**},**

**{**

**"id": 27,**

**"createdAt": "2023-07-04T08:02:57.396Z",**

**"updatedAt": "2023-07-04T08:02:57.397Z",**

**"name": "Anxiety"**

**},**

**{**

**"id": 28,**

**"createdAt": "2023-07-04T08:03:11.020Z",**

**"updatedAt": "2023-07-04T08:03:11.021Z",**

**"name": "Disabilities"**

**},**

**{**

**"id": 29,**

**"createdAt": "2023-07-04T08:04:41.997Z",**

**"updatedAt": "2023-07-04T08:04:41.998Z",**

**"name": "Depression"**

**},**

**{**

**"id": 30,**

**"createdAt": "2023-07-04T08:04:50.747Z",**

**"updatedAt": "2023-07-04T08:04:50.748Z",**

**"name": "Life Hacks"**

**},**

**{**

**"id": 31,**

**"createdAt": "2023-07-04T08:05:00.829Z",**

**"updatedAt": "2023-07-04T08:05:00.830Z",**

**"name": "Politics"**

**},**

**{**

**"id": 32,**

**"createdAt": "2023-07-04T08:05:07.957Z",**

**"updatedAt": "2023-07-04T08:05:07.958Z",**

**"name": "Others"**

**}**

**]**