***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
  + Gets the token from the signup API to the storage. This token is used to call APIs that the next screen needs.
  + Navigates to Category List screen which 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

## Signup API

* URL
  + <http://streaming.nexlesoft.com:4000/api/auth/signup>
* Method: POST
* Request Payload
  + firstName (string)
  + lastName (string)
  + email (string)
  + password (string)

E.g.

**{**

**"firstName": "Trung",**

**"lastName": "Huynh",**

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

**"password": "12345678"**

**}**

* Response
  + \_id (string)
  + firstName (string)
  + lastName (string)
  + displayName (string)
  + token (string)
  + refreshToken (string)

E.g.

**{**

**"\_id": "627a67b3dfcfa579ffcc525e",**

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

**"admin": false,**

**"firstName": "Trung",**

**"lastName": "Huynh",**

**"createdAt": "2022-05-10T13:25:07.366Z",**

**"updatedAt": "2022-05-10T13:25:07.369Z",**

**"\_\_v": 0,**

**"displayName": "Huynh Trung",**

**"token": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MjdhNjdiM2RmY2ZhNTc5ZmZjYzUyNWUiLCJpYXQiOjE2NTIxODkxMDcsImV4cCI6MTY1MjI3NTUwN30.M1xmyufSX4mPPasyW4X84gfSS5LSxo5Id7p\_nFXVuzw",**

**"refreshToken": "eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJfaWQiOiI2MjdhNjdiM2RmY2ZhNTc5ZmZjYzUyNWUiLCJpYXQiOjE2NTIxODkxMDcsImV4cCI6MTY1NDc4MTEwN30.dXNHuRZ54Kt3m2ivDg4NqrJMpsvGencE0gmacRCuO3M"**

**}**

* 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:4000/api/categories?pageSize=100&pageNumber=0>
* Method: GET
* Request header
  + Authorization: {token}
* Response
  + An array of categories

E.g.

**{**

**"categories": [**

**{**

**"\_id": "627a71c1dfcfa579ffcc5260",**

**"name": "Relationships"**

**},**

**{**

**"\_id": "627a7a34dfcfa579ffcc5264",**

**"name": "Family"**

**},**

**{**

**"\_id": "627a7a3bdfcfa579ffcc5265",**

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

**},**

**{**

**"\_id": "627a7a43dfcfa579ffcc5266",**

**"name": "Friends"**

**},**

**{**

**"\_id": "627a7a48dfcfa579ffcc5267",**

**"name": "Hopes"**

**},**

**{**

**"\_id": "627a7a57dfcfa579ffcc5268",**

**"name": "Bullying"**

**},**

**{**

**"\_id": "627a7a5fdfcfa579ffcc5269",**

**"name": "Health"**

**},**

**{**

**"\_id": "627a7a65dfcfa579ffcc526a",**

**"name": "Work"**

**},**

**{**

**"\_id": "627a7a6cdfcfa579ffcc526b",**

**"name": "Music"**

**},**

**{**

**"\_id": "627a7a75dfcfa579ffcc526c",**

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

**},**

**{**

**"\_id": "627a7a7fdfcfa579ffcc526d",**

**"name": "Parenting"**

**},**

**{**

**"\_id": "627a7a86dfcfa579ffcc526e",**

**"name": "Education"**

**},**

**{**

**"\_id": "627a7a91dfcfa579ffcc526f",**

**"name": "Religion"**

**},**

**{**

**"\_id": "627a7a95dfcfa579ffcc5270",**

**"name": "LGBT"**

**},**

**{**

**"\_id": "627a7aa0dfcfa579ffcc5271",**

**"name": "Pregnancy"**

**},**

**{**

**"\_id": "627a7aa7dfcfa579ffcc5272",**

**"name": "Positive"**

**},**

**{**

**"\_id": "627a7aafdfcfa579ffcc5273",**

**"name": "Eating Disorders"**

**},**

**{**

**"\_id": "627a7ab9dfcfa579ffcc5274",**

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

**},**

**{**

**"\_id": "627a7ac3dfcfa579ffcc5275",**

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

**},**

**{**

**"\_id": "627a7acedfcfa579ffcc5276",**

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

**},**

**{**

**"\_id": "627a7ad7dfcfa579ffcc5277",**

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

**},**

**{**

**"\_id": "627a7adfdfcfa579ffcc5278",**

**"name": "Gaming"**

**},**

**{**

**"\_id": "627a7ae5dfcfa579ffcc5279",**

**"name": "Grief"**

**},**

**{**

**"\_id": "627a7aeedfcfa579ffcc527a",**

**"name": "Anxiety"**

**},**

**{**

**"\_id": "627a7af6dfcfa579ffcc527b",**

**"name": "Disabilities"**

**},**

**{**

**"\_id": "627a7afedfcfa579ffcc527c",**

**"name": "Depression"**

**},**

**{**

**"\_id": "627a7b06dfcfa579ffcc527d",**

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

**},**

**{**

**"\_id": "627a7b10dfcfa579ffcc527e",**

**"name": "Politics"**

**},**

**{**

**"\_id": "627a7b14dfcfa579ffcc527f",**

**"name": "Ask Nexle"**

**},**

**{**

**"\_id": "627a7b1fdfcfa579ffcc5280",**

**"name": "Ask Guys"**

**},**

**{**

**"\_id": "627a7b24dfcfa579ffcc5281",**

**"name": "Others"**

**}**

**],**

**"totalCount": 31**

**}**