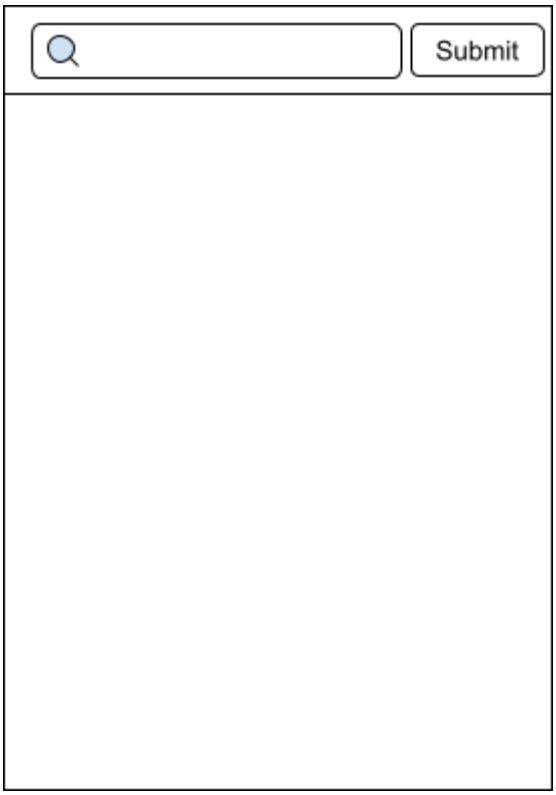
Android Test Task

Scope:

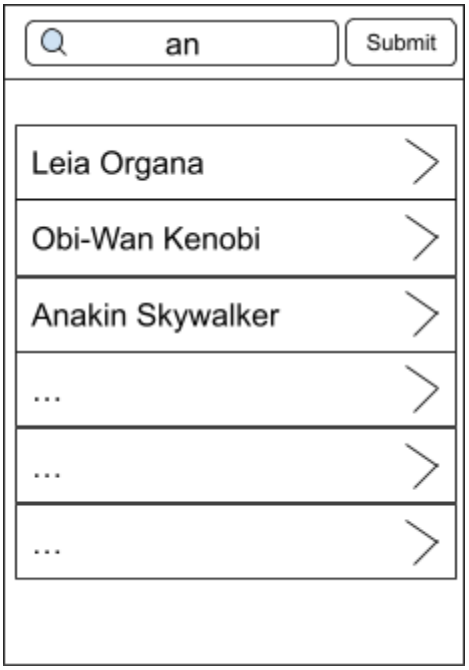
The task involves creating a small white-label app, delivered as source code. The app should be written in Kotlin and it needs to compile and run in an emulator without errors. You will use the Star Wars API (https://swapi.dev/documentation) to retrieve and list data.

Flow:

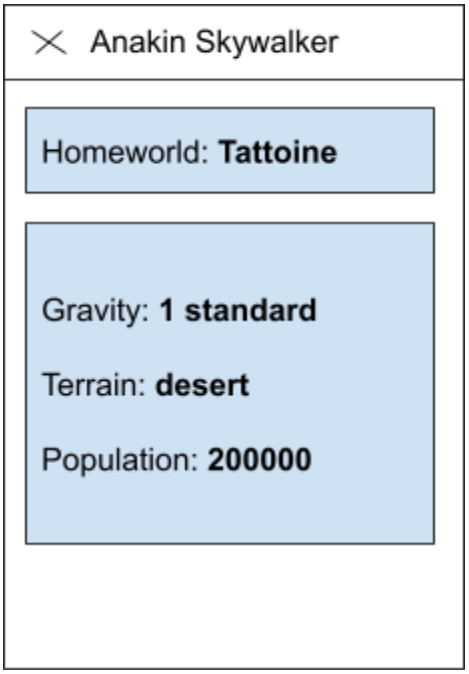
On startup the app should show a screen with a search input field and a submit button.



By entering a search term and pressing the submit button, the app should send a request to the “People API” (see below) to list all the people, no matter how many that match the search criteria.



The list elements are interactive. By tapping on an item in the list, the app shows their home world view displaying some of the basic planet data. The planets' data is retrieved through the "Planet API" (see below). Planet API url is available in the API response in the field "homeworld". The view can be closed.



Requirements and constraints:

Branding:

- Flavours and possibility to build with two different color schemes
- Configuration determines the branding colors

Technology

- Build target - compileSdkVersion 35 or higher
- Jetpack Compose
- Data fetching with Ktor + Coroutines
- Android Studio with Gradle build tool
- Good performance with long lists. The technical solution is your choice.
- When retrieving data there should be a preloader of some sorts.
- BONUS: Implementation in Kotlin Multiplatform and delivery of an iOS version of the app as well.

Caution

Please be on the lookout for edge-cases and specifics of the API that are not explicitly specified in the requirements. It is important to demonstrate ability to work in a real-world situation where no specification is perfect and APIs evolve and change.

API:

People search API

URL: https://swapi.dev/api/people/?search=term

*Where term is the term from the search input field.

What to read: name, homeworld

Example response:


```
{
    "count": 12,
    "next": "https://swapi.dev/api/people/?search=an&page=2",
    "previous": null,
    "results": [
        {
            "name": "Leia Organa",
            "height": "150",
```

```
            "mass": "49",
            "hair_color": "brown",
            "skin_color": "light",
            "eye_color": "brown",
            "birth_year": "19BBY",
            "gender": "female",
            "homeworld": "https://swapi.dev/api/planets/2/",
            "films": [
                "https://swapi.dev/api/films/1/",
                "https://swapi.dev/api/films/2/",
                "https://swapi.dev/api/films/3/",
                "https://swapi.dev/api/films/6/"
            ],
            "species": [],
            "vehicles": [
                "https://swapi.dev/api/vehicles/30/"
            ],
            "starships": [],
            "created": "2014-12-10T15:20:09.791000Z",
            "edited": "2014-12-20T21:17:50.315000Z",
            "url": "https://swapi.dev/api/people/5/"
        },
        {
            "name": "Obi-Wan Kenobi",
            "height": "182",
            "mass": "77",
            "hair_color": "auburn, white",
            "skin_color": "fair",
            "eye_color": "blue-gray",
            "birth_year": "57BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/20/",
            "films": [
                "https://swapi.dev/api/films/1/",
                "https://swapi.dev/api/films/2/",
                "https://swapi.dev/api/films/3/",
                "https://swapi.dev/api/films/4/",
                "https://swapi.dev/api/films/5/",
                "https://swapi.dev/api/films/6/"
            ],
            "species": [],
            "vehicles": [
                "https://swapi.dev/api/vehicles/38/"
            ],
            "starships": [
                "https://swapi.dev/api/starships/48/",
                "https://swapi.dev/api/starships/59/",
                "https://swapi.dev/api/starships/64/",
                "https://swapi.dev/api/starships/65/",
                "https://swapi.dev/api/starships/74/"
```

```
            ],
            "created": "2014-12-10T16:16:29.192000Z",
            "edited": "2014-12-20T21:17:50.325000Z",
            "url": "https://swapi.dev/api/people/10/"
        },
        {
            "name": "Anakin Skywalker",
            "height": "188",
            "mass": "84",
            "hair_color": "blond",
            "skin_color": "fair",
            "eye_color": "blue",
            "birth_year": "41.9BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/1/",
            "films": [
                "https://swapi.dev/api/films/4/",
                "https://swapi.dev/api/films/5/",
                "https://swapi.dev/api/films/6/"
            ],
            "species": [],
            "vehicles": [
                "https://swapi.dev/api/vehicles/44/",
                "https://swapi.dev/api/vehicles/46/"
            ],
            "starships": [
                "https://swapi.dev/api/starships/39/",
                "https://swapi.dev/api/starships/59/",
                "https://swapi.dev/api/starships/65/"
            ],
            "created": "2014-12-10T16:20:44.310000Z",
            "edited": "2014-12-20T21:17:50.327000Z",
            "url": "https://swapi.dev/api/people/11/"
        },
        {
            "name": "Han Solo",
            "height": "180",
            "mass": "80",
            "hair_color": "brown",
            "skin_color": "fair",
            "eye_color": "brown",
            "birth_year": "29BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/22/",
            "films": [
                "https://swapi.dev/api/films/1/",
                "https://swapi.dev/api/films/2/",
                "https://swapi.dev/api/films/3/"
            ],
            "species": [],
```

```
            "vehicles": [],
            "starships": [
                "https://swapi.dev/api/starships/10/",
                "https://swapi.dev/api/starships/22/"
            ],
            "created": "2014-12-10T16:49:14.582000Z",
            "edited": "2014-12-20T21:17:50.334000Z",
            "url": "https://swapi.dev/api/people/14/"
        },
        {
            "name": "Wedge Antilles",
            "height": "170",
            "mass": "77",
            "hair_color": "brown",
            "skin_color": "fair",
            "eye_color": "hazel",
            "birth_year": "21BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/22/",
            "films": [
                "https://swapi.dev/api/films/1/",
                "https://swapi.dev/api/films/2/",
                "https://swapi.dev/api/films/3/"
            ],
            "species": [],
            "vehicles": [
                "https://swapi.dev/api/vehicles/14/"
            ],
            "starships": [
                "https://swapi.dev/api/starships/12/"
            ],
            "created": "2014-12-12T11:08:06.469000Z",
            "edited": "2014-12-20T21:17:50.341000Z",
            "url": "https://swapi.dev/api/people/18/"
        },
        {
            "name": "Lando Calrissian",
            "height": "177",
            "mass": "79",
            "hair_color": "black",
            "skin_color": "dark",
            "eye_color": "brown",
            "birth_year": "31BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/30/",
            "films": [
                "https://swapi.dev/api/films/2/",
                "https://swapi.dev/api/films/3/"
            ],
            "species": [],
```

```
            "vehicles": [],
            "starships": [
                "https://swapi.dev/api/starships/10/"
            ],
            "created": "2014-12-15T12:56:32.683000Z",
            "edited": "2014-12-20T21:17:50.357000Z",
            "url": "https://swapi.dev/api/people/25/"
        },
        {
            "name": "Quarsh Panaka",
            "height": "183",
            "mass": "unknown",
            "hair_color": "black",
            "skin_color": "dark",
            "eye_color": "brown",
            "birth_year": "62BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/8/",
            "films": [
                "https://swapi.dev/api/films/4/"
            ],
            "species": [],
            "vehicles": [],
            "starships": [],
            "created": "2014-12-19T17:55:43.348000Z",
            "edited": "2014-12-20T21:17:50.399000Z",
            "url": "https://swapi.dev/api/people/42/"
        },
        {
            "name": "Gasgano",
            "height": "122",
            "mass": "unknown",
            "hair_color": "none",
            "skin_color": "white, blue",
            "eye_color": "black",
            "birth_year": "unknown",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/40/",
            "films": [
                "https://swapi.dev/api/films/4/"
            ],
            "species": [
                "https://swapi.dev/api/species/18/"
            ],
            "vehicles": [],
            "starships": [],
            "created": "2014-12-20T10:02:12.223000Z",
            "edited": "2014-12-20T21:17:50.416000Z",
            "url": "https://swapi.dev/api/people/49/"
        },
```

```
        {
            "name": "Bail Prestor Organa",
            "height": "191",
            "mass": "unknown",
            "hair_color": "black",
            "skin_color": "tan",
            "eye_color": "brown",
            "birth_year": "67BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/2/",
            "films": [
                "https://swapi.dev/api/films/5/",
                "https://swapi.dev/api/films/6/"
            ],
            "species": [
                "https://swapi.dev/api/species/1/"
            ],
            "vehicles": [],
            "starships": [],
            "created": "2014-12-20T16:53:08.575000Z",
            "edited": "2014-12-20T21:17:50.463000Z",
            "url": "https://swapi.dev/api/people/68/"
        },
        {
            "name": "Jango Fett",
            "height": "183",
            "mass": "79",
            "hair_color": "black",
            "skin_color": "tan",
            "eye_color": "brown",
            "birth_year": "66BBY",
            "gender": "male",
            "homeworld": "https://swapi.dev/api/planets/53/",
            "films": [
                "https://swapi.dev/api/films/5/"
            ],
            "species": [],
            "vehicles": [],
            "starships": [],
            "created": "2014-12-20T16:54:41.620000Z",
            "edited": "2014-12-20T21:17:50.465000Z",
            "url": "https://swapi.dev/api/people/69/"
        }
    ]
}
```

Planet API

URL: https://swapi.dev/api/planets/id/
Where id is the planets id (for example 1)

What to read: name, terrain, gravity, population

Example response:


```
{
    "name": "Tatooine",
    "rotation_period": "23",
    "orbital_period": "304",
    "diameter": "10465",
    "climate": "arid",
    "gravity": "1 standard",
    "terrain": "desert",
    "surface_water": "1",
    "population": "200000",
    "residents": [
        "https://swapi.dev/api/people/1/",
        "https://swapi.dev/api/people/2/",
        "https://swapi.dev/api/people/4/",
        "https://swapi.dev/api/people/6/",
        "https://swapi.dev/api/people/7/",
        "https://swapi.dev/api/people/8/",
        "https://swapi.dev/api/people/9/",
        "https://swapi.dev/api/people/11/",
        "https://swapi.dev/api/people/43/",
        "https://swapi.dev/api/people/62/"
    ],
    "films": [
        "https://swapi.dev/api/films/1/",
        "https://swapi.dev/api/films/3/",
        "https://swapi.dev/api/films/4/",
        "https://swapi.dev/api/films/5/",
        "https://swapi.dev/api/films/6/"
    ],
    "created": "2014-12-09T13:50:49.641000Z",
    "edited": "2014-12-20T20:58:18.411000Z",
    "url": "https://swapi.dev/api/planets/1/"
}
```


Good luck, and we look forward to seeing your result!