**Weather App**

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# General description

This app is ment to fetch live weather data from the internet thru an API. Actual user it is able to add up to three favourites locations (for first version). He will receive a set of information about desired locations, which will contain:

* Name of the actual location,
* A pictogram which will contain the status of the weather,
* Amount of degrees in Celsius or Fahrenheit.

The inferface of the app will have the dark mode enabled feature.

# Structure

The app is structured in two screens:

* Weather information screen,
* Add and select the desired location.

## Weather information screen

This screen is will display the user desired weather information for the selected location and will contain the following elements:

* An Add to favourite UIButton, which will trigger the Add and Select favourite locations screen,
* An actual location UIButton, which will display the weather for the current user’s location,
* A search bar, more precised an UITextField, which will collect the desired location inputed by the user,
* A search UIButton, which will start the fetching process of the weather data and send it to the user.

Weather information will be displayed thru an UIImageView (e.g. a sun pictogram), a Label for showing the amount of degrees and another Label which displays the location.

## Add and select favourite locations screen

This screen will allow user to add up to three favourite locations for showing the weather and will contain the following elements:

* A search bar, more precised a UITextFIeld, which will collect the desired favourite locations introduce by the user (up to three),
* An add to faourites UIButton which will add the desired locations in the faourite locations list,
* A delete location UIButton, which will delete a location from list,
* A UITableView, which will store and show the current three favourite locations.

# Fetching weather and location data

Weather and location data will be fetched thru networking process. An API will be used for fetching them. The interaction with the API will be made by making HTTP requests with URLSessions.

Will be used OpenWeatherMap API from [OpenWeatherMap](https://openweathermap.org/api) site.

The desired data will be collected in a JSON format and will contain:

* The city location and its id,
* Coordinates in latitude and longitude,
* Time zone,
* State of weather,
* Temperature (Celsius or Fahrenheith).

JSON data will be parse to an Swift Object by a JSONDecoder.