

# Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
<b>2</b>	<b>Prerequisites</b>	<b>2</b>
2.0.1	Frontend . . . . .	2
2.0.2	Backend . . . . .	2
<b>3</b>	<b>Installation</b>	<b>3</b>
3.0.1	Frontend Installation . . . . .	3
3.0.2	Backend Installation . . . . .	3
<b>4</b>	<b>Running the code</b>	<b>3</b>
4.1	Running the Frontend . . . . .	3
4.2	Running the Backend . . . . .	4
4.2.1	Using Docker . . . . .	5
4.2.2	Using Your own database . . . . .	5
4.2.3	Running tests . . . . .	5
4.2.4	Frontend Tests . . . . .	5
4.2.5	Backend Tests . . . . .	5
<b>5</b>	<b>Extra notes</b>	<b>6</b>

# 1 Introduction

BeakPeek was developed with a backend and frontend and will therefore have two separate sub sections for installation for the frontend and backend installation

## 2 Prerequisites

### 2.0.1 Frontend

- Flutter SDK
- Android SDK Platform, API 35.0.1
- Android SDK Command-line Tools
- Android SDK Build-Tools
- Android SDK Platform-Tools
- Android Emulator

The full guide on how to install any of these can be found at the URL <https://docs.flutter.dev/get-started/install>

- Select the operating system you are using
- Select android

### 2.0.2 Backend

- .Net SDK 8.0
- ASP.Net Core Runtime 8.0
- .Net Runtime 8.0
- Docker Desktop 4.42 or=

The full guide on how to install all of the .Net dependencies can be found at the URL: <https://learn.microsoft.com/en-us/dotnet/core/install/>

- Then select the operating system you are using from the choices available

The full guide on how to install docker desktop can be found at the URL: <https://docs.docker.com/desktop/>

- Then select the operating system you are using from the choices available

## 3 Installation

To start with installing BeakPeek for local development first clone the repository onto your local machine.

```
git clone https://github.com/COS301-SE-2024/BeakPeek
```

Then open the directory/folder that you cloned the repository into either with a file explorer or preferably with the command line of your operating system

### 3.0.1 Frontend Installation

If you are only interested in using/working on the frontend of BeakPeek then you can clone only the frontend directory of BeakPeek by running these commands:

```
git clone -n --depth=1 --filter=tree:0 \  
    https://github.com/COS301-SE-2024/BeakPeek  
cd BeakPeek  
git sparse-checkout set --no-cone beakpeek  
git checkout
```

### 3.0.2 Backend Installation

If you are only interested in using/working on the backend of BeakPeek then you can clone only the frontend directory of BeakPeek by running the following to clone the entire backend which includes the test

```
git clone -n --depth=1 --filter=tree:0 \  
    https://github.com/COS301-SE-2024/BeakPeek  
cd BeakPeek  
git sparse-checkout set --no-cone dotnet  
git checkout
```

Or if you only want the Main Api

```
git clone -n --depth=1 --filter=tree:0 \  
    https://github.com/COS301-SE-2024/BeakPeek  
cd BeakPeek  
git sparse-checkout set --no-cone dotnet/BeakPeekApi  
git checkout
```

## 4 Running the code

### 4.1 Running the Frontend

You will have to add a single file filled with your own details for connecting to your own login provider, BeakPeek uses Azure so the following is used for the

Azure Config which just needs to be added to the lib directory in the beakpeek directory. The file should be called *azure\_config.dart*

```
String domain = 'com.example.beakpeek';
String clientID = '<clientID>';
String issuer =
    'https://<Issuer Url>';
String bundleID = 'com.example.beakpeek';
String redirectURL = 'com.example.beakpeek://login-callback';
String discoveryURL =
    'https://<Url that the signing can be discovered on>';
String scope = 'https://beakpeek.onmicrosoft.com/com.example.beakpeek/callback';

String initialUrl = '<Initial Url>';
String tokenUrl =
    '<Url path that the token is retrieved from>';

String accessToken = '';
bool loggedIn = false;
```

To run the frontend you will have to make sure that there is an android phone installed on the android emulator and that all of the dependencies are installed.

To ensure that all of the flutter dependencies are installed run the following in the './beakpeek' directory using the command line:

```
flutter pub get
```

To verify that you have a running emulator for running the frontend run the following command:

```
flutter devices
```

To run the app run the following command

```
flutter run
```

## 4.2 Running the Backend

You will have to add a single file to the './dotnet/BeakPeekApi' directory as usually it contains api keys, to add it you can make a new file with the following contents in it giving your own flickr api key where necessary

```
{
  "Logging": {
    "LogLevel": {
      "Default": "Information",
      "Microsoft.AspNetCore": "Warning"
    }
  },
}
```

```
"AllowedHosts": "*",
"FLICKR_APIKEY": "<Your Flickr Api Key"
}
```

To run the backend there are two methods one being using docker to host the api and to host the database and the other is running it locally using your own database.

#### 4.2.1 Using Docker

To run the api locally using docker is really simple. First ensure that docker and docker-compose are installed and then run the following command from the

```
docker compose up --build
```

The api will now be accessible from 'localhost:5000' and then to view the swagger documents of the api go to the following link 'localhost:5000/swagger/index.html'

#### 4.2.2 Using Your own database

To run the api locally using your own database you will first need to find the databases connection string which can be found in various methods depending on the database you are using and how it is hosted on your machine or over the internet.

Next to connect to your database you will have to change the value of the 'DefaultConnection' the key value pair found in the appsettings.development.json file, to the connection string of your database.

next to run the api you will have to use the command line in the './dotnet/BeakPeekApi' and run the following command:

```
dotnet run
```

This will run the dotnet api locally where it will be accessible on the 'localhost:5050' url and the swagger api documentation can be found at 'localhost:5050/swagger/index.html'

#### 4.2.3 Running tests

#### 4.2.4 Frontend Tests

To run the tests for the flutter frontend open the command prompt in the './beakpeek' directory and run the following command:

```
flutter test --coverage
```

#### 4.2.5 Backend Tests

To run the tests for dotnet backend open the command prompt in the './dotnet' directory and run the following command:

```
dotnet test
```

## 5 Extra notes

The database that is created when using the docker method for running the backend uses only 500 entries from each province for the data as the database has approximately 1.4M entries on it and is very difficult to run locally.

To import the full data set to your own database use the endpoints that have been provided by the api at the urls for importing that can be found on the swagger documentation when running the api in development.