

CityPop manual

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1 User manual

CityPop is an app that is used to display cities population count. Through the home screen of the app, figure 1, the user can choose to either search for individual cities by pressing the first button or for countries by pressing the second button.

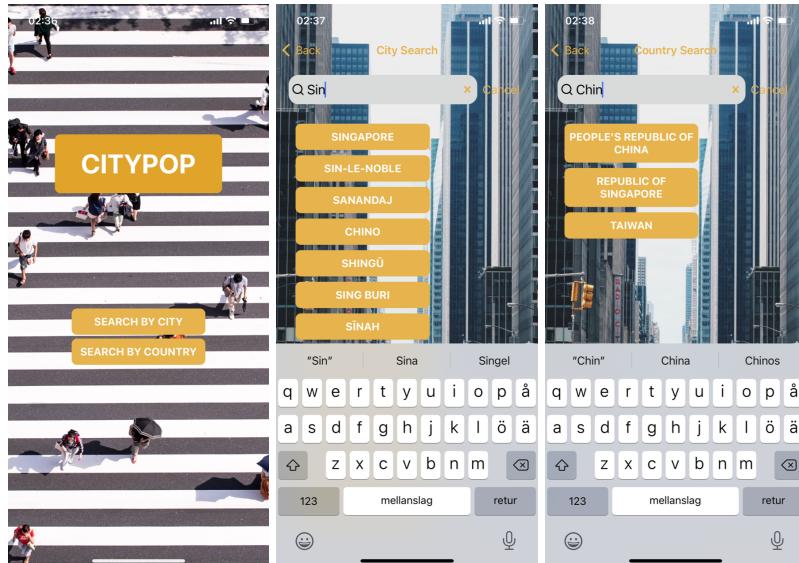


Figure 1: The home screen of the app, the screen for searching for cities and the screen for searching for countries, respectively

The first button will take the user to the first search screen where they can through the search bar type in a city. If the wanted city shows up under the search bar, the user can press the button with the city's name on it to display the population count of that city, see figure 2. Under the population count there is a button that takes the user directly back to the home screen. The country search page works the same as the city search page, except for when the user

presses on a country. Then it will instead take the user to a page displaying the five most populous cities in that country, see figure 2. Pressing on one of these cities will take the user to the same page as pressing on a city from the city search page.



Figure 2: The screen for showing a city's population and the screen that shows a country's five largest cities, respectively

2 About the program

Inside the **CityPopApp** folder is the React-Native project. **App.js** is the main file whereas all the screens and subcomponents are in the **app** folder where they are divided into subfolders, such as **screens** and **list**.

App.js has a **NavigationContainer** that controls the navigation between the screens. The initial screen is set to **WelcomeScreen**. The **WelcomeScreen** is composed of a **Logo** component to display the apps name and two **SearchButton** that when pressed switches the navigation to either the **SearchScreen** for cities or the **SearchScreen** for countries.

What differentiates the different **SearchScreen** components are the passed in parameters, *nextScreen* and *additionalSearchCriteria*. The *nextScreen* parameter is a string that decides what screen should be displayed when pressing on one of the results from the search results, and the *additionalSearchCriteria* component changes the results that show up as search results. The **SearchScreen** component uses the API **GeoNames** to gather the data based on the user input

and uses a [SearchList](#) component to filter and display the results.

The country search screen switches the screen to [CitiesDisplayScreen](#) that has a [Logo](#) that displays the country's name and uses a [CityList](#) to display the five most populous countries ordered by population. It is the [CityList](#) that gets these cities from the API and puts them in order. When one of these cities are pressed they switch the screen to [PopDisplayScreen](#) which is the same screen that the search results from the city search screen switches to.

The [PopDisplayScreen](#) displays the city's name along with it's population and also has a button to return to the home screen.

3 The components

Here is a list of all the components along with a short description of their purpose. They are listed in the order their folder is in and then the file of the component, so first up are the components in the **buttons** folder.

- [DisplayButton](#) - A button used to display text without any functionality when pressed.
- [SearchButton](#) - An extension of [DisplayButton](#), but this button has an action when pressed, based on the passed in parameter *onPress*.
- [CityList](#) - A list that displays the five most populous cities, based on the country passed in through the *data* parameter, as buttons that can be pressed to navigate to different screens.
- [SearchList](#) - A list that displays a collection of objects as buttons that can be pressed to navigate to different screens.
- [Logo](#) - Displays text at a fixed position on the screen.
- [CitiesDisplayScreen](#) - A screen that displays the five most populous cities of a country using a [CityList](#) component.
- [PopDisplayScreen](#) - A screen that displays a city's population count based on the city passed through the parameters. Also uses a [SearchButton](#) that when pressed switches the screen back to the home screen.
- [SearchScreen](#) - A screen that can display either cities or countries based on the *additionalSearchCriteria* parameter. Takes user input through a [Searchbar](#) component and displays it using a [SearchList](#) component.
- [WelcomeScreen](#) - The initial screen when opening the app. Shows the name of the app using a [Logo](#) component and uses two [SearchButton](#) components to switch the screens to the desired [SearchScreen](#).
- [SearchBar](#) - A search bar that takes and displays user input.

The **config** folder contains colors and styles used commonly in the other components.