# Project description

## Phase 1:

Within this stage, user can query country data from the World Bank API using a simple user interface.

### Getting started

#### Installation

This program is developed using Jupyter notebook on macOS.

To install required packages, user need to run “In [3]” cell from the program file. If this !pip installation fails, it’s likely due to errors or mismatches between the installation directory and the working directory. To resolve this issue, run the code in the cell following “In [3]” and restart the kernel.

#### Launching the GUI

After installation, run “In [4]” to “In [5]” and a user interface would pop up.

### User instructions

This program helps users to query country data from the World Bank API. Currently the program queries 6 indicators: Nominal GDP in USD, Real GDP in 2010 USD, Total population, Current account balance in USD, Unemployment rate, Doing business index (1=most friendly). Graphical user interface

Description automatically generated with medium confidence

1. Enter a country name in this field. There are no specific requirements for upper or lower cases or abbreviation. The program supports fuzzy match for country names using pycountry package.
2. This button triggers the query function.

The program returns the latest data point from the past 3 years. If there is no data in the past 3 years, the program will print a warning message in (4)

1. Results
2. A warning message will be displayed here if the specified country has any indicator which hasn’t been updated in 3 years.

Example:

In this example, the country name Zimbabwe is not entered in full. The program fuzzy matched this input into Zimbabwe and returned results. As Zimbabwe hasn’t had any updates for current account balance in the past three years, a warning message is displayed.

Graphical user interface, text, application

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## Phase 2 Objectives:

1. Expand the function to query information from other sources such as the Google trend API. This program will extract the trending topics related to country of interest
2. Expand the function to allow user to input two countries at the same time. For example, user can query data from a foreign country and his/her home country at the same time for reference.

## References

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M. (2020, July 18). *mattduck/wbpy*. GitHub. <https://github.com/mattduck/wbpy>

*pycountry*. (2020, July 3). PyPI. <https://pypi.org/project/pycountry/>

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