

Udvikling af cloud-baserede sundheds-apps

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Blok 2

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Exercise 1 - First UI Programming

This exercise is designed to prepare you for the upcoming exercises in which you and your group will have to develop a cloud-based application step by step. Therefore it is **not required** to hand this exercise in. Nevertheless, it is good practise to prepare the tasks set here so that we can help you effectively in the areas that are unclear for you.

1. Choose a User Environment (**IDE**) for yourself and run the examples from the lecture to get yourself familiar with Kivy and the environment you will be working in. We recommend either to use PyCharm (<https://www.jetbrains.com/pycharm/>), or to use Visual Studio Code (<https://code.visualstudio.com/>) together with the plugin for support for Python (<https://marketplace.visualstudio.com/items?itemName=ms-python.python>).

Note: If you decide to use Visual Studio Code or another solution, you might need to install Python yourself using this link (<https://www.python.org/downloads/release/python-3120/>). In this course we are using Python Version 3.

2. In this exercise you are required to implement a small Kivy application in which you use your knowledge from the lecture. The final application is shown in figure 1. In Absalon you can find a code base for this project **Exercise 1**. This directory contains a **main.py** which is missing some of the elements to provide a fully functional application. At it's current state, the button "click for search." is missing. It is your task to add the button. As a help, we summarize the steps that are missing to achieve a fully functional application:

- Make yourself familiar with the hierarchical tree of widgets and think about where the button could fit in.
- Create an instance of a Button with a default text.
- Add the button at the right position into the hierarchy
- Find the function `def look_up(self, word: str)`. At the moment the response is an empty json document. Substitute this line to set the `response` variable to the response of the dictionary REST Api that was used in the live presentation during the lecture (<https://dictionaryapi.dev/>).
- The source code for linking the result to the button click is `button.bind(on_press=self.press)`. Try to add this line of code at the right place to link everything together.

Happy Coding!

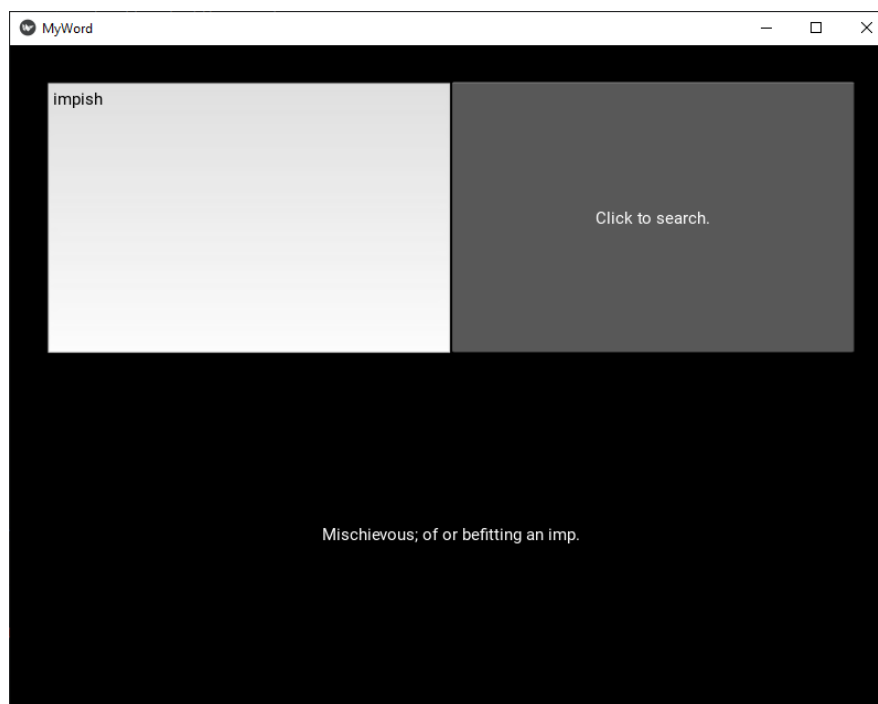


Figure 1: Final result of the application for using a word database.