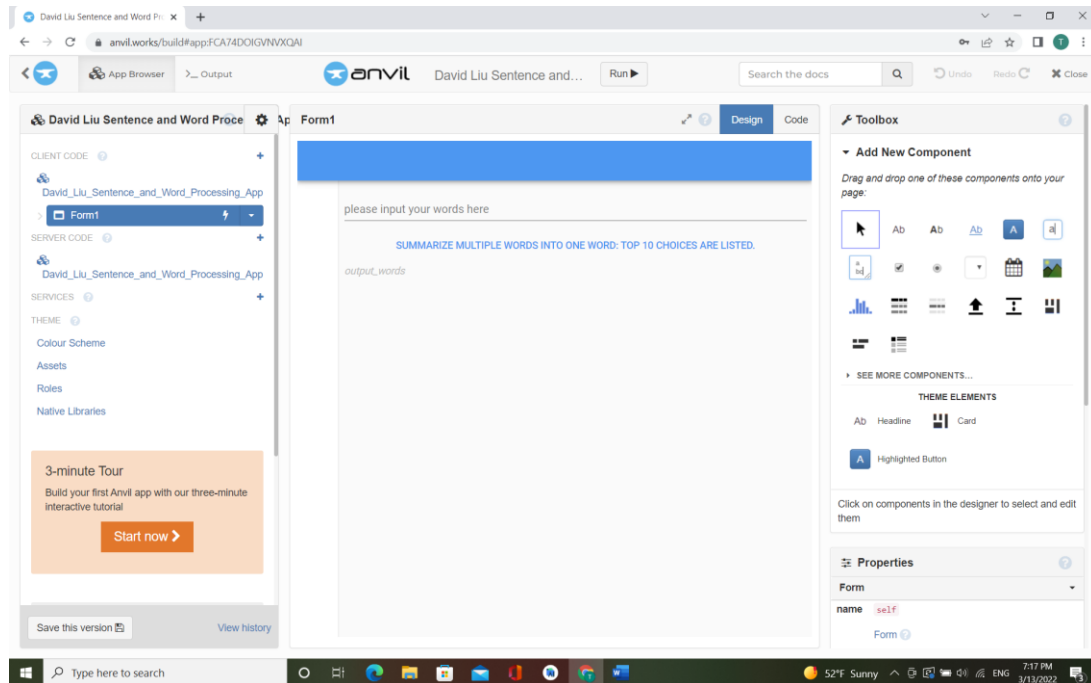


Front-end web app link: <https://fca74doigvnxqai.anvil.app/UTEG24CHFQ7DD2AU5G7DB6HH>

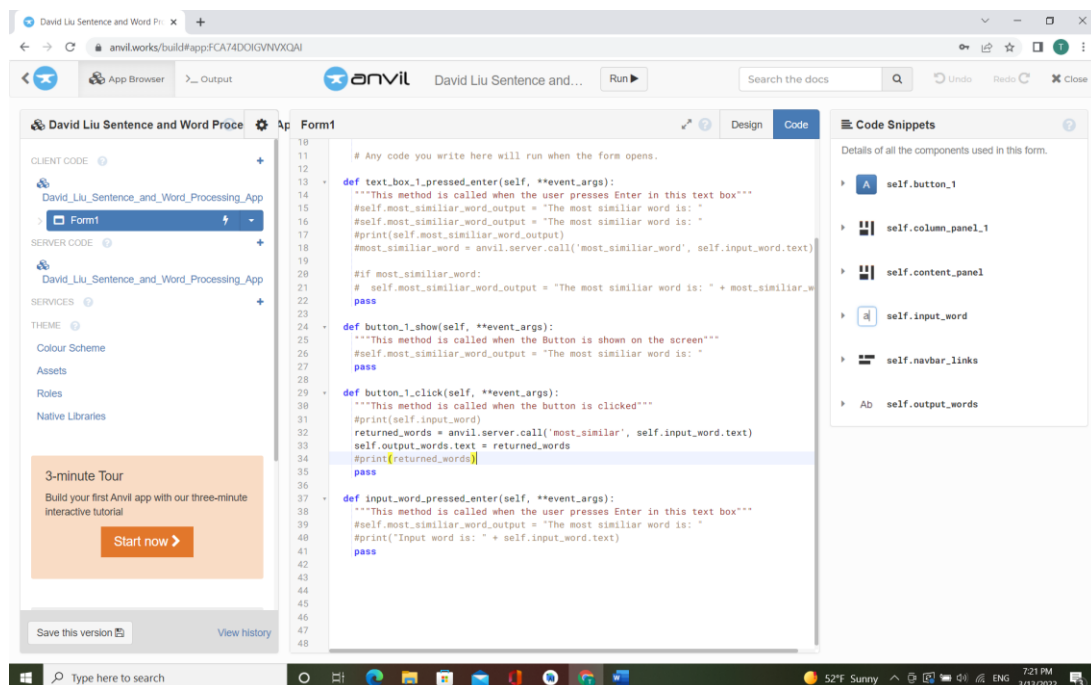
Tutorial on how to develop a front-end web-based app based on Anvil works:

<https://anvil.works/learn/tutorials/google-colab-to-web-app>

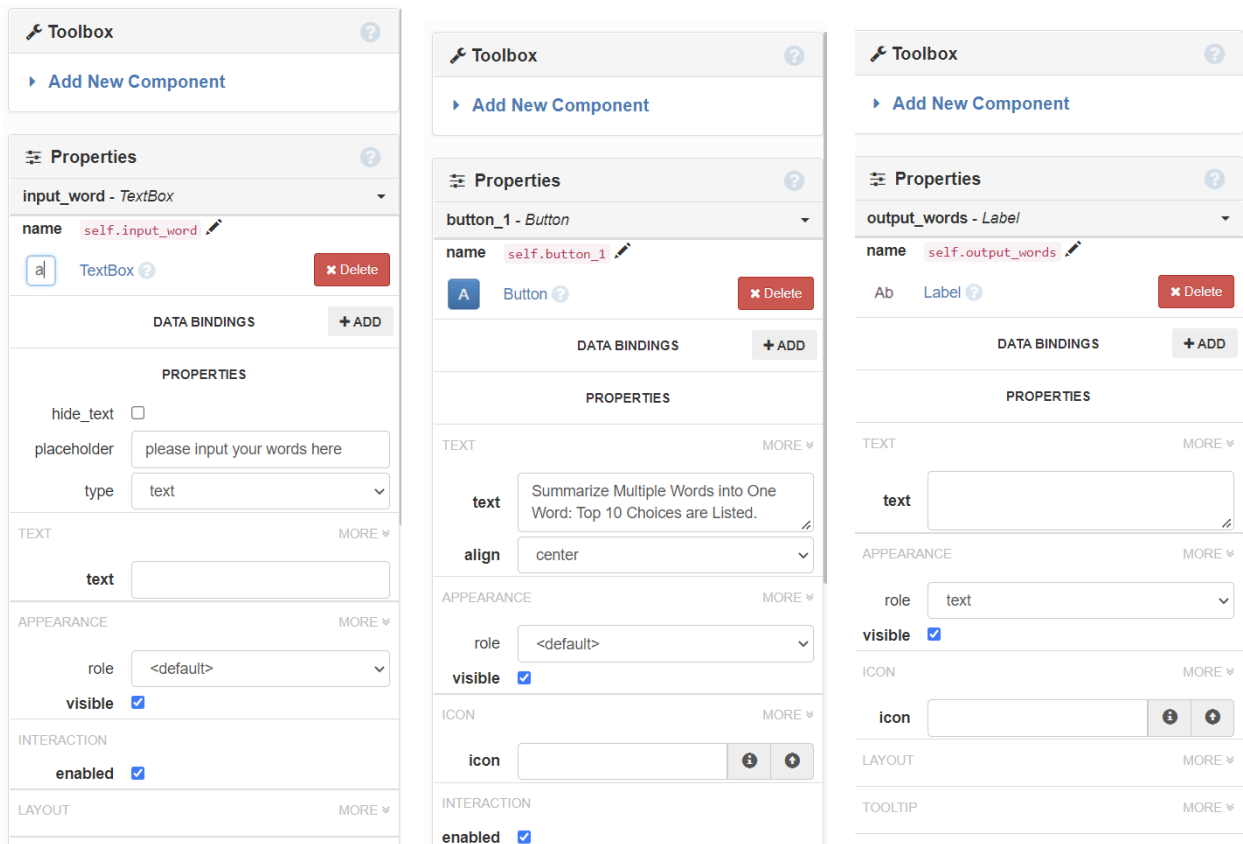
1) Screenshot 1: interface on Anvil Work design studio. It is in the Design mode.



2) Screenshot 2: interface on Anvil Work design studio. It is in the Code mode.



3) Screenshot 3: properties of the textbox, button, and output label:



4) Python codes used in the Code section for input, output and interaction with the Google Colab code:

```
from anvil import *
```

```
import anvil.server
```

```
class Form1(Form1Template):
```

```
    def __init__(self, **properties):
```

```
        # Set Form properties and Data Bindings.
```

```
        self.init_components(**properties)
```

```
        # Any code you write here will run when the form opens.
```

```
    def text_box_1_pressed_enter(self, **event_args):
```

```
        """This method is called when the user presses Enter in this text box"""
```

```
pass
```

```
def button_1_show(self, **event_args):  
    """This method is called when the Button is shown on the screen"""  
    pass
```

```
def button_1_click(self, **event_args):  
    """This method is called when the button is clicked"""  
    #print(self.input_word)  
    returned_words = anvil.server.call('most_similar', self.input_word.text)  
    self.output_words.text = returned_words  
    #print(returned_words)  
    pass
```

```
def input_word_pressed_enter(self, **event_args):  
    """This method is called when the user presses Enter in this text box"""  
    #self.most_similiar_word_output = "The most similiar word is: "  
    #print("Input word is: " + self.input_word.text)  
    pass
```

5) Examples of inputs and outputs by the system

football and soccer

SUMMARIZE MULTIPLE WORDS INTO ONE WORD: TOP 10 CHOICES ARE LISTED.

```
[['football', 0.9279550313949585], ['soccer', 0.9057307243347168], ['basketball', 0.8770369291305542], ['rugby', 0.838591992855072], ['handball',  
0.8211396336555481], ['cricket', 0.8198157548904419], ['tennis', 0.8187107443809509], ['hockey', 0.8153386116027832], ['boxing', 0.8045641183853149],  
['lacrosse', 0.7926631569862366]]
```

professor teaches in a university

SUMMARIZE MULTIPLE WORDS INTO ONE WORD: TOP 10 CHOICES ARE LISTED.

[[university, 0.728559672832489], [cambridge, 0.6951942443847656], [oxford, 0.670843780040741], [graduate, 0.663942277431488], [professor, 0.6522369384765625], [harvard, 0.6459981799125671], [faculty, 0.6443161964416504], [edinburgh, 0.6386677026748657], [renters, 0.6339263916015625], [education, 0.6269642114639282]]

Football and golf are popular

SUMMARIZE MULTIPLE WORDS INTO ONE WORD: TOP 10 CHOICES ARE LISTED.

[[golf, 0.7218402028083801], [sport, 0.7138334512710571], [competitions, 0.6974631547927856], [football, 0.6805915832519531], [clubs, 0.6696231365203857], [tournaments, 0.667607843875885], [matches, 0.6628644466400146], [mahjong, 0.656302273273468], [teams, 0.6515592932701111], [competition, 0.6485686302185059]]