

# Cheat Sheet: Building Apps with RAG



Estimated Reading Time: 5 minutes

Gradio is an open-source Python package that allows for the quick building of an application interface. No JavaScript, CSS, or web hosting experience is required!

## Interface class core arguments

Gradio's Interface class wraps any arbitrary Python function. The interface class has the following three core arguments:

| Term                 | Definition   |
|----------------------|--|
| <code>Fn</code>      | <code>Fn</code> is the function to wrap. Each function parameter represents an input component, and the function's output should be either a single value or a tuple. Each element within the tuple corresponds directly to a specific output component. |
| <code>inputs</code>  | The Gradio component(s) to use for the inputs of the function. The number of inputs should match the number of arguments in the function.  |
| <code>outputs</code> | Outputs are the Gradio component(s) to use for the outputs of the function.  |

## Common input types

| Term                       | Definition  |
|----------------------------|---|
| <code>checkbox</code>      | A checkbox that can be set to <code>True</code> or <code>False</code> only.   |
| <code>checkboxGroup</code> | An input type that allows users to select multiple values from a predefined checkbox list.  |
| <code>dropdown</code>      | An input type that provides a dropdown list where, by default, one value can be selected. If <code>multiselect</code> is set to <code>True</code> , then one or more values can be selected.  |
| <code>file</code>          | An input type that allows a user to upload a file.  |
| <code>image</code>         | An input type that allows the user to select or upload an image.  |
| <code>radio</code>         | An input type that forces the user to choose one value.   |
| <code>slider</code>        | An input type that provides a slider where a value must be selected between a minimum and a maximum range. The <code>value</code> parameter defines the default value, and <code>step</code> provides the increment value. Setting the minimum, maximum, and <code>step</code> values to integers will select integer values. |
| <code>textbox</code>       | An expandable text box that allows the user to type in text.  |

## Common output types

| Term                 | Definition   |
|----------------------|--|
| <code>textbox</code> | An expandable text box that allows the user to type in text.   |
| <code>label</code>   | A type typically used for classification models. Can output the classes along with their predicted probabilities. You can control the number of output classes using the <code>num_top_classes</code> parameter. |

## Launching the application

Use the `launch()` method to launch the application. This method starts a simple web server that serves the interface. If you set `share=True` in `launch()`, you can share the application with the rest of the world. The system will set up a public URL allowing anyone worldwide to access your application. Users can interact with your app through this URL, while all computations run on your local machine.

## Author

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