

Okay, let's create a basic app to display the 99 names of Allah with their meanings in Python. We'll use Kivy for the GUI, as it's relatively straightforward for this kind of application.

****Project Title:**** "Asmaul Husna" - 99 Names of Allah

****Project Goal:**** To create a simple mobile application that displays the 99 names of Allah (Asmaul Husna) along with their meanings.

****Data Source:**** We'll need a data source containing the names and meanings. Let's create a `names\_data.json` file.

****Technology Stack:****

- * Python
- * Kivy

****1. Project Setup:****

- * Create a new directory (e.g., `asmaul\_husna\_app`).
- * Install Kivy: `pip install kivy`

****2. Core Files:****

- * `main.py` (Main application logic)
- * `asmaul\_husna.kv` (Kivy language file for UI layout)
- * `names\_data.json` (JSON file containing the names and meanings)

****3. Code Snippets:****

****`names\_data.json`:****

```
```json
[
 {
 "number": 1,
 "name": "Ar-Rahman",
 "meaning": "The All-Compassionate"
 },
 {
 "number": 2,
 "name": "Ar-Rahim",
 "meaning": "The All-Merciful"
 },
 {
 "number": 3,
 "name": "Al-Malik",
 "meaning": "The Absolute Ruler"
 },
 {
 "number": 4,
 "name": "Al-Quddus",
 "meaning": "The Pure One"
 },

```

```
{
 "number": 5,
 "name": "As-Salam",
 "meaning": "The Source of Peace"
},
```

```
{
 "number": 6,
 "name": "Al-Mu'min",
 "meaning": "The Inspirer of Faith"
},
```

```
{
 "number": 7,
 "name": "Al-Muhaymin",
 "meaning": "The Guardian"
},
```

```
{
 "number": 8,
 "name": "Al-Aziz",
 "meaning": "The All Mighty"
},
```

```
{
 "number": 9,
 "name": "Al-Jabbar",
 "meaning": "The Compeller"
},
```

```
{
```

```
"number": 10,
"name": "Al-Mutakabbir",
"meaning": "The Majestic"
},
{
"number": 11,
"name": "Al-Khaliq",
"meaning": "The Creator"
},
{
"number": 12,
"name": "Al-Bari",
"meaning": "The Maker"
},
{
"number": 13,
"name": "Al-Musawwir",
"meaning": "The Fashioner"
},
{
"number": 14,
"name": "Al-Ghaffar",
"meaning": "The Great Forgiver"
},
{
"number": 15,
```

```
"name": "Al-Qahhar",
"meaning": "The Subduer"
},
{
 "number": 16,
 "name": "Al-Wahhab",
 "meaning": "The Supreme Bestower"
},
{
 "number": 17,
 "name": "Ar-Razzaq",
 "meaning": "The Provider"
},
{
 "number": 18,
 "name": "Al-Fattah",
 "meaning": "The Opener"
},
{
 "number": 19,
 "name": "Al-Alim",
 "meaning": "The All-Knowing"
},
{
 "number": 20,
 "name": "Al-Qabid",
```

"meaning": "The Restrainer"

},

{

"number": 21,

"name": "Al-Basit",

"meaning": "The Extender"

},

{

"number": 22,

"name": "Al-Khafid",

"meaning": "The Abaser"

},

{

"number": 23,

"name": "Ar-Rafi",

"meaning": "The Exalter"

},

{

"number": 24,

"name": "Al-Mu'izz",

"meaning": "The Honourer"

},

{

"number": 25,

"name": "Al-Muzill",

"meaning": "The Humiliator"

```
},
{
 "number": 26,
 "name": "As-Sami",
 "meaning": "The All-Hearing"
},
{
 "number": 27,
 "name": "Al-Basir",
 "meaning": "The All-Seeing"
},
{
 "number": 28,
 "name": "Al-Hakam",
 "meaning": "The Judge"
},
{
 "number": 29,
 "name": "Al-'Adl",
 "meaning": "The Just"
},
{
 "number": 30,
 "name": "Al-Latif",
 "meaning": "The Gentle"
},
```

```
{
 "number": 31,
 "name": "Al-Khabir",
 "meaning": "The All-Aware"
},
{
 "number": 32,
 "name": "Al-Halim",
 "meaning": "The Forbearing"
},
{
 "number": 33,
 "name": "Al-'Azim",
 "meaning": "The Magnificent"
},
{
 "number": 34,
 "name": "Al-Ghafur",
 "meaning": "The All-Forgiving"
},
{
 "number": 35,
 "name": "Ash-Shakur",
 "meaning": "The Appreciative"
},
{
```

```
"number": 36,
"name": "Al-'Aliyy",
"meaning": "The Most High"
```

```
},
```

```
{
```

```
"number": 37,
"name": "Al-Kabir",
"meaning": "The Greatest"
```

```
},
```

```
{
```

```
"number": 38,
"name": "Al-Hafiz",
"meaning": "The Preserver"
```

```
},
```

```
{
```

```
"number": 39,
"name": "Al-Muqit",
"meaning": "The Nourisher"
```

```
},
```

```
{
```

```
"number": 40,
"name": "Al-Hasib",
"meaning": "The Accountant"
```

```
},
```

```
{
```

```
"number": 41,
```

```
"name": "Al-Jalil",
"meaning": "The Sublime One"
},
{
 "number": 42,
 "name": "Al-Karim",
 "meaning": "The Bountiful"
},
{
 "number": 43,
 "name": "Ar-Raqib",
 "meaning": "The Watchful"
},
{
 "number": 44,
 "name": "Al-Mujib",
 "meaning": "The Responsive"
},
{
 "number": 45,
 "name": "Al-Wasi",
 "meaning": "The All-Embracing"
},
{
 "number": 46,
 "name": "Al-Hakim",
```

```
"meaning": "The Wise"
},
{
 "number": 47,
 "name": "Al-Wadud",
 "meaning": "The Loving"
},
{
 "number": 48,
 "name": "Al-Majid",
 "meaning": "The Glorious"
},
{
 "number": 49,
 "name": "Al-Ba'ith",
 "meaning": "The Resurrector"
},
{
 "number": 50,
 "name": "Ash-Shahid",
 "meaning": "The Witness"
},
{
 "number": 51,
 "name": "Al-Haqq",
 "meaning": "The Truth"
```

```
},
{
 "number": 52,
 "name": "Al-Wakil",
 "meaning": "The Trustee"
},
{
 "number": 53,
 "name": "Al-Qawiyy",
 "meaning": "The All-Strong"
},
{
 "number": 54,
 "name": "Al-Matin",
 "meaning": "The Firm"
},
{
 "number": 55,
 "name": "Al-Waliyy",
 "meaning": "The Protecting Friend"
},
{
 "number": 56,
 "name": "Al-Hamid",
 "meaning": "The Praiseworthy"
},
```

```
{
 "number": 57,
 "name": "Al-Muhsi",
 "meaning": "The Accounter"
},
{
 "number": 58,
 "name": "Al-Mubdi",
 "meaning": "The Originator"
},
{
 "number": 59,
 "name": "Al-Mu'id",
 "meaning": "The Restorer"
},
{
 "number": 60,
 "name": "Al-Muhyi",
 "meaning": "The Giver of Life"
},
{
 "number": 61,
 "name": "Al-Mumit",
 "meaning": "The Taker of Life"
},
{
```

```
"number": 62,
"name": "Al-Hayy",
"meaning": "The Ever-Living"
},
{
"number": 63,
"name": "Al-Qayyum",
"meaning": "The Self-Subsisting"
},
{
"number": 64,
"name": "Al-Wajid",
"meaning": "The Finder"
},
{
"number": 65,
"name": "Al-Majid",
"meaning": "The Glorious"
},
{
"number": 66,
"name": "Al-Wahid",
"meaning": "The One"
},
{
"number": 67,
```

```
"name": "As-Samad",
"meaning": "The Eternal"
},
{
 "number": 68,
 "name": "Al-Qadir",
 "meaning": "The All-Powerful"
},
{
 "number": 69,
 "name": "Al-Muqtadir",
 "meaning": "The Determiner"
},
{
 "number": 70,
 "name": "Al-Muqaddim",
 "meaning": "The Advancer"
},
{
 "number": 71,
 "name": "Al-Mu'akhkhir",
 "meaning": "The Delayer"
},
{
 "number": 72,
 "name": "Al-Awwal",
```

```
"meaning": "The First"
},
{
 "number": 73,
 "name": "Al-Akhir",
 "meaning": "The Last"
},
{
 "number": 74,
 "name": "Az-Zahir",
 "meaning": "The Manifest"
},
{
 "number": 75,
 "name": "Al-Batin",
 "meaning": "The Hidden"
},
{
 "number": 76,
 "name": "Al-Wali",
 "meaning": "The Governor"
},
{
 "number": 77,
 "name": "Al-Muta'ali",
 "meaning": "The Exalted"
```

```
},
{
 "number": 78,
 "name": "Al-Barr",
 "meaning": "The Beneficent"
},
{
 "number": 79,
 "name": "At-Tawwab",
 "meaning": "The Acceptor of Repentance"
},
{
 "number": 80,
 "name": "Al-Muntaqim",
 "meaning": "The Avenger"
},
{
 "number": 81,
 "name": "Al-'Afuww",
 "meaning": "The Pardoner"
},
{
 "number": 82,
 "name": "Ar-Ra'uf",
 "meaning": "The Kind"
},
```

```
{
 "number": 83,
 "name": "Malik-al-Mulk",
 "meaning": "The Owner of Dominion"
},
{
 "number": 84,
 "name": "Dhu-al-Jalali wal-Ikram",
 "meaning": "The Lord of Majesty and Generosity"
},
{
 "number": 85,
 "name": "Al-Muqsit",
 "meaning": "The Equitable"
},
{
 "number": 86,
 "name": "Al-Jami'",
 "meaning": "The Gatherer"
},
{
 "number": 87,
 "name": "Al-Ghaniyy",
 "meaning": "The Self-Sufficient"
},
{
```

```
"number": 88,
"name": "Al-Mughni",
"meaning": "The Enricher"
},
{
"number": 89,
"name": "Al-Mani",
"meaning": "The Preventer"
},
{
"number": 90,
"name": "Ad-Darr",
"meaning": "The Distressor"
},
{
"number": 91,
"name": "An-Nafi",
"meaning": "The Benefiter"
},
{
"number": 92,
"name": "An-Nur",
"meaning": "The Light"
},
{
"number": 93,
```

```
"name": "Al-Hadi",
"meaning": "The Guide"
},
{
 "number": 94,
 "name": "Al-Badi",
 "meaning": "The Incomparable"
},
{
 "number": 95,
 "name": "Al-Baqi",
 "meaning": "The Enduring"
},
{
 "number": 96,
 "name": "Al-Warith",
 "meaning": "The Inheritor"
},
{
 "number": 97,
 "name": "Ar-Rashid",
 "meaning": "The Guide to Rectitude"
},
{
 "number": 98,
 "name": "As-Sabur",
```

```
 "meaning": "The Patient"
}
]
...
```

```
`main.py`:
```

```
```python
import kivy
from kivy.app import App
from kivy.uix.screenmanager import ScreenManager, Screen
from kivy.uix.boxlayout import BoxLayout
from kivy.uix.label import Label
from kivy.uix.scrollview import ScrollView
import json
```

```
kivy.require('2.0.0') # Replace with your Kivy version
```

```
class NameScreen(Screen):
    def __init__(self, **kwargs):
        super().__init__(**kwargs)

        layout = BoxLayout(orientation='vertical')

        title_label = Label(text="99 Names of Allah", size_hint_y=0.15, font_size=24)
        layout.add_widget(title_label)
```

```
self.names_list = BoxLayout(orientation='vertical', size_hint_y=None)

# Make sure the height is such that there is something to scroll.
self.names_list.bind(minimum_height=self.names_list.setter('height'))
```

```
scroll_view = ScrollView()
scroll_view.add_widget(self.names_list)
layout.add_widget(scroll_view)
self.add_widget(layout)
```

```
self.load_names()
```

```
def load_names(self):
    try:
        with open("names_data.json", "r") as f:
            data = json.load(f)
            for item in data:
                name_label = Label(text=f"{item['number']}. {item['name']} - {item['meaning']}",
                                   size_hint_y=None,
                                   height=60,
                                   text_size=(self.width - 20, None), # Wrap text
                                   valign='middle',
                                   halign='left') # Align text
                self.names_list.add_widget(name_label)
```

```

except FileNotFoundError:

    error_label = Label(text="Error: names_data.json not found.", size_hint_y=None, height=40)

    self.names_list.add_widget(error_label)

except json.JSONDecodeError:

    error_label = Label(text="Error: Invalid JSON in names_data.json.", size_hint_y=None,
height=40)

    self.names_list.add_widget(error_label)

```

```

class AsmaulHusnaApp(App):

    def build(self):

        sm = ScreenManager()

        sm.add_widget(NameScreen(name='names'))

        return sm

```

```

if __name__ == '__main__':

    AsmaulHusnaApp().run()

...

```

****`asmaul\_husna.kv` (Optional - Styling):****

```

`kivy

# You can add styling here, like font sizes, colors, etc.

<Label>:

    font_size: 18

    color: (0, 0, 0, 1) # Black color

    padding: [10, 10] # Add some padding around the text

```

<NameScreen>:

canvas.before:

Color:

rgba: (1, 1, 1, 1) # White background color

Rectangle:

pos: self.pos

size: self.size

...

****Explanation:****

1. ****Data Loading:**** The `load_names()` function reads the `names_data.json` file. It uses `try...except` blocks to handle potential errors (file not found, invalid JSON).
2. ****Dynamic Label Creation:**** It iterates through the data and creates a `Label` widget for each name and its meaning. The text is formatted to display the number, name, and meaning.
3. ****Scrolling:**** The `ScrollView` allows the user to scroll through the list of names if they don't fit on the screen. We bind the `minimum_height` of the `names_list` `BoxLayout` to its `height` to ensure scrolling works correctly.
4. ****Text Wrapping:**** `text_size=(self.width - 20, None)` ensures that the text wraps within the label.
5. ****Error handling:**** Included basic error handling to display errors to the user.

****How to Run:****

1. Save the files (`main.py`, `asmaul_husna.kv`, `names_data.json`) in the same directory.
2. Run `python main.py` from your terminal.

****Next Steps and Enhancements:****

- * ****UI Improvements:**** Use the Kivy language (`.kv` file) to improve the visual appearance of the app. Consider different layouts, colors, fonts, etc.
- * ****Transliteration:**** Add transliteration of the Arabic names.
- * ****Audio:**** Add audio pronunciation of each name.
- * ****Search:**** Implement a search function to quickly find names.
- * ****Theming:**** Allow users to select different themes (e.g., light mode, dark mode).
- * ****Responsiveness:**** Make the UI responsive to different screen sizes.
- * ****Database:**** For larger datasets or more complex features, consider using a database (e.g., SQLite).

This project provides a basic structure. Feel free to customize it and add more features as needed.