

Solitary M

KING CODER

King Coder is a web-app that can serve as one-stop solution to all challenges faced by coders. Helps the coder in many ways possible

[View demo](#)



Team



Solitary M

Members

1. Srinadh vura



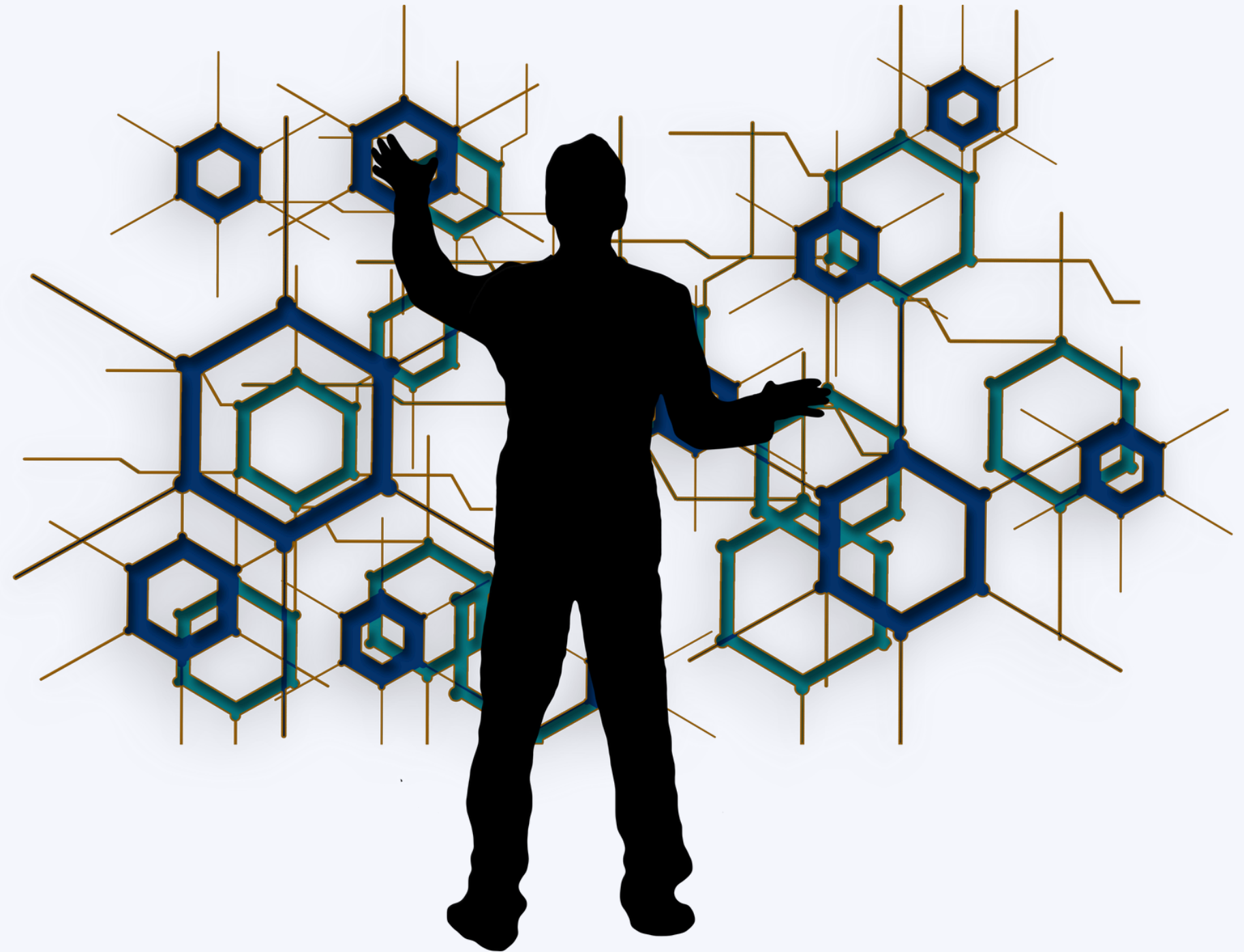
Objective

To build a web-app that can address most of the challenges faced by everyone while they code. Be it professionals, learners, market leaders(with no CS background).



Technologies

1. Python
2. Streamlit
3. MistralAI
4. HTML, CSS



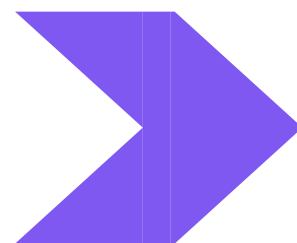


Approach

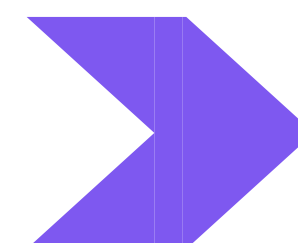
RECEIVE USER INPUT



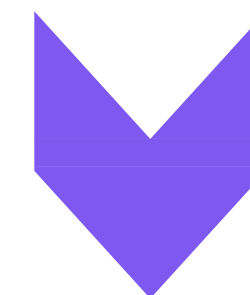
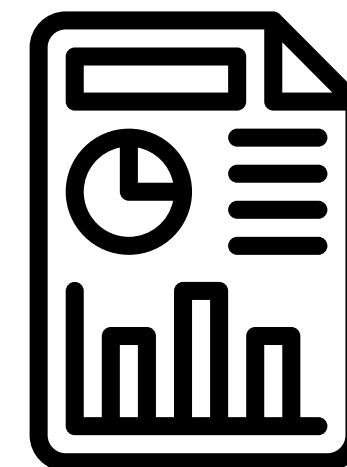
USER



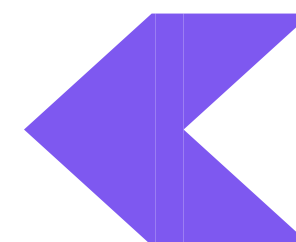
CLASSIFY THEM



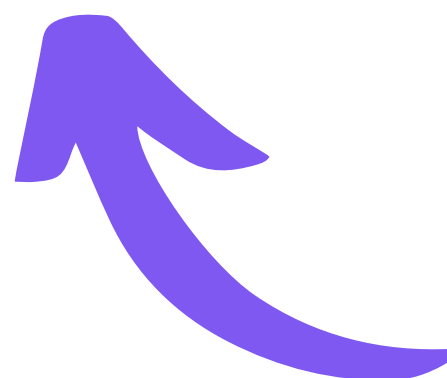
FRAME A PROMPT



MAKE REQUEST
TO CODESTRAL API



DISPLAY RESULT TO USER





Features



On the fly

Responds to the user very quickly



Lucid Interface

The web app is easy to use and provides high levels of usability



Precise

The King Coder is well versed and precise in solving the coding challenges



Various Applications

The King Coder can perform many coding tasks



Wide support

The app supports 20 programming languages as of now.



Accessibility

King Coder is a web application and can be accessed by any device that is connected to internet

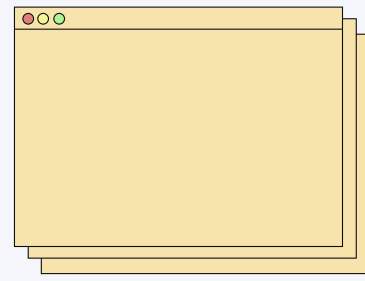


Applications



**King Coder can be used in numerous ways.
Some of the use cases are**

- Learn DSA to crack interviews
- Explain you any script without enough documentation
- Plan the study projects and outline a plan to complete them
- To help you complete scripts, and help you clear blockers
- Translate the scripts seamlessly between languages
- Learn new programming language by translating your own scripts



Interface **Light mode**



kingcoder.streamlit.app



Share ☆ ↺ ⋮

King Coder

- 👤 Get a question
- ✓ Solve a question
- ✍️ Complete the script
- 🤖 Plan a project
- 🗣️ Translate your script

View more

Choose a task from above

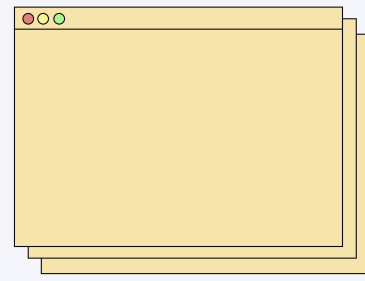
Hi, there!!! Welcome to the court of majestic *King Coder* 👑

King Coder is here to help you with your coding journey.

I can help you with the following:

1. Test you with an amazing coding question
2. Solve your coding problems in any language
3. Complete your incomplete scripts
4. Plan a project for you
5. Translate your code to any language
6. Explain any script you have

Choose the task you want me to do from the sidebar on the left.



Interface

Dark mode



kingcoder.streamlit.app



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Examples





King Coder


 **Get a question**

 Solve a question

 Complete the script

 Plan a project

 Translate your script

 Explain a script

 **WELCOME TO TESTING ROOM!** 

I will test your coding skills with an amazing coding question.

Choose your preferred settings and get ready to solve the question.

Select the difficulty level

Hard



Select the DSA topic you'd like to test

Trees



Get a question

Sure, here's a question for you:


Question:


Write a function `is_balanced(root)` that takes the root of a binary tree as input and returns True if the tree is height-balanced, and False otherwise. A height-balanced binary tree is defined as a binary tree in which the depth of the two subtrees of every node never differ by more than 1.


Test Cases:





King Coder


 Get a question

 **Solve a question**

 Complete the script

 Plan a project

 Translate your script

 Explain a script

Python



Write down constraints (if any)

Solve it

Here is a Python solution for the problem:

```
class Node:
    def __init__(self, data):
        self.data = data
        self.left = None
        self.right = None

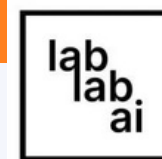
def height(node):
    if node is None:
        return 0
    return 1 + max(height(node.left), height(node.right))

def is_balanced(root):
    if root is None:
        return True

    lh = height(root.left)
    rh = height(root.right)

    if (abs(lh - rh) <= 1) and is_balanced(root.left) is True and is_balanced(root.right) is True:
        return True

    return False
```



Thank You



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SrinadhVura