



Steps for Learning C++

WE will **follow PROBLEM SOLVING APPROACH** in this **COURSE**



Basics of Programming

- variables
- datatypes
- compilers
- execution
- RAM
- OS
- hardware
- input & output

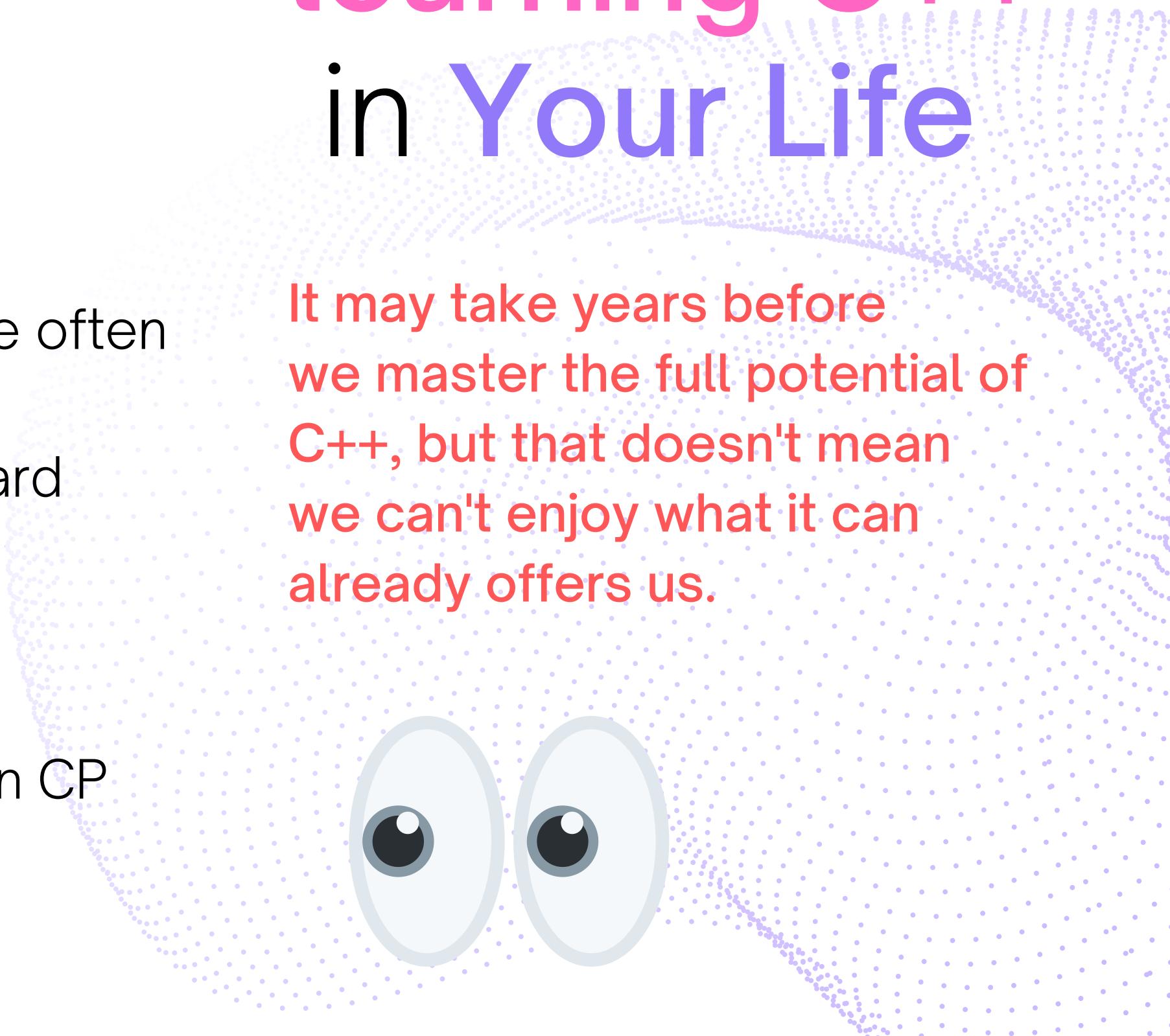
Fundamentals of C++

- comments
- main function
- header files
- compilation & execution
- fundamental types & variables
- loops
- conditionals
- sample programs

Advanced C++

- arrays
- linked lists
- stacks
- queues
- binary trees
- classes & objects
- inheritance & polymorphism
- use of STL

Benefits of learning C++ in Your Life



Problem Solving Skills

- Gives you the ability to think like a computer scientist.
- Gain solid problem solving skills in real world

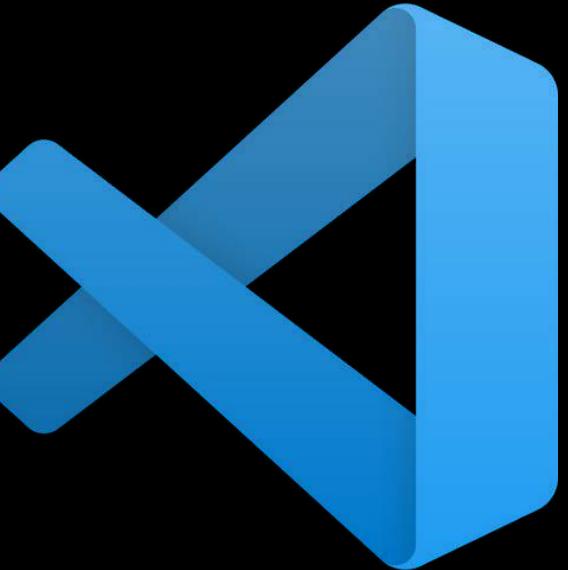
Get Ready for Interviews

- C++ is popular language whose concepts are often asked in interviews at companies
- This course will give you an edge in this regard

Tool for Competitive Programming

- C++ is the most popular choice for language in CP
- This will set you up for diving into CP

It may take years before we master the full potential of C++, but that doesn't mean we can't enjoy what it can already offer us.



Computer

Any computer would do

MinGW Software

Provides C/C++ compiler and all tools and libraries

Any Text Editor

To write and modify text files (source code files)

What does C++
language really
need to run?

LEARNING TECHNIQUES

Spaced Repetition:

repeat your learnt things at regular intervals for retention

Active Recall:

recall what you learnt without looking at notes

Minimize Input
&
Maximize Output



Best Way of Learning Any New Thing or Skill



Set your end goal

Take Short Notes
During the Class



Drink Water
& Stretch Your Body



Think of the big
picture in mind



Practice
& Revise
& Review

1



Set your end goal

why do you want to learn this skill?

what would you do with this?

Think of the big picture

Best Way of Learning Any New Thing or Skill

Take Short Notes During the Class

Drink Water & Stretch Your Body

Practice & Revise & Review

Best Way of Learning Any New Thing or Skill

Set your end goal

Think of the big picture

2

don't stop when initial obstacles come

search answers, seek help, read blogs & websites

Take Short Notes During the Class

Drink Water & Stretch Your Body

Practice & Revise & Review



Best Way of Learning Any New Thing or Skill



Set your end goal

Think of the big picture

Take Short Notes During the Class

taking notes builds your muscle power in brain

3

it helps to revise & recall

Drink Water & Stretch Your Body

Practice & Revise & Review

Best Way of Learning Any New Thing or Skill



Set your end goal

Think of the big picture

Take Short Notes During the Class

Drink Water & Stretch Your Body

4

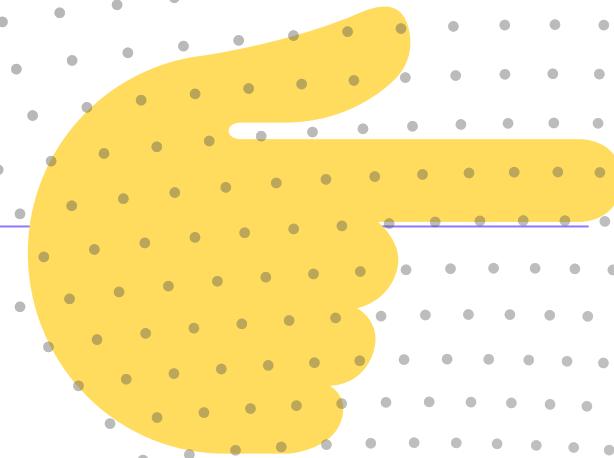
drinking water hydrates our body

stretching removes dullness & inactivity

Practice & Revise & Review

Best Way of Learning
Any New Thing or Skill

Set your end goal



Think of the big picture

- 5 Practice & Revise & Review**
- practice is the key for mastering
 - revise your notes visually
 - review by taking tests & repeat

Take Short Notes During the Class

Drink Water & Stretch Your Body

Any fool can write code
that a computer can
understand.

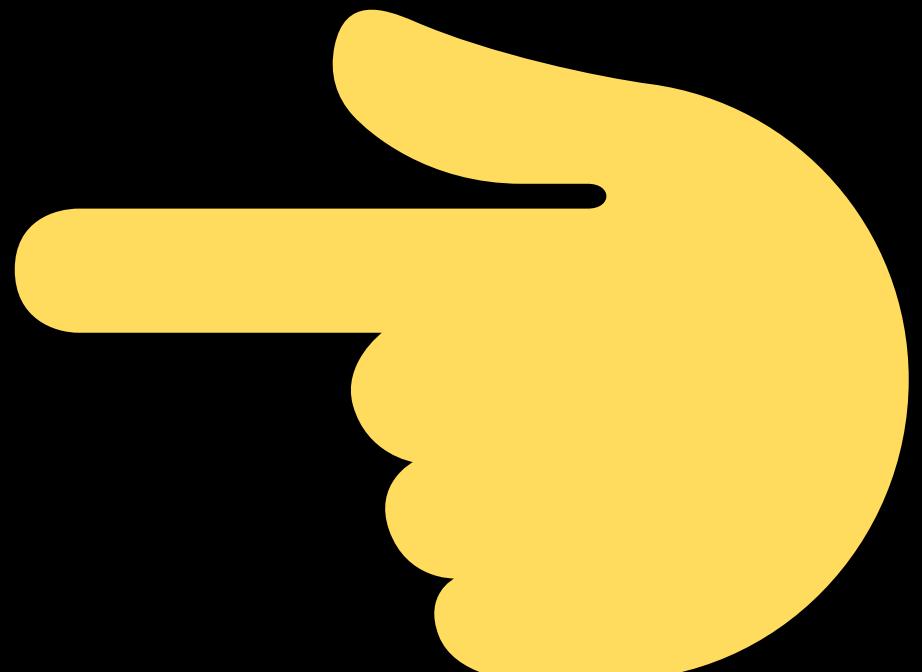
Good programmers write
code that humans can
understand.”

– MARTIN FOWLER

We will learn to write better code in this course

Better code means code which is -

1. Readable
2. Maintainable
3. Easy to understand
4. Stepwise
5. Comprehensive



The **Pomodoro Technique** is a time management method developed by Francesco Cirillo in the late 1980s.

The technique uses a **timer** to break down work into **intervals**, traditionally **25 minutes** in length, separated by **short breaks**.





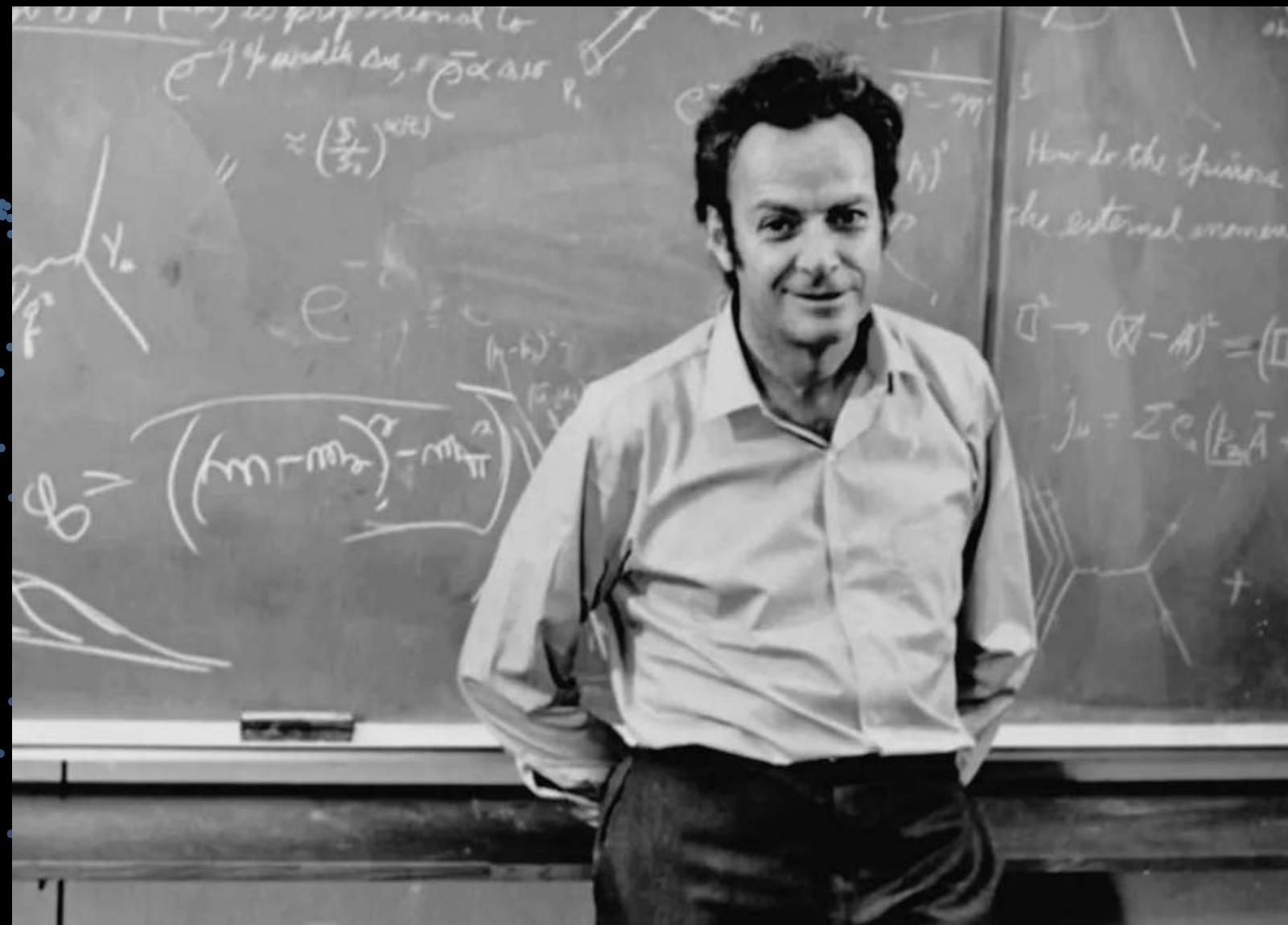
“

IF YOU ARE BORN
POOR IT'S NOT
YOUR MISTAKE,
BUT IF YOU DIE
POOR IT'S YOUR
MISTAKE.



BILL GATES

The **Feynman Technique** is a study method developed by Richard Feynman(Nobel Physicist) in the late 1980s.



Pretend to teach a concept you want to learn about to a student in the sixth grade.

Identify gaps in your explanation.

Go back to the source material to better understand it.

Organize and simplify.
Transmit (optional).

ABOUT ME

Akash Maji

Connect At:

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Offers from:

TCS, Accenture, Hexaware,
Capgemini and UpGrad

- **ORACLE CERTIFIED JAVA DEVELOPER**
- **MICROSOFT CERTIFIED AZURE FUNDAMENTALS**
- **ORACLE CLOUD INFRASTRUCTURE CERTIFIED**
- **RGPV CHANCELLOR SCHOLARSHIP RECIPIENT**



ABOUT ME

Gopal Patel

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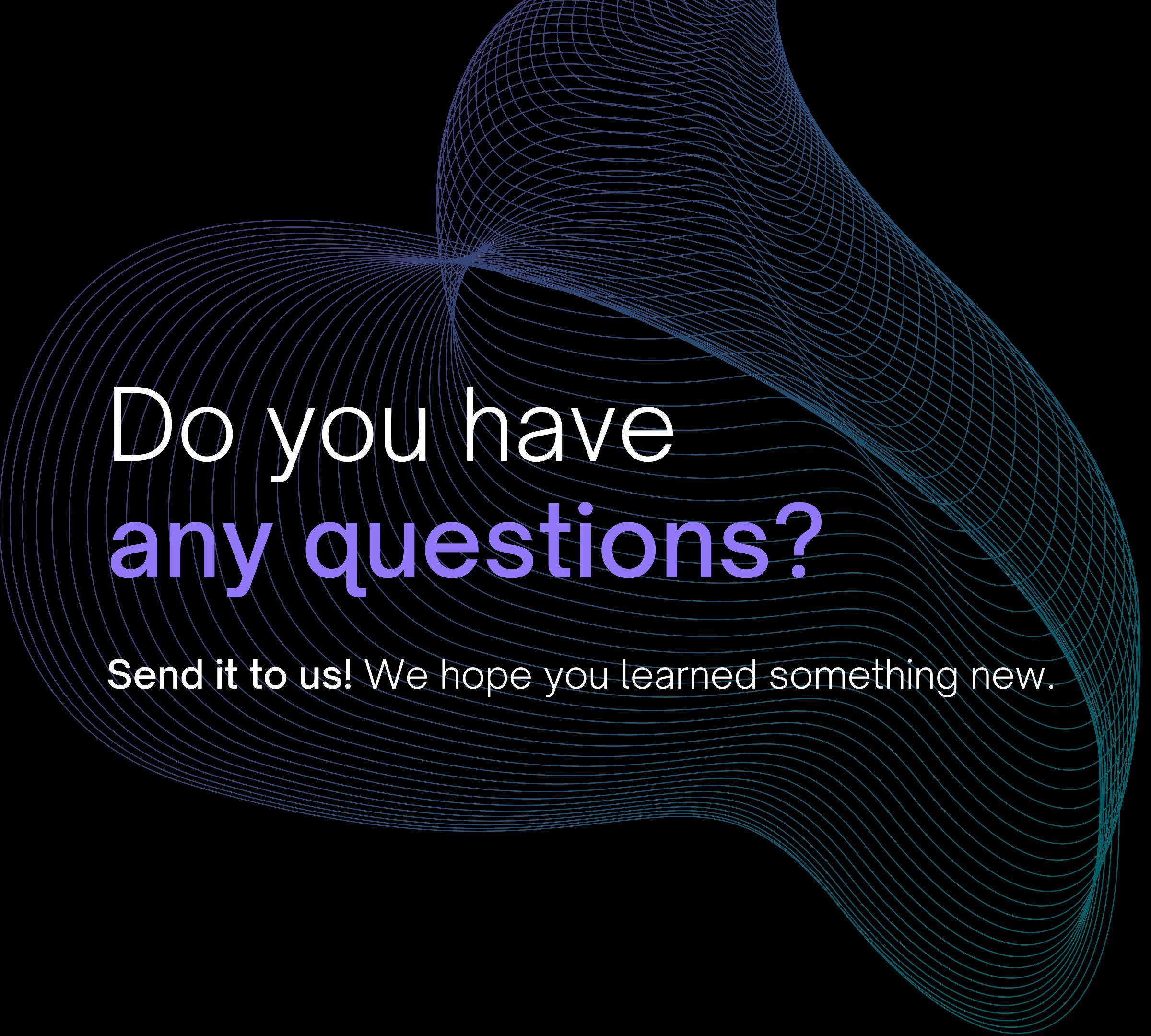
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Offers from:

UC, Accenture, Amdocs,
Capgemini and Infosys

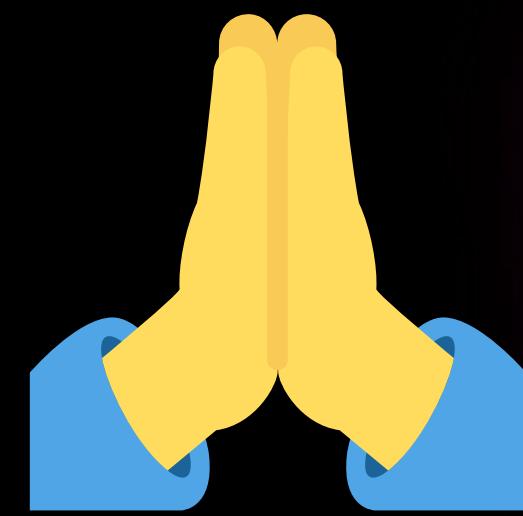
- **3* CODER AT CODECHEF**
- **GOLDEN BADGE IN PROBLEM SOLVING IN HACKERRANK**
- **HEAD BACE INCHARGE AT ISKCON BACE**
- **VICE PRESIDENT AT INSPIRE CLUB**



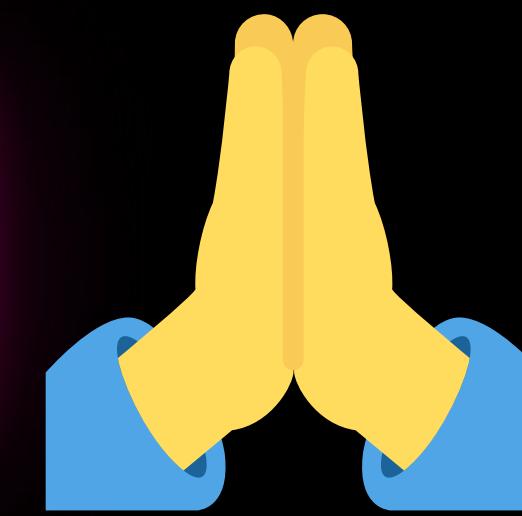
The background features a complex, abstract geometric pattern. It consists of numerous thin, light blue lines forming concentric circles and a fine grid that curves and spirals across the frame. The lines are slightly curved, creating a sense of depth and motion.

Do you have
any questions?

Send it to us! We hope you learned something new.



THANK YOU



keep calm,
wear mask,
and
study hard



whoami
AKASH MAJI
Your Mentor

The End