

# N-body Simulation

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# Intro

What is our project about?

To reach the maximum amount of  
bodies interacting on the screen

To observe gravitational  
interaction in complex systems  
of bodies



# Relevance

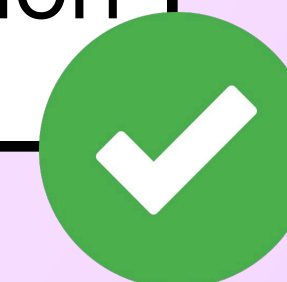
What's wrong with most gravitational simulators?

Too complex or too simplified

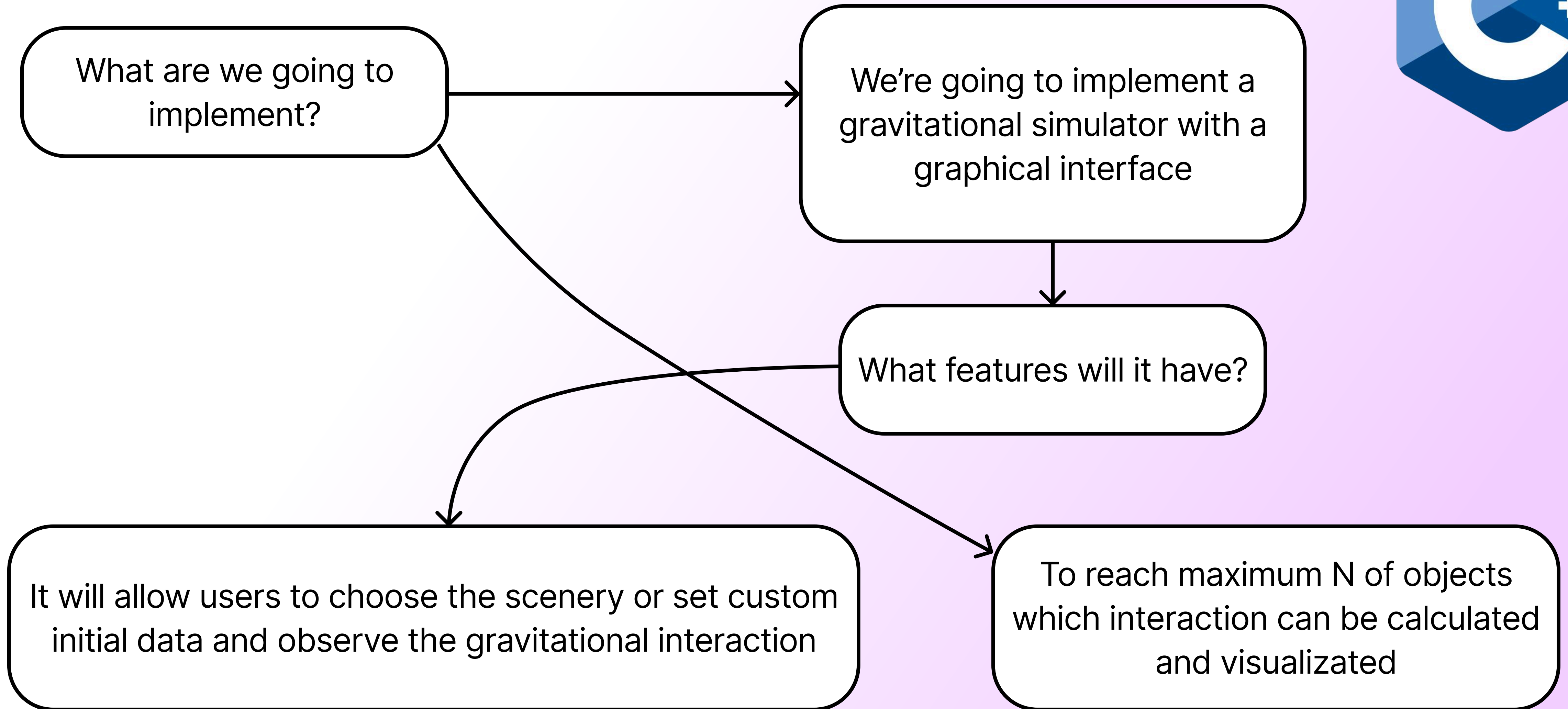


What we suggest

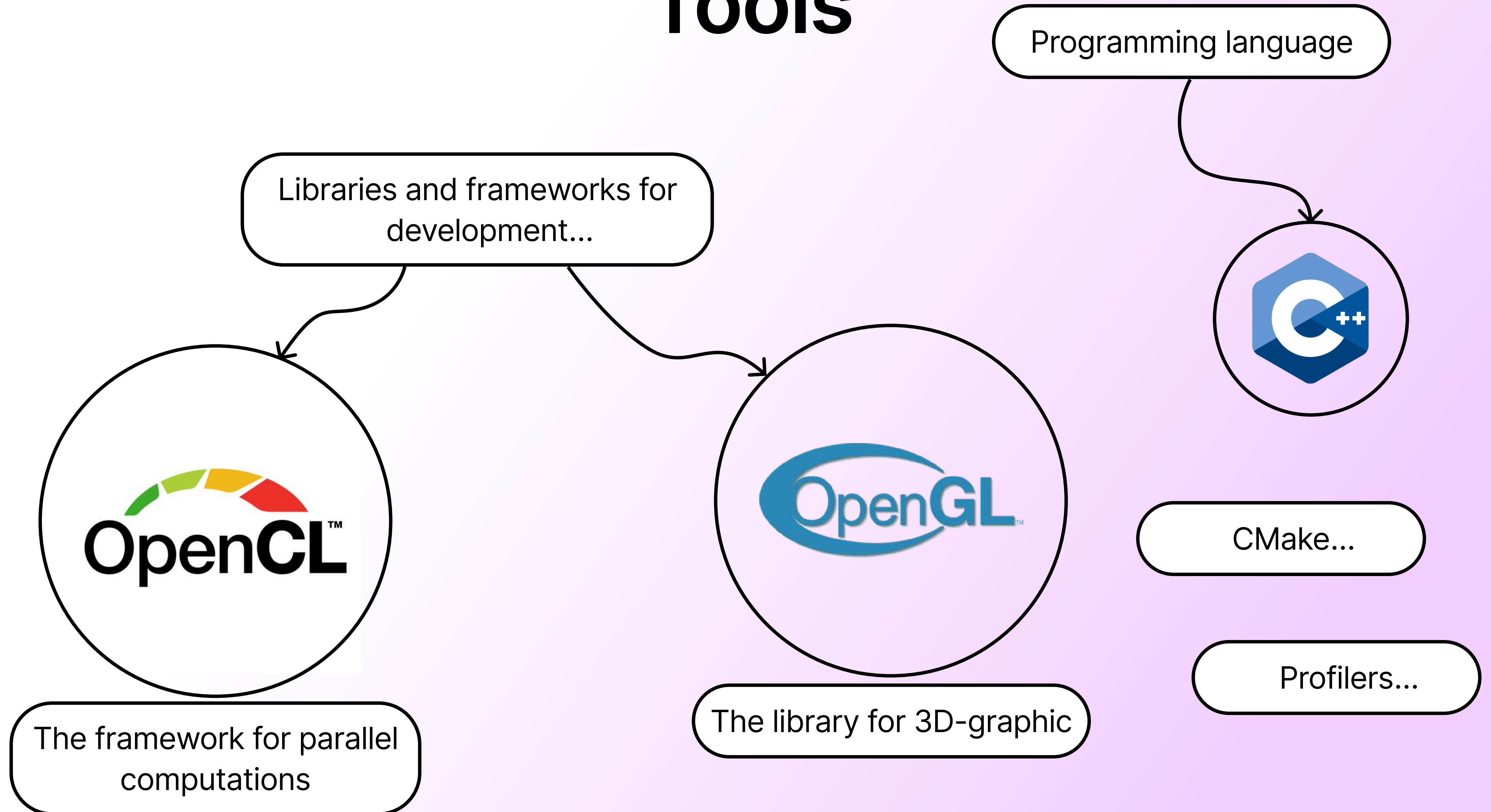
To combine scientific accuracy with user-friendly visualization



# Goal



# Tools





# Time changing

One of the most useful feature in our program will be the ability to change the time interval between events on a screen

It will allow users to see in more detail what's happening at a specific moment...

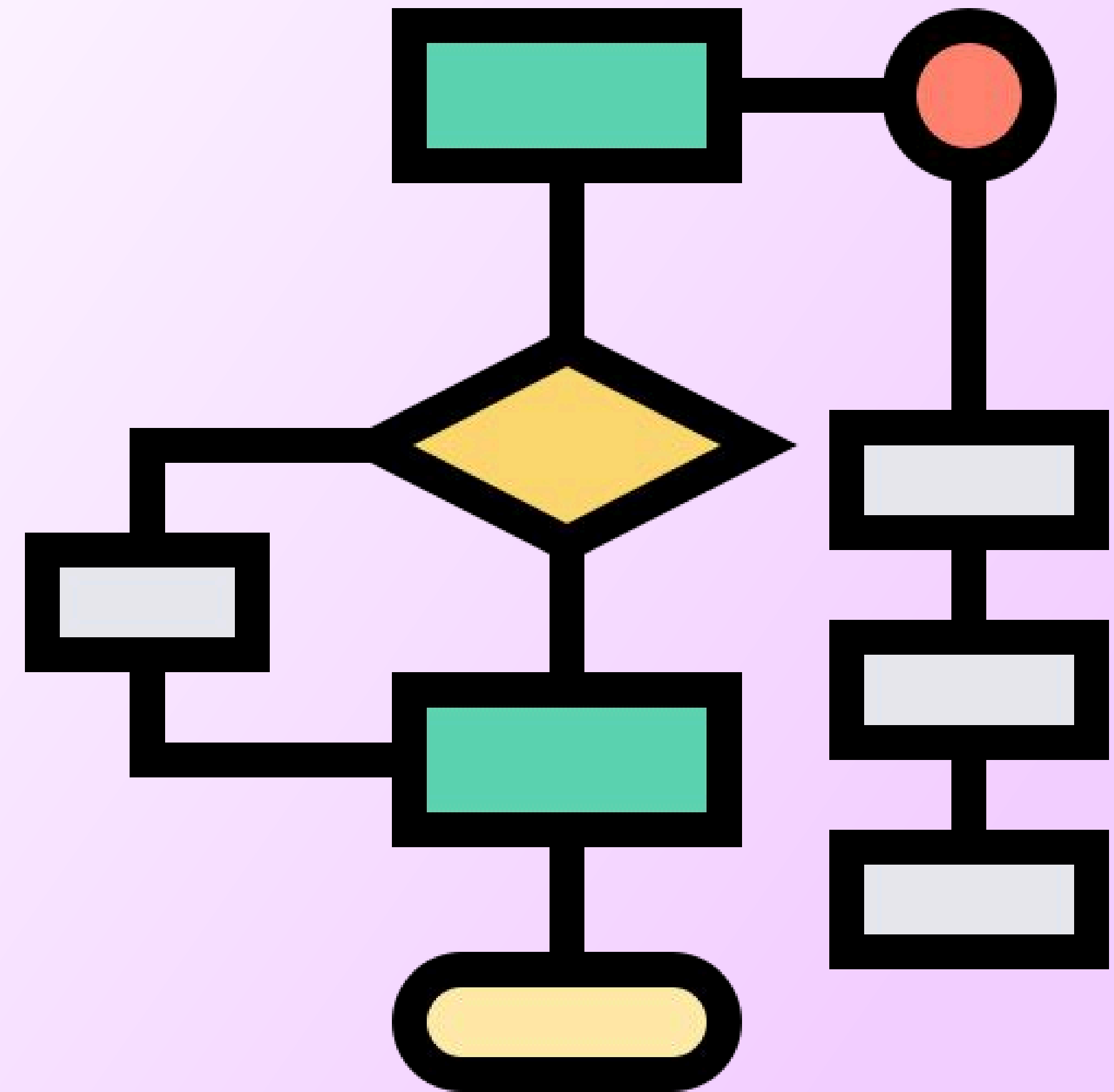


# Algorithms

The second main idea is to test different calculating algorithms and compare their time of performing and accuracy...

It will allow us to understand what algorithm is the most suitable for our application...

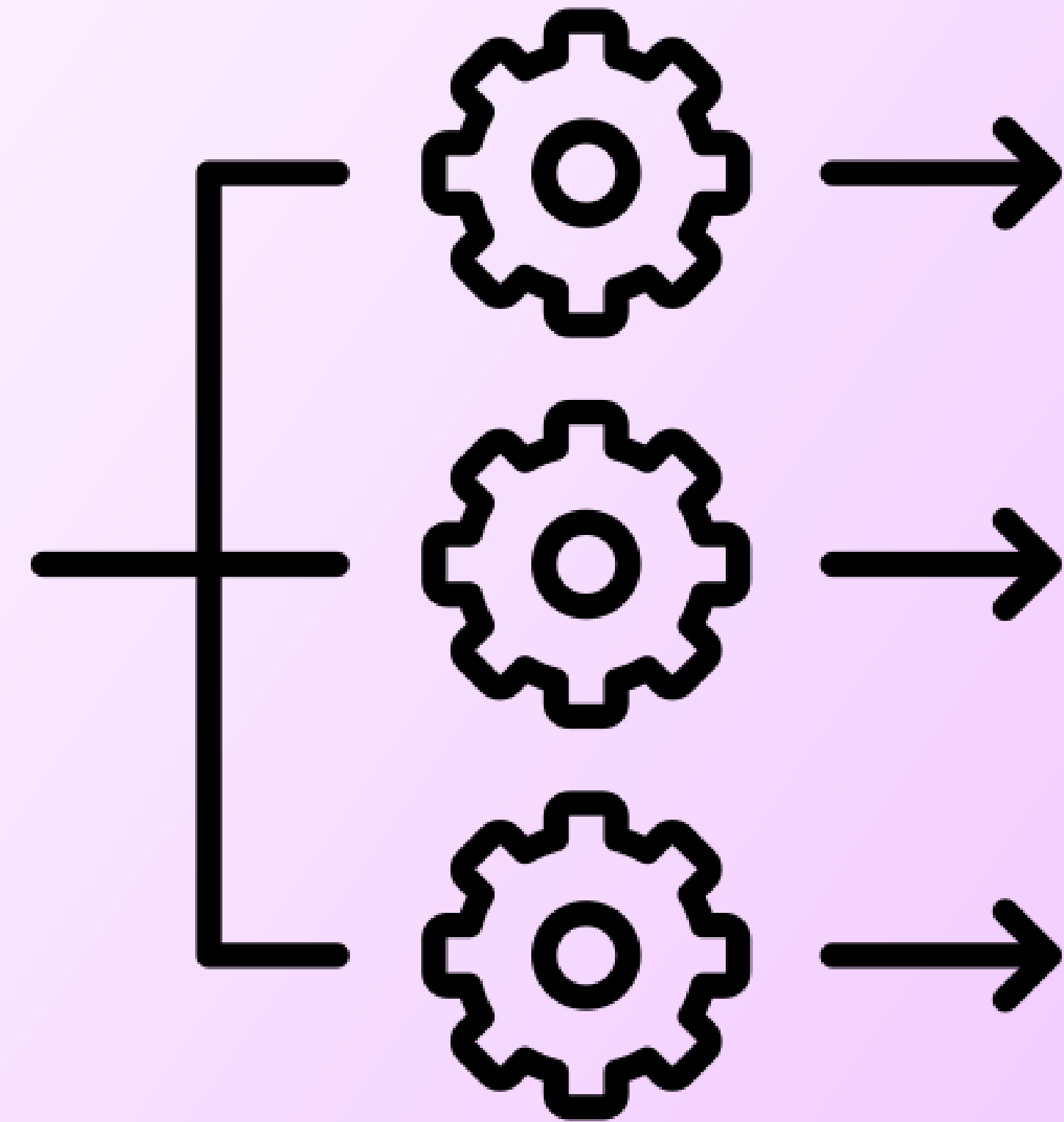
We're going to use C++ profilers to find out performance on test scenarios...



# Parallel computations

The third main task is to implement parallel computations using, for example, OpenCL...

It will allow us to understand what is the maximum amount of objects which interaction we can calculate and show on a screen...





# Current state

