



JONAS.IO  
SCHMEDTMANN

# THE COMPLETE JAVASCRIPT COURSE

FROM ZERO TO EXPERT!



@JONASSCHMEDTMAN

## SECTION

HOW JAVASCRIPT WORKS BEHIND THE  
SCENES

## LECTURE

THE JAVASCRIPT ENGINE AND  
RUNTIME

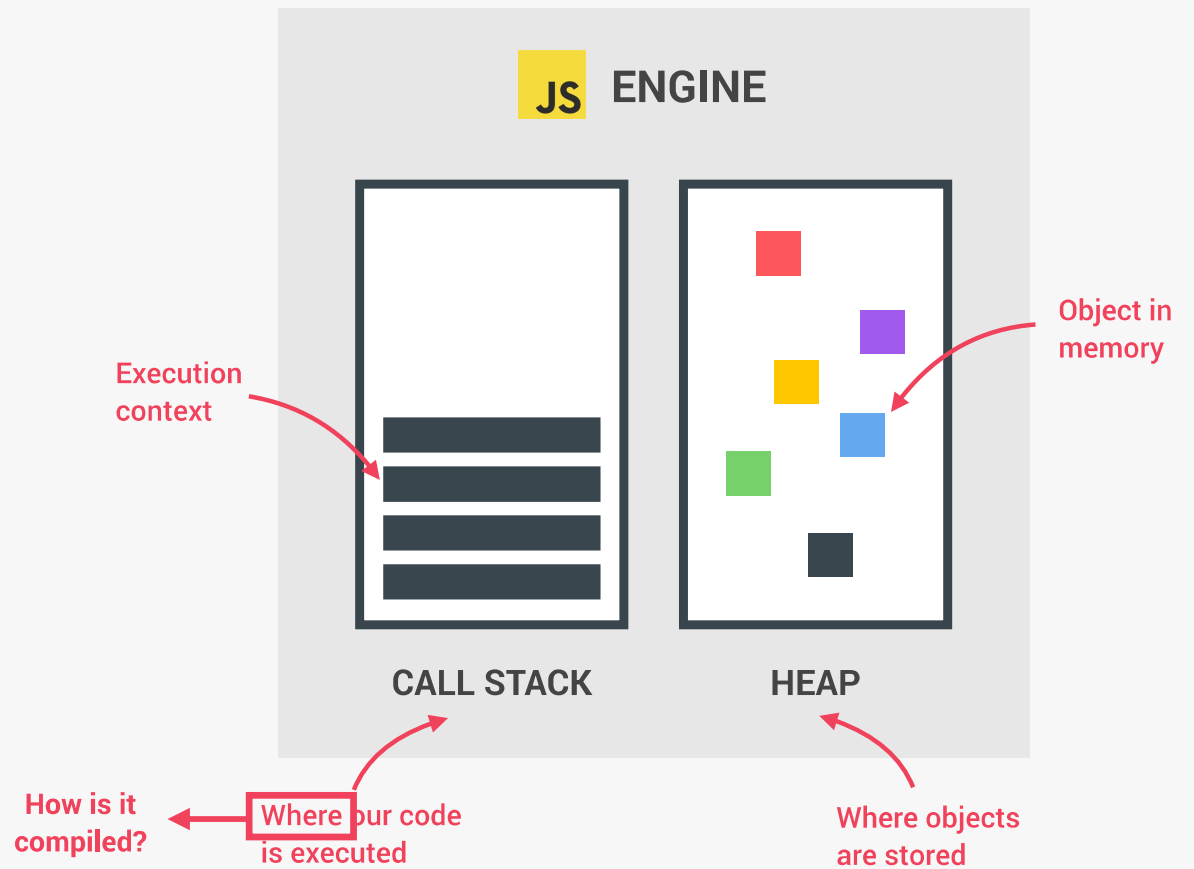
JS

# WHAT IS A JAVASCRIPT ENGINE?

JS ENGINE

PROGRAM THAT **EXECUTES**  
JAVASCRIPT CODE.

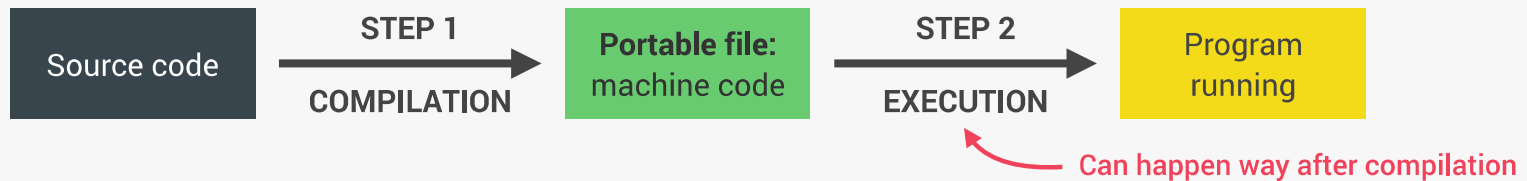
👉 Example: V8 Engine



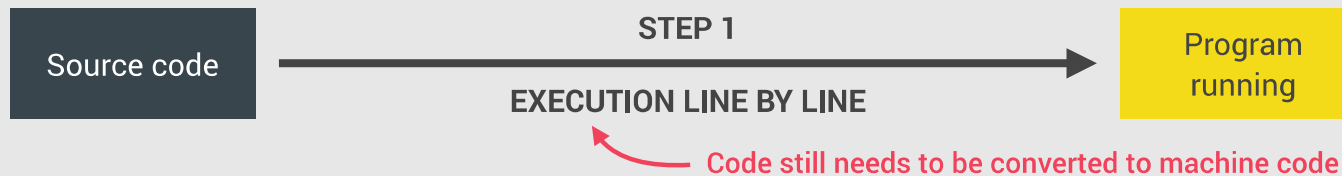
# COMPUTER SCIENCE SIDENOTE: COMPILATION VS. INTERPRETATION



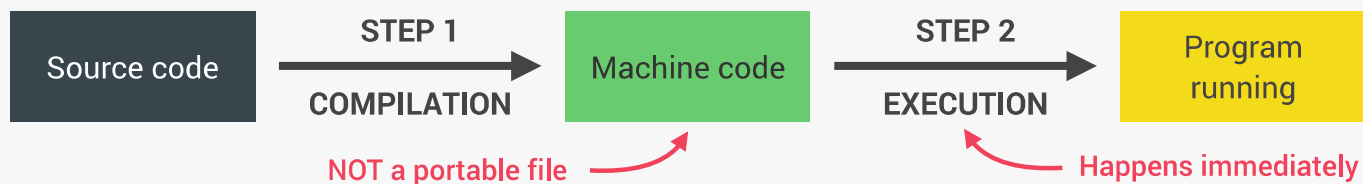
👉 **Compilation:** Entire code is converted into machine code at once, and written to a binary file that can be executed by a computer.



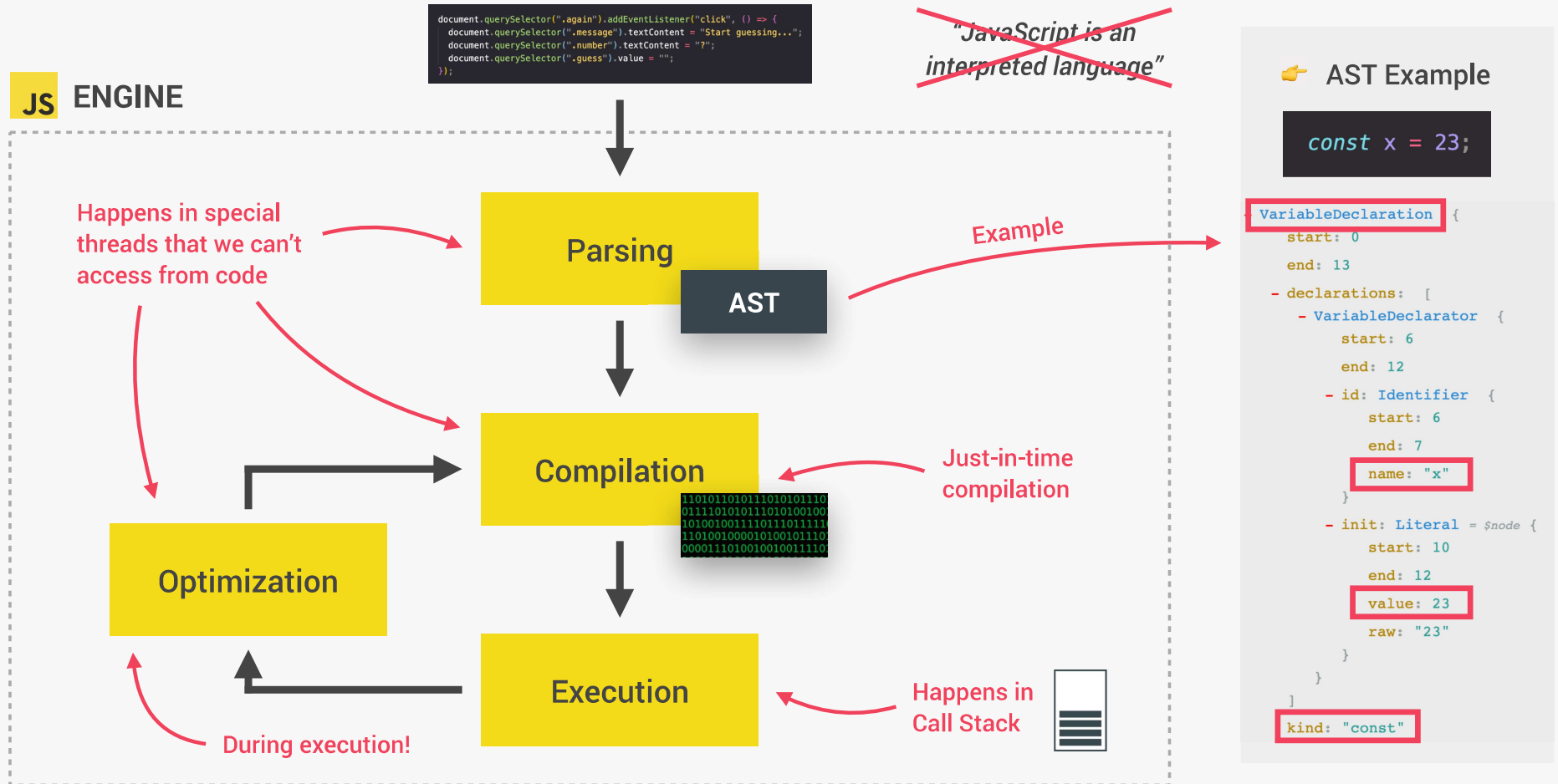
👉 **Interpretation:** Interpreter runs through the source code and executes it line by line.



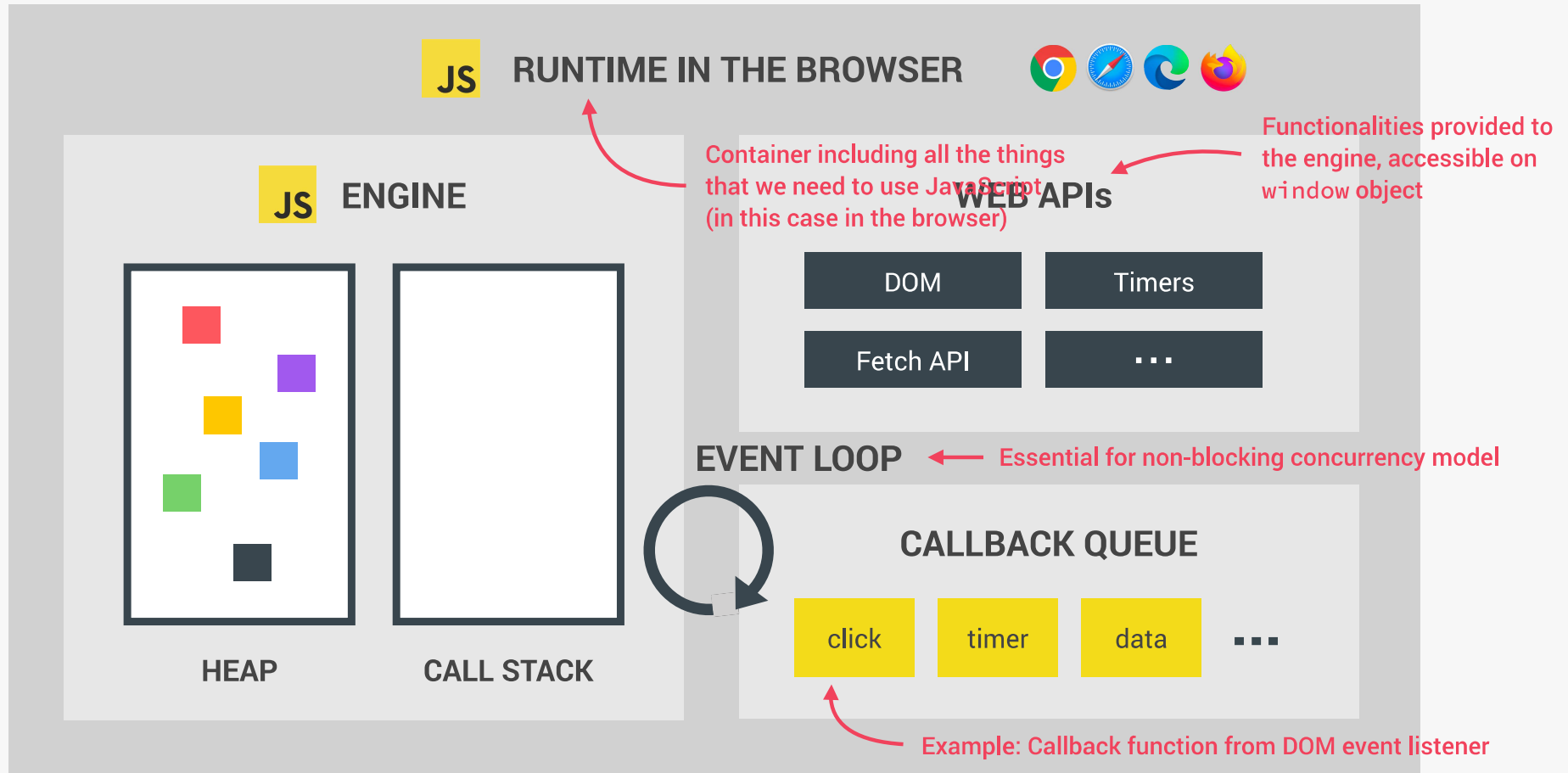
👉 **Just-in-time (JIT) compilation:** Entire code is converted into machine code at once, then executed immediately.



# MODERN JUST-IN-TIME COMPILATION OF JAVASCRIPT



# THE BIGGER PICTURE: JAVASCRIPT RUNTIME



# THE BIGGER PICTURE: JAVASCRIPT RUNTIME

