How Code Gets Executed

Inside the JavaScript Engine

"The thing that executes your code"

JavaScript is single-threaded: *"One thing happens at a time"*

The Stack controls "which thing is happening"

Will become important later
(Event Loop)

A

B

D

C

Heap

prompt()
getName()
greet()
(anonymous)

Stack

Memory allocation

Stores data in your system memory and manages access to it

Execution Context

Manages your program flow (function calls and communication)
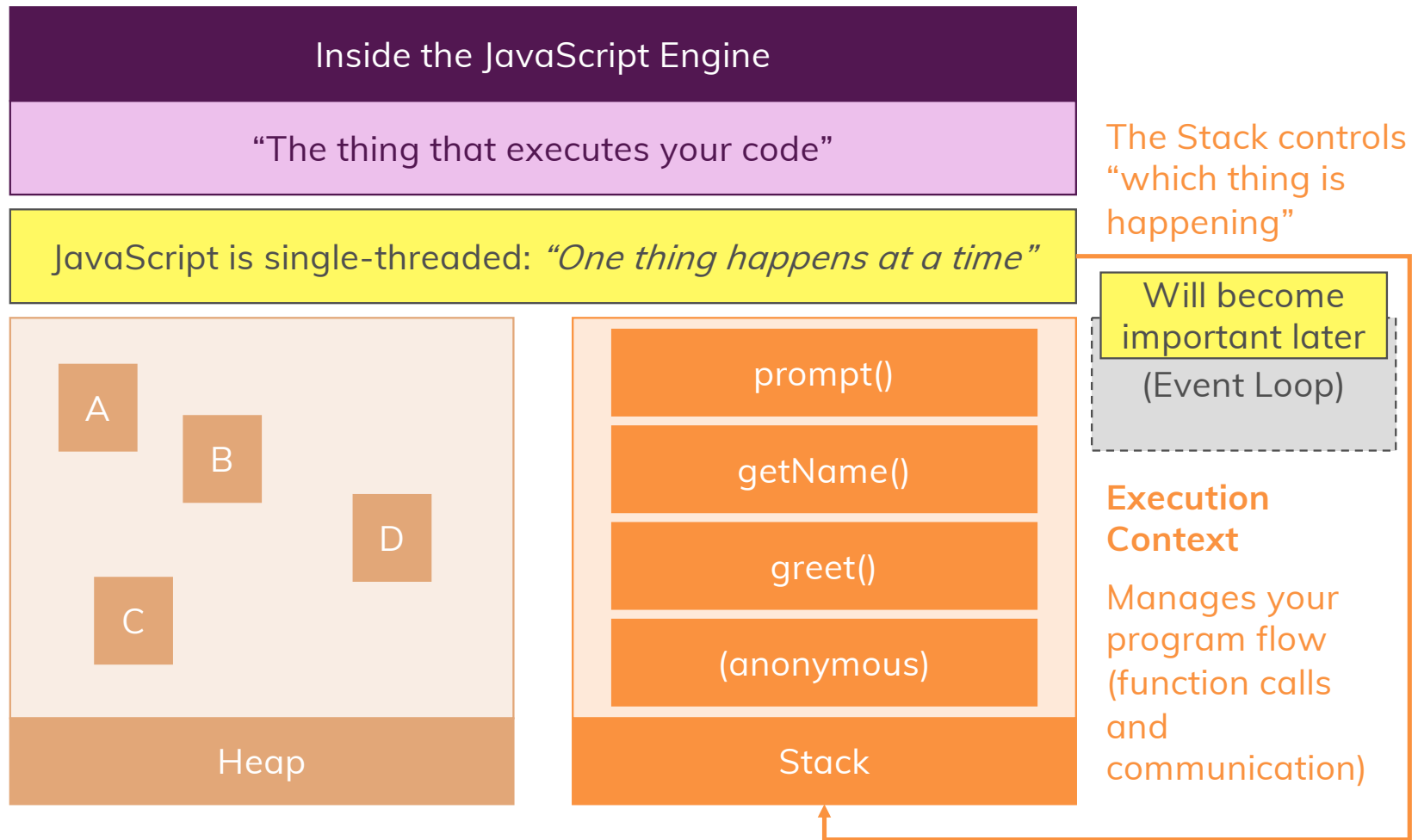
Event Loop, Queue and Async Code

ACADE MIND

```
const greet = () => {
  console.log('Hi');
};

const showAlert = () => {
  alert('Danger!');
};

setTimeout(showAlert,
2000);

greet();
```

Code

Message Queue   showAlert

JavaScript Engine

alert()

showAlert()

Stack

DOM API
...
navigator.geolocation

...

setTimeout

Ongoing Timer ...

(Browser) APIs

Event Loop