

JavaScript

① We've done a lot so far...

①A Problems w./ HTML + CSS
↳ stateless

② Why JavaScript?

```
graph TD; JS[JavaScript] --> CS[client side]; JS --> SS[server side]; JS --> DB[database]; JS --> MacOS[Mac OS scripting];
```

The diagram shows 'JavaScript' at the top with four arrows pointing down to 'client side', 'server side', 'database', and 'Mac OS scripting'. 'client side' is enclosed in a box.

③ Limitations of client-side JS

④ Debugging + testing in browser

⑤ Lists (arrays)

⑥ Hashes (aka dictionaries)

} COMPILES

⑦ Objects

↳ strings

↳ Math

↳ window

↳ document

} built-in

⑧ DOM

↳ representation of HTML in tree structure