

Why are web apps attractive? Because they are...

I R O N

Isolated Rich On-demand Networked

- Cannot impose on other applications

therefore

- Safe to try out

- Visually appealing
- Interactively responsive
- Semantically powerful

therefore

- Practical and useful
- Pleasant to use

- No installation
- No OS configuration

therefore

- Easy to test drive
- Easy to point others to

- Use resources on the web

therefore

- Access up-to-date content
- Integrate disparate content

The IRON properties

😊 make the Web attractive
☹ are weakened by the Web API

Isolation is weakened
because

The web API is very wide

Less rich than desktop apps
because

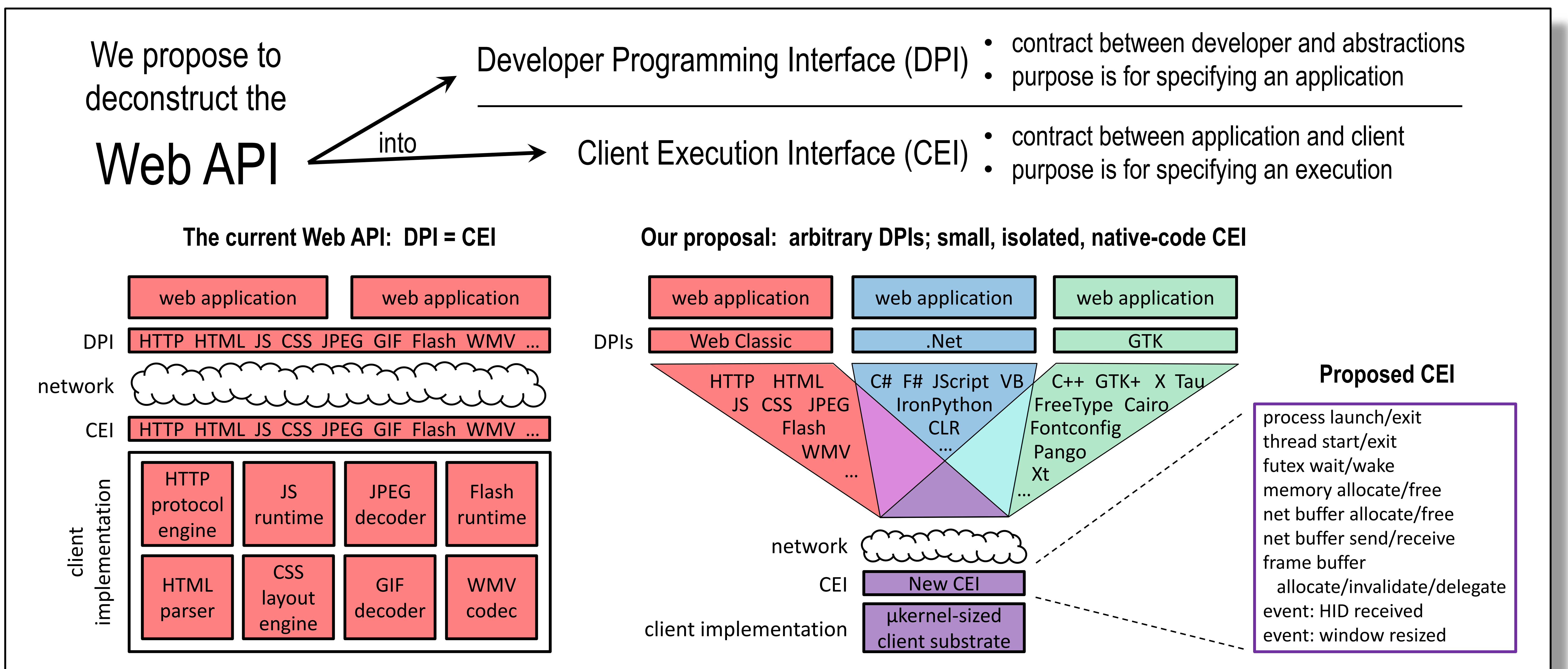
Web apps cannot employ non-type-safe legacy code

User still must configure
because

Updates and patches to plug-ins affect the TCB

Networking is restricted
because

The Same-Origin Policy limits access to content



New CEI is small

Reduces shared TCB size

therefore

Improves isolation

New CEI runs native code

Allows reuse of legacy code

therefore

Supports richer applications

Rich code outside the TCB

User need not approve new rich functionality

therefore

Apps stay on-demand

Raw pipe to the internet

Browser is logically outside enterprise firewall

therefore

Access restrictions unneeded