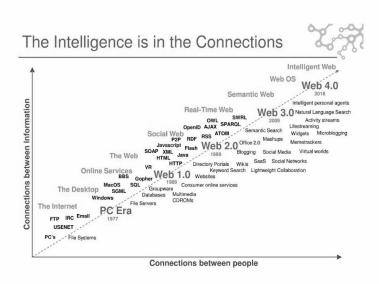
Past, Present & Potential Future of Web Design

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What's Web Design Really?

- User Interface/Experience Design?
- Accessibility? Usability?
- SEO?
- Platform (mobile, desktop, browser, IoT, etc.)?
- Let's only focus on web browser for now

Evolution of Web and Web Design



Sir Timothy John Berners-Lee, also known as TimBL, is an English computer scientist best known as the inventor of the World Wide Web. He is a Professorial Fellow of Computer Science at the University of Oxford and a professor at the Massachusetts Institute of





The Past (<2010)

- During 1991 to 1993 the World Wide Web was born
- Mosaic 1993
- Static Page (Document) & Hyperlink based to MPA
- First Browser War (1995 2001)
 - Javascript, CSS
- Second Browser War (2004 2017)
 - Firefox, WHATWG, Web Standards, AJAX

Problems:

- Lack of Interactivity, Scalability
- Browser Compatibility Issues



The Present

- Single Page Application
- Web Component Better Modularity
- ESModule Better JS ecosystem
- WebAssembly Compilation target
- Web-Worker Concurrency
- UI/X Design Tools Figma, Adobe XD
- Http/2
- Experimental Transitional Apps, Server Rendered Interactive Web Apps (ex. Liveview, LiveWire, HotWire)

Problems:

- Server-Client Dichotomy
- Too many half baked solutions
- Lack of proper computing model



The Future

- Browser as default target for very complex apps
 - o Photoshop, Figma, Autocad
- More client-side computing
 - Thanks to growing capability of user-end devices
- Powerful computing & computational model
 - Object, System, Message, Event, Actor, Agent Oriented Models
- Users with more control
 - User/Client Scriptable Environment
- More Isolation! Less Coupling!

Conclusion



The Future is unpredictable. But with some experience and intuition, we can foresee some of the upcoming trends and techs in the making. But the best way to predict is to invent it. Web Design has come a long way, but computing disciplines are in their early stage, and we have lots to explore and ponder...

"We don't have to accept computing as it is. Computing education today focuses mostly on preparing students to be professional software developers, using the tools of professional software development. That's important and useful, but often eclipses other, broader goals for learning computing. The earliest goals for computing education are different from those in most of today's computing education. We should question our goals, our tools, and our assumptions. Computing for everyone is likely going to look different than the computing we have today which has been defined for a narrow set of goals and for far fewer people than "all." - Mark Guzdial

Links & References

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- 4. webarch_icse2000.pdf (uci.edu).
- 5. <u>Web design Wikipedia</u>
- 6. https://github.com/lumen/lumen/lumen/