MICHIGAN STATE UNIVERSITY **Alpha Presentation** Making Firefox's Picture-in-Picture Even More Awesome The Capstone Experience Team Mozilla Niklas Baumgardner **Chris Jackson** Hunter Jones Manish Rajendran **Reid Shinabarker**

> Department of Computer Science and Engineering Michigan State University Fall 2020

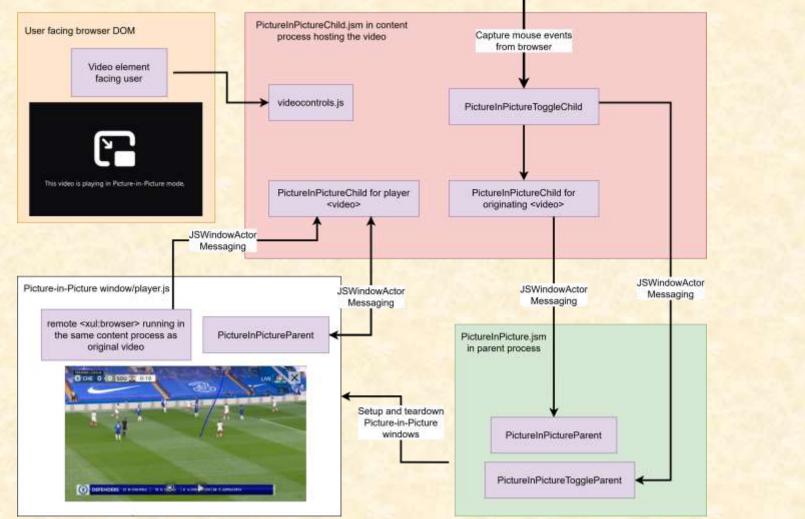


...to Professionals

Project Overview

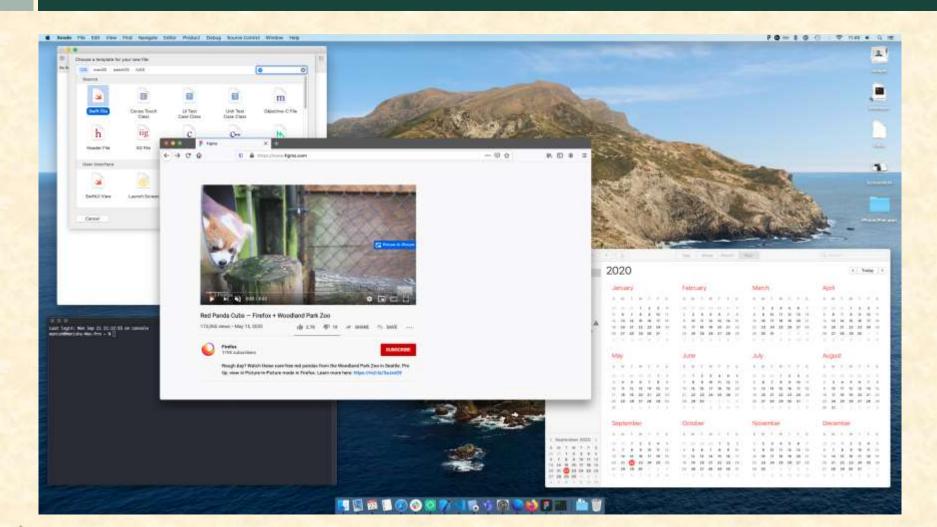
- Make Picture-in-Picture even more awesome
- Fix bugs involving Picture-in-Picture
- Add features to Picture-in-Picture
 - Multiple Picture-in-Picture windows
 - Corner snapping
 - Reopening at last used Picture-in-Picture location
- Improve compatibility of Picture-in-Picture on select websites

System Architecture



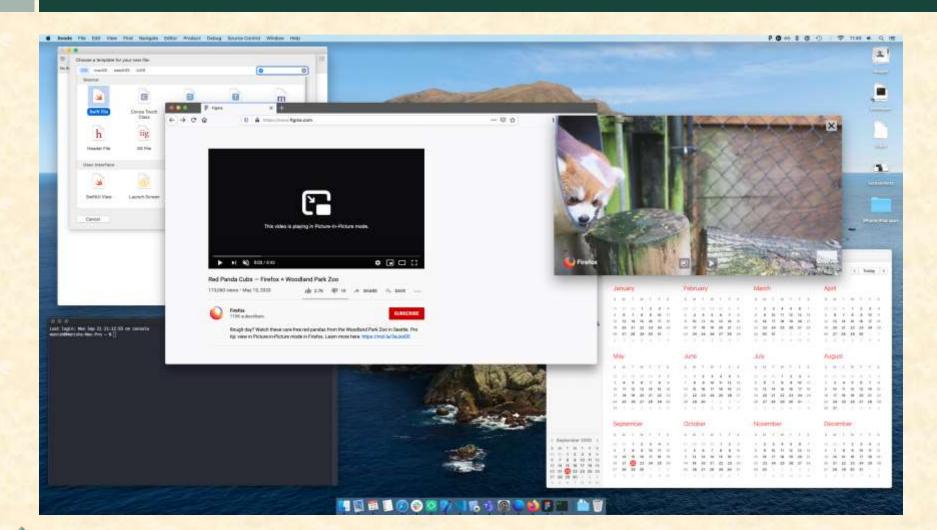
The Capstone Experience

Picture-in-Picture Toggle Button



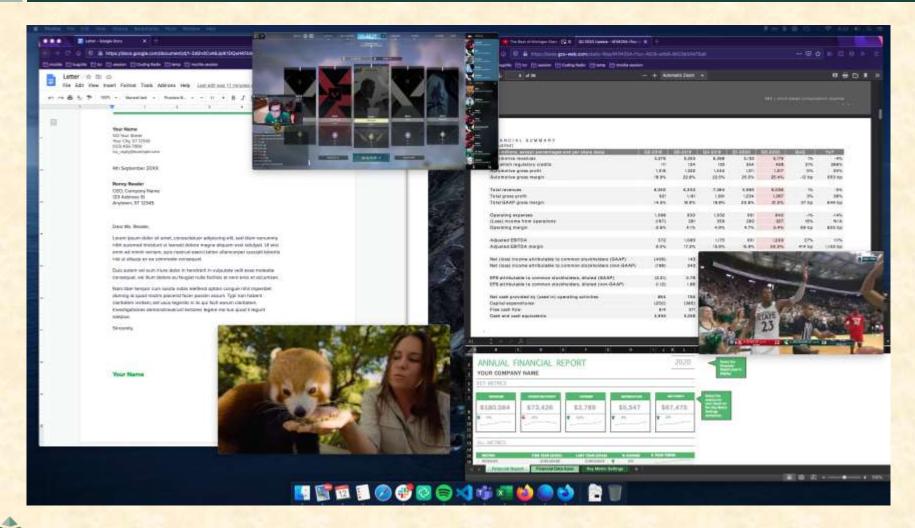
The Capstone Experience

Picture-in-Picture Player Window



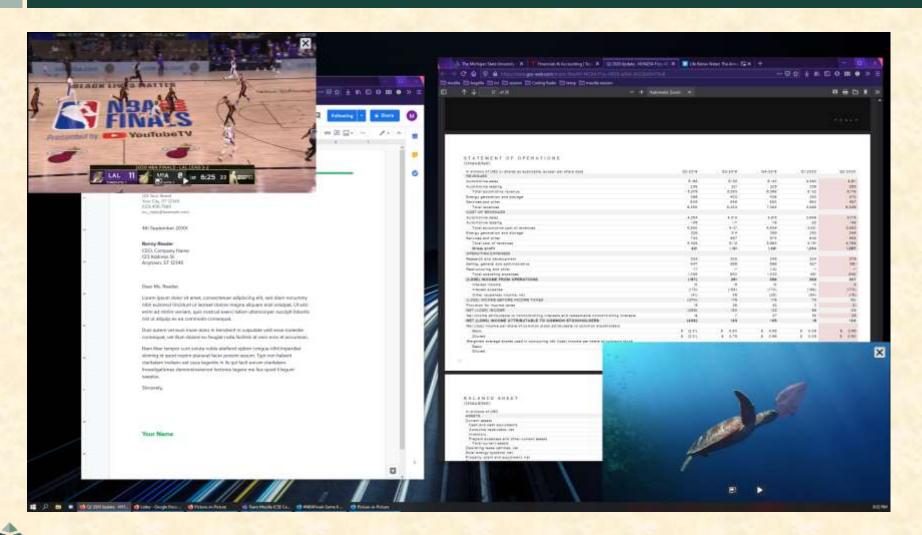
The Capstone Experience

Multiple Picture-in-Picture Windows



The Capstone Experience

Picture-in-Picture Window Snapping



What's left to do?

- Finish support for multiple Picture-in-Picture windows
- Website specific adapters for improved web compatibility
- More bug fixes and improvements
 - Improved multiple monitor support
 - Improved localization support (RTL)
 - Removing old and unused code
 - And more improvements as user suggestions are added

Questions?

