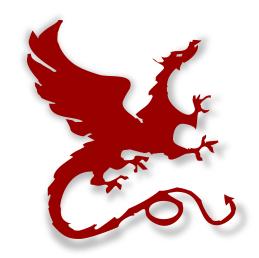
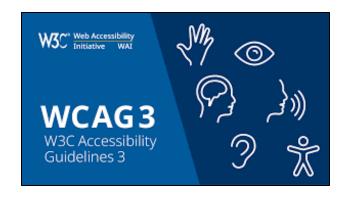
Tab to Autocomplete: The Effects of AI Coding Assistants on Web Accessibility

Peya Mowar Yi-Hao Peng Aaron Steinfeld Jeffrey Bigham





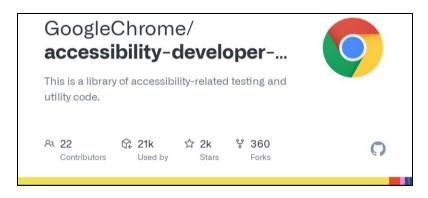
Efforts in Web Accessibility



Web Accessibility Content Guidelines



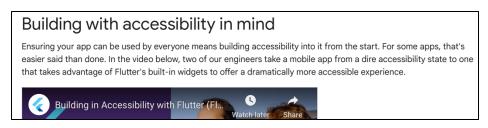
Accessibility Trainings



Accessibility Developer Tools



Accessibility Research



Developer Advocacy and Awareness



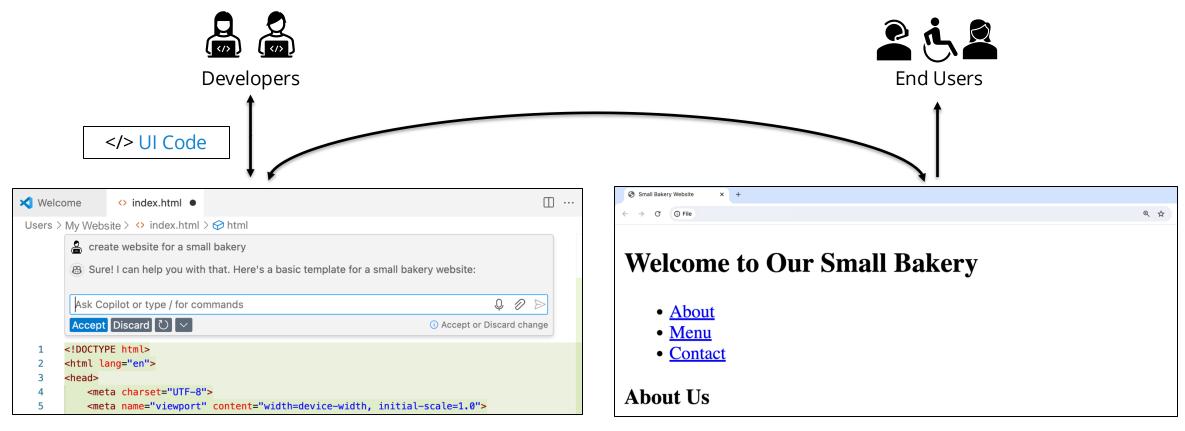
Legal Requirements

Challenge: Still requires developers to care about accessibility!





Developers Are Adopting AI Coding Assistants



Integrated Development Environment (IDE) with AI Coding Assistant Plugin

Rendered Web UI (User Interface)



Research Questions

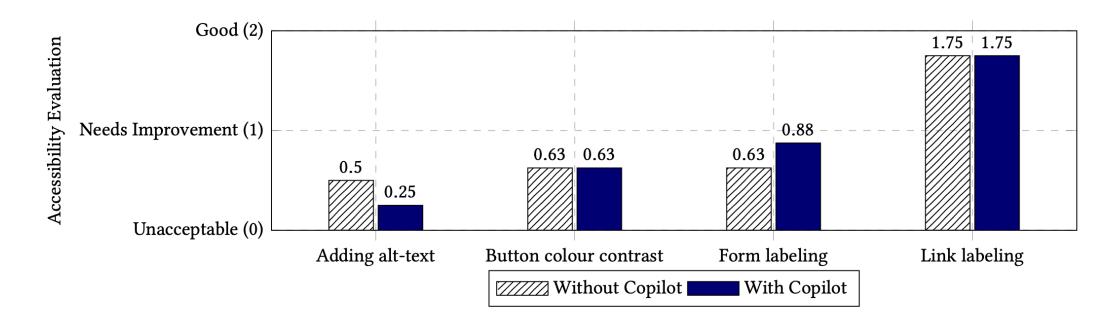
- 1. Can AI coding assistants produce accessible code?
- 2. How much accessibility expertise is required to benefit from AI coding assistants?

Methods

16 developers **untrained** in accessibility were tasked with web development tasks with GitHub Copilot, a popular AI coding assistant



Findings



Mean Accessibility Evaluation Scores by Tasks and Copilot Usage: Higher scores indicate that participants were successful.



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