



THE A11YPHANT IN THE ROOM

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About Me



Government
Digital
Services

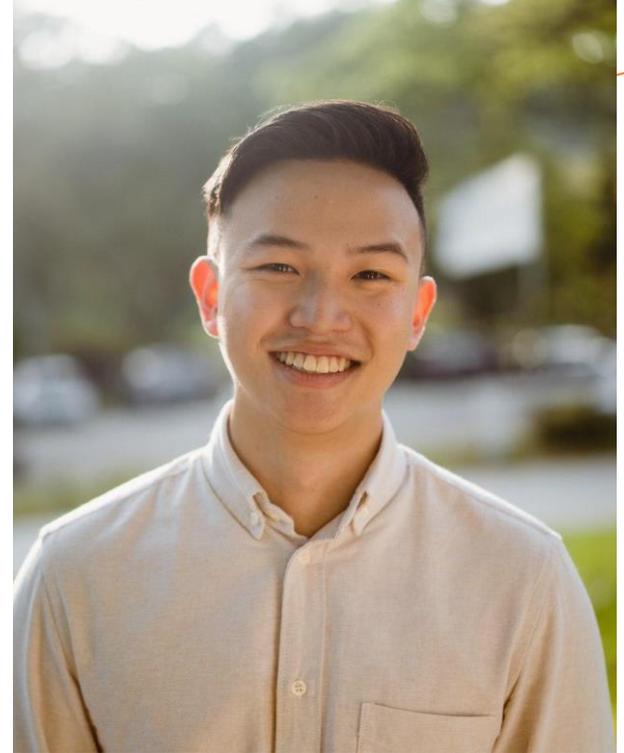
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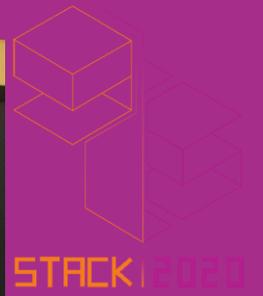


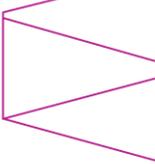
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Supply**Ally**







a11y



5/12/2019

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accessibility

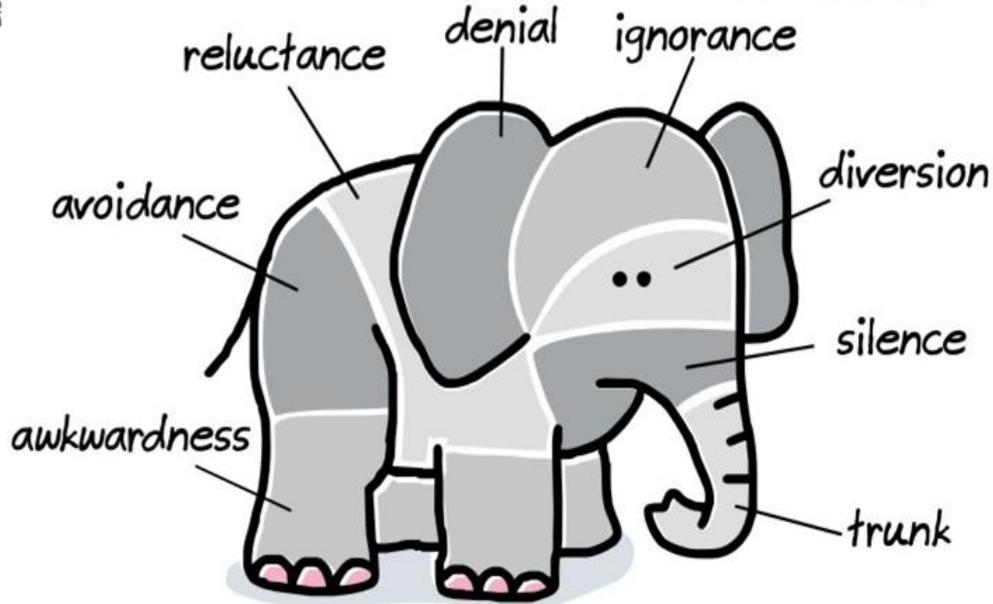
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PARTS OF THE ELEPHANT IN THE ROOM

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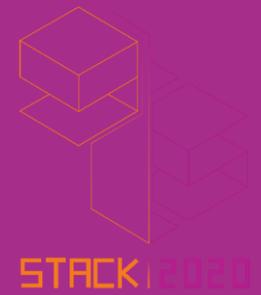


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Who benefits from this?



USER RESEARCH





USABILITY ISSUES

Button

Button

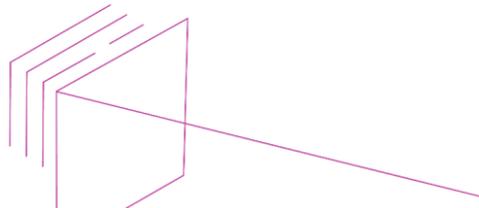
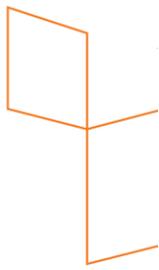
OUR FINDINGS

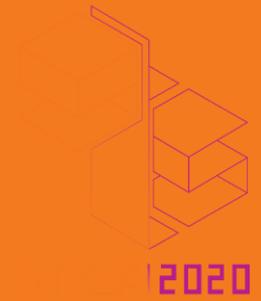


Labelling of elements/status

Inaccessible Captcha

Easy to rectify yet critical issue
for PWDs





BUILDING OUR A11Y TOOL



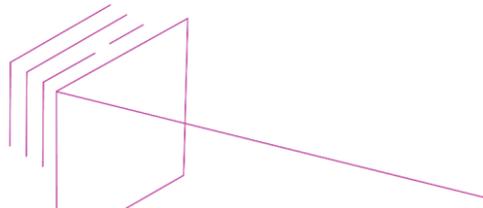
Purpose & Mission



Early detection of violations



Target root cause and rectify during software development cycle



What it does



Highlight key issues & provide easy to fix solutions

Prioritise violations for a11y scoring

New Priority Score = AXE Severity * (1 + Local Factor).

DEMO





SPREADING THE WORD



How GovTech created a web accessibility testing tool

09 MAR 2020

Ask Liamie @ GovTech



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Web Accessibility Testing for Singapore Government e-Services

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ABSTRACT

The paper proposes a customized automated accessibility testing tool built on existing open source tools that makes upholding web accessibility standards less daunting and overwhelming for developers working on Singapore government e-services.

We incorporate findings from contextual inquiry (N = 8) on government e-service use by persons with disabilities (PWDs) in Singapore to help software development teams identify and prioritise accessibility test findings within the agile development cycle. Our tool incorporates a customised accessibility audit tool with rule set prioritised from the contextual inquiry, and built as part of a software package that can be rapidly deployed on continuous integration / continuous delivery (CI/CD) platforms to scale up the adoption and accessibility testing.

The goal of our tool is to deliver a usable output for developers and product managers that is streamlined, targeted, and integrated into existing workflows.

CCS CONCEPTS

• Human-centered computing → Accessibility → Empirical Studies in Accessibility • Software and its engineering → Software creation and management → Software verification and validation → Software prototyping

KEYWORDS

Web accessibility, Automated testing, Accessibility standards, Accessibility evaluation

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1 INTRODUCTION

1.1 Motivation

In the government context, there has been a growing global awareness of web accessibility as a core service standard. Almost every aspect of daily life and civic participation, from education, employment, healthcare, is mediated through digital means. Hence it is crucial for government e-services to be accessible for different populations, including PWDs [1].

A number of countries have published accessibility audits of their government websites on federal, state, and local levels [2, 3, 4]. Many, such as the US and the European Union have also consequently published their respective accessibility standards, mostly based on the WCAG, that governs public sector websites, and in many countries these standards are backed by legislation (e.g. Section 508 in the United States) [5]. However, there is limited work to link such standards to tools that can help developers proactively adhere to these guidelines, rather than to police deviants through compliance audits.

Singapore is ranked 4th in the United Nations 2018 e-Government Online Services Index [6], implying a high quality of government to consumer (G2C) and consumer to government (C2G) interactions. There are government e-services available, for virtually any domain in life, from transacting with the national savings system, Central Provident Fund (CPF), to purchasing public housing, to booking healthcare appointments [7].

More info

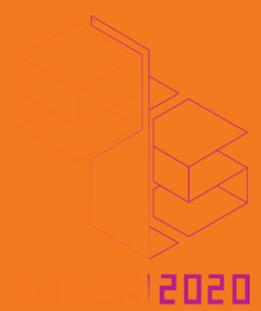


HATS

<https://www.developer.tech.gov.sg/technologies/devops/hats>

Purple HATS

<https://github.com/GovTechSG/purple-hats>



Thanks! Any Questions?

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