HW6 Debate Research

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Domino's Pizza - website ADA compliance

K. Sheikh, "Court finds Domino's Pizza Violated the ADA by Having an Inaccessible Website and Orders WCAG Compliance," online, June 2021, https://www.jdsupra.com/legalnews/court-finds-domino-s-pizza-violated-the-2182635/.

> The plantiff alleged that the mobile website violated ADA because it was inaccesible to the blind. It was not accessible using a screen reader by experts. Domino's argued the website/mobile app had no nexus to the physical stores, but this was overturned.

S. L. Henry and W. Dick, "WCAG 2.1 at a Glance," online, June 2018, https://www.w3.org/WAI/standards-guidelines/wcag/glance/.

> WCAG guidelines are made for developers to have a list of technical requirements to meet ADA compliance. Content must be perceivable, operable, understandable, and robust. The Domino's website was not perceivable by the blind, and so it didn't meet WCAG guidelines. WCAG 2.1 is backwards compatible with WCAG 2.0.

Therac-25

C. Huff, "A History of the Introduction and Shut Down of Therac-25," online, 2003, https://onlineethics.org/cases/therac-25/history-introduction-and-shut-down-therac-25/.

> The Therac-25 was a new version of an existing line of machines, for the first time with all safety features being handled by software. Several incidents were reported to the manufacturer, AECL, and each time they stated there had been no similar incidents. All corrective action was minor, without a full investigation.

A. M. Porrello, "Death and Denial: The Failure of the THERAC-25, A Medical Linear Accelerator," online, http://users.csc.calpoly.edu/~jdalbey/SWE/Papers/THERAC25.html.

> AECL had a lot of misplaced confidence in the machine, claiming numerous times that the machine couldn't have been causing problems, even as reports of injuries arrived. The software bug-checking was insufficient, and after the third accident AECL lied outright about there being no other incidents.

ÖPPNA SKOLPLATTFORMEN

M. Burgess, "These Parents Built a School App. Then the City Called the Cops," online, November 2021, https://www.wired.com/story/sweden-stockholm-school-app-open-source/.

> Skolplattform, Stockholm's official platform for students, parents, and teachers to access things like attendance and grades. Teachers and parents were both frustrated with the overly complicated system that rarely worked, and some parents took it into their own hands and created the Öppna Skolplattformen, an open source alternative for parents. The project grew, and the parents faced attempts by the city to take their app/code down, including changing their API to break the app and legal action.

Mars Climate Orbiter

"Mars Climate Orbiter Team Finds Likely Cause of Loss," news, September 1999, https://solarsystem.nasa.gov/news/156/mars-climate-orbiter-team-finds-likely-cause-of-loss/.

> After the MCO incident where a probe was crashed into the surface of Mars and lost, the problem was quickly identified within a week. A contracted spacecraft team in Colorado was using English units of measurement, while the mission navigation team in California was using metric units. The primary issue lies with the failure to detect this error before launch.

"ROOT CAUSE ANALYSIS – THE LOSS OF THE MARS CLIMATE ORBITER," online, https://dev.thinkreliability.com/case_studies/root-cause-analysis-the-loss-of-the-mars-climate-orbiter/.

> The incident can be boiled down to more than a simple unit conversion error. A lack of software validation to correct the error, lack of software testing, and the team not noticing and correcting the incorrect trajectory. The teams working on this project were seperated across the country, and inadequate effort was put into effective communication.

Patriot Missile Bug

M. Barr, "Lethal Software Defects: Patriot Missile Failure," online, March 2014, https://embeddedgurus.com/barr-code/2014/03/lethal-software-defects-patriot-missile-failure/.

> The Patriot missile defense system was designed to intercept enemy missiles by detecting and shooting them down in the air. There was a software error inherent in all the deployed systems, but it had deadly consequences at a U.S. Army barrack in Saudi Arabia in 1991. The bug caused a slight delay in the timing of the defense system, but this delay would continue to increase until the system is rebooted. During this incident, the Patriot had already been running for over 100 hours, rendering it completely ineffective.

T. Copp, L. C. Baldor, and the associated press, "Zelensky will finally receive Patriot missile systems from the U.S.—here is what they are and what they do," online, December 2022, https://fortune.com/2022/12/15/patriot-missile-defense-systems-what-they-are-and-what-they-do/.

> Even considering the failure of the Patriot system in 1991, they are still deployed around the world today. They are highly sought after in many of the allies to the U.S. Raytheon, who manufactures the system, claims a high success rate, but the efficacy has been called into question several times since. There isn't a lot of concrete evidence that the system was successful in intercepting missiles during the Gulf War, nor in Saudi Arabia in 2018.