2022
Hawai'i Annual Code Challenge (HACC)

Challenge Title	**All About Broadband, or *What <the fill-in-your-colorful-expression> is this Internet Thing?***
Department / Organization	University of Hawaii
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The Challenge	
Describe situation to be solved	The COVID-19 pandemic brought to light the devastating need for access to affordable and reliable broadband internet service. Access to the internet alone nor possession of an internet enabled device does not guarantee one's knowledge of how the internet works, its importance to society, and the ability to benefit from access to the internet. We would like to create an interactive learning application that educates the general public on how the internet works, how it reaches Hawaii, and how to access the internet. The audience is a technology neophyte, and potentially includes those that are fearful of trying new things. The interactive learning application could be utilized together with the support of a digital navigator, especially for first time use by someone completely new to technology and the internet. The interactive learning application should also help gather information from the user as to concerns, hurdles to adoption, issues or impacts to use/non-use of the technology. Resources include www.hawaii.edu/broadband/ site and infographics.
Preconditions *(How does it work now)*	1. Residents must refer to the hawaii.edu/broadband website to learn more about how broadband works in Hawaii, and must refer to external resources to locate digital literacy training courses or public internet access points; and hopefully community outreach sessions, e.g., internet access for kupuna. 2. Mistrust of the internet (particularly in cases of 5G) makes individuals skeptical of attempting "new" things, devices, technology, including the internet, or simply just fear of the unknown. 3. Classes and introductory sessions are offered in a range of venues, although post-class guidance is typically left to the individual together with their own support networks (family and friends).

Assumptions/Issues *(list any conditions that could impact the solution)*	1. Assume that there will be various levels of technology comprehension and skills - assume zero to none; and perceived misconceptions/mistrust of the internet. 2. Assume that not everyone will have access to a mobile device to access a mobile-exclusive application, although one likely path for distribution is community digital navigators
Current Approach *(how is situation currently being handled)*	1. The University of Hawaii's broadband website features information on the history of broadband in Hawaii, funding opportunities to advance access and affordability of internet services as well as devices and digital literacy. Other sources around the internet (of course, that require access to the internet). Classic fear, uncertainty and doubt that cloud things that are "new" and "different" 2. The University has developed multiple infographics to accompany website text about how the internet reaches Hawaii. 3. Residents must take their own initiative to visit the website to learn more about the internet.
Users *(Who would use the application - employees or constituents or both? How many users would there be?)*	1. K12 students primarily - estimated 170,000 students in the public and charter school system. 2. Parents and family of K12 students (that are trying to help the students figure things out). 3. Employees - using application data to improve educational material for public distribution. 4. Pockets of community members that are currently unfamiliar with technology, and that lack the ability to access help to learn.
Business Rules	Adhere to ADA accessibility guidelines. What would be do to help with adoption for the range of accessibility hurdles?
Special Requirements	Simple UI/UX. Consider gamification of the app, potentially connecting with rewards, ratings, or badges (would be useful to create a tie-in to other Digital Equity and Literacy efforts). Push for subject "mastery" as the princess/prince (or maybe neutral monarch) of broadband land.
Technical Platforms *(in use or desired to be used)*	Offer ability to link to social media platforms and WordPress website (hawaii.edu/broadband). Usernames/login portal not necessary for app; PII protections
Data set to be used or collected	Collect data about barriers to adoption (of the internet), hurdles to adoption and blockers to achieving meaningful use of the internet.

Data set calculations or reporting needs	Data collected informs Hawaii's strategy and spending plan for ~200m in public funds dedicated to digital equity, literacy and community engagement and outreach.
Solution Road Map	
Basic Flow *(steps of user action/system response)*	Independently check out the app, or participate with a community digital navigator to get started / get interested / *learn-how-to-fish*, or participate with others at a community hub to get started with the app, i.e. start out with *training wheels.*
Goal of Solution	Expand community knowledge and basic use of the internet, create awareness of the internet value proposition in fringe and unconnected communities.
Business Value *(potential financial or time savings)*	Knowledge on broadband is disseminated to the public in an application that minimizes the need for formal instruction. Data gathered from this application will inform future educational materials and outreach materials that are crafted for publication by the University of Hawaii and its partners. Inform Hawaii's investment of public funds to maximize investment outcomes.
Success Scenario *(how you know a solution is working)*	Web and social media engagement for Hawaii broadband begins to increase. In-person, higher engagement at community hubs is recorded, along with higher turnout at broadband and digital equity convenings. Ultimately, to see all of Hawaii's residents engaged with meaningful use of the internet - no one left behind.
To be completed by the HACC Planning Committee	
Community/Industry Data Available	
Potential Community/Industry Co-Sponsors	