Cyber hygiene app proposal

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Group 2

Problem

Everyone falls for a scam at some point or another. A single point of failure in technology will always be humans. But what if there was a way to help prevent scams, fraud, or people being tricked into being a victim of a similar attack before it happens? The problem my team and I want to explore is poor cyber or online hygiene. Poor cyber hygiene can cause many different issues such as financial theft or identity theft, viruses, and overall distress to the user. My team and I have recognized that this issue may not go anywhere anytime soon and want to do something about it. This is an issue that can affect almost anyone who uses technology, however, we will focus on college students (ages 18 – 26), as young adults are one of the most susceptible to scams, fraud, and other similar online attacks, next to senior citizens. Scams, fraud, identity theft, and other forms of low-grade cyber-attacks can often be prevented or improve the chances of avoiding these situations with good cyber hygiene.

Context

How is Cyber hygiene a problem? As stated before, the groups that fall most vulnerable to fraud attacks and similar attacks are those under the age of 25 and over 75. While people over the age of 75 are vulnerable due to lack of knowledge, people under the age of 25 are vulnerable for the opposite reason. People under the age of 25 are too comfortable online and more relaxed about what information they share, willing to share even their personal data online. According to a survey from Deloitte, an audit, consulting, and risk advisory company, Gen Z (people born between the late 1990s and early 2010s) are more likely to fall for scams and get hacked more frequently than their grandparents are (Ohlheiser,2023). Now why is this age group or generation more vulnerable to this when they are more tech savvy? Gen Z, they grew up online and using the evolving technology, and are more comfortable and familiar with this technology. It can be said that this generation was babysat by their devices which could give them a false sense of safety on the internet. In addition to that, cyber awareness and education are still fairly new and being improved, meaning there was little to no education and awareness being taught in schools when Gen Z was growing up, and by the time there was, it was too late for them to break their bad habits. According to a report done by Social Catfish, a company that conducts online investigations, victims under 20 years old lost about $8 million in 2017, and about $210 million in 2022 (Obi,2023) We will be conducting our own research soon by sending out a survey to students in at local colleges (TCC, ODU, CNU, etc.) to further back this data.

Solution

How will this problem be solved? My team and I want to develop an app that helps monitor and teach good cyber hygiene practices, to help reduce or mitigate this issue. We want an app that takes information from past experiences and gives recommendations on actions the person can take to learn from their mistakes. This would be a short survey the user would take

upon first opening the app. With the app we want to put in something that will monitor the user's information, this system would monitor information the user might've had that was a part of a recent breach of a site or company page they visited, maybe information that has been over shared online. This system would evaluate the risk the user may be in or the risk the information is in (such as good, the information isn't at risk, moderate, the information might be at risk, or bad, the information is at risk) and give them recommendations on how to act on this risk. This monitoring system would scan public domains for users' information (such as an email they use for login). We also want this app to have a password component, not like a password manager but something that lets the user know if the password is weak or overused and gives them guidelines for making a stronger password. In addition to this being a monitoring center for users, it can give recommendations in the form of short readings or possibly videos as "In this situation what should you do" or "In this situation this is what you're supposed to do".

Barriers

As with anyone developing an app, we aren't expecting this app to come out perfect or exactly how we want it to first try. We're anticipating issues and even failure while developing this app. My team and I are fairly inexperienced with creating an app, so we're expecting this process to be tough and a learning experience for all of us. Apps are likely to have bugs and need updates and patches, we are expecting our app to have bugs and not be perfect or function right, but this is something that every app developer will experience. With bugs being a possible issue, we are also expecting to encounter security issues we might have to work out. If an app or software has bugs, there's a likely chance that bugs can make it vulnerable or be able to be manipulated and cause further issues. This is also the issue of people trusting us and the app. Since the app will be dealing with users' data, there may be some privacy concerns associated with the app. Data privacy is a big issue right now, and although we have no plans or interest in looking at or collecting user data for nefarious purposes, people may distrust the app using their data after other sites and platforms have abused their power with user data. Another roadblock we think we might encounter is people being untruthful or unreliable in surveys, both for backing our problem and the startup survey when they first use the app. The issue we're trying to solve can be embarrassing for some people to admit and might be untruthful to avoid being ashamed. Finally, an issue that most companies and app developers may encounter when starting off is a lack of financial resources. We are all college students with limited financial resources, so we may need to find people to help invest in helping to develop our app.

Assessment

How will we know if we made it or if our app is successful? Well, the obvious answer is if the app works properly how it's supposed and if our app helps someone be safer and smarter online. We can get to this information by getting user feedback on the app. We also know that if the app is successful when we can grow to have a team working on the app and are able to bring in outside help to help develop the app further and evaluate the app's function. If we are

investing money in this app or getting investors to invest in the app, we'll know the app is successful when we start to see a return or profit on that investment in the app.

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