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EX01\_02-03: Pitch Document for House Arrest and Initial Target Audience Feedback

Problem:

Thousands struggle with online addictions, habits, and other unhealthy tendencies. Additionally, the universal dangers of childrens’ internet usage should be remedied in all households. The tools at peoples’ disposals are helpful, but each tool has major pitfalls. Our team has come up with a concept that would provide its users with a toolset that can effectively remedy these types of issues. Meet the mobile app, House Arrest (tentative name). House Arrest will serve as the most versatile internet-usage-regulation mobile app available.

Human Trafficking makes more annual profit than Microsoft, Apple, and Amazon, combined. In order to make such huge margins of demand, traffickers must generate massive supply. One of the primary ways in which this is done is via online manipulation. Traffickers manipulate unsuspecting targets, such as children with smartphones, in order to groom them into an eventual ‘pickle situation,’ before forced exploitation may occur. Specifically, children are contacted by seemingly innocent people while they navigate their mobile devices. Snapchat, online apps like ‘Among Us,’ Instagram, Blogs, and virtually all mediums of online communication are seen as weapons by traffickers. They spend hours, days, months, or years trying to gain the trust of children and to eventually create a trap situation. The scale of this problem is astronomical. Children in every city in the world are targeted. Most parents are oblivious and most children never inform their parents. It is typical for a young girl, upon creating a social media account, to be contacted by a sexual predator within the first hour. The same danger confronts boys as well. As does it confront older people who do not act safely.

Anyone who is informed about the dangers of online predation knows that every household must have defenses set up. The tools at their disposal are limited. House Arrest will remedy that with many parental control features. For example, House Arrest can recognise certain unsafe or suspicious tendencies in a user’s device. A parent can request, for instance, to be notified if a child is using their phone after midnight. The app can monitor on-screen text in order to scan for suspicious keywords and sentence combinations which are common among predatorily-manipulative conversations and report this to a parent. The toolset available to parents is immense and effective. And the app will be able to perform all desired features using what permission the user allows. In other words, if a parent is not comfortable giving that app permission to analyse what is on a user’s screen, then they are at liberty to not give the app that permission. The app will continue to run and offer alternative protective measures, given these conditions. A user will know all of the specifics, as far as permissions go.

House arrest can collect data about trafficking cases and function as an asset to police departments. Currently, there is a major problem of a lack of data about the true scope of problems surrounding child online safety. House Arrest can help solve these problems. House Arrest provides very thoughtful tools in the realm of parental control. It takes the best methods from other types of software, adds new features that have not yet been seen, and includes the unique anti-grooming technology.

One of the most destructive behaviors of our generation is the consumption of pornography. Not only does this action often involve illegal activites (even unknown to the consumer), but it enables human trafficking. Many people who create such content are actually forced to do so by traffickers. Additionally, consumers of pornography are more likely than other demographic to partake of the business of human trafficking. There are many studies which suggest that pornography couses numerous major psychological detriments. Additionally, in transparency and truth, it is a demonic playground that steals peoples’ salvations and heavenly callings.

There are various anti-pornography apps out there. However, they all suffer from major and blatant pitfalls. For example, many are based on accountability. They detect some (but not all) suspicious links and report the links to accountability partners the next day. This doesn’t prevent pornography consumptions. It only enforces accountability. Still, others attempt to block sites using complex VPN technology. Yet, there are so many loopholes and complications that makes this type of approach ineffective in many cases. House Arrest will provide various methods to prevent pornography consumption which are much more effective by combining the accountability approach with numerous other options of enforcement.

One of House Arrest’s numerous applications is in the realm of lifestyle improvement. The problem being addressed is of managing lifestyle behaviors and access to content that someone wants to avoid but on a more contextual basis. The primary features (access being based on GPS and/or network connection) can create and enforce rules based on location, rather than a global restriction. This could be used to enforce or remove habits, an example being a student wanting to reduce distractions from social media sites, and so the app could be used to remove access when at the library to help with studying. Network connections serves as another outlet to location services, as it also would indicate proximity or contexts that the rules would be made for.

Target Audience:

The main target audience is anyone wanting to have tools at their disposal to manage habits that involve the usage of other apps or internet services. Unlike a traditional global restriction, this app would help by providing more options and offering ways to still be able to use those services but only in the right contexts. An additional target audience may be those suffering more serious addictions related to device behaviors. Parents may also find the app useful as a way to manage permissions, while only restricting the functions which they choose to restrict.

Device/System Requirements:

House Arrest will take the form of an app for mobile smartphone devices. Our team will use a development kit for mobile devices, considering options such as Flutter, to help in creating the application. Also due to the team's access to only Android devices, the app will be targeted to those users (omitting the iOS platform). However, will consider options that are cross-platform where possible but not guaranteed. Due to the scope of the project, it is proposed to develop the project with identified goals with progress towards expanding the range of capabilities. The following is an initial order planned for developing/adding of available features for the scope of this semester:

1. Creating a working app that can be used to create self-imposed “rules” that can restrict network and app access.
2. Using time, GPS, and network conditions (such as which WiFi network they are connected to) as options in creating rules, to make it possible for contextual restrictions.
3. Create options to allow other users to have roles with the main user, such as authorizing access and adding/editing rules. This addition will require the setup of a web service to connect users with some having permissions over others.

For the rules to work at all, the critical system requirement is the ability to control network traffic and apps running on the device. With these abilities, the rules could actually be enforced. For the ability to have the rules take location into account, additional necessary requirements is being able to access current physical location, current network info, and current time. For better UI in rule creation, it may also be required to have access to a location api to make inputting locations easier using names of places (for example, may use the api to translate “Whitworth University” to a set of GPS coordinates).

For end resulting functionality, the app will require full-time access to the mobile device's GPS; camera access; awareness of the device's time data and the device's time zone; storage of metadata which includes keystrokes, app and web usage details, data usage, network details; awareness of the words within incoming messages via both sms and online chats/forums/posts; permission to disable privacy apps which would obstruct House Arrest's functionality; and on-screen text monitoring. Over time, in theory, the app could partner with other applications, like Facebook, in order to assure effective functionality. The app would allow users to make accounts. The app would need server access to store the information it collects. House Arrest would need algorithms which would recognize various forms of concerning activity and implement measures of security, such as notifying a parent or buddy with a linked account.

Target Audience Feedback:

From asking some individuals that would fall under the target audience (college students, parents, anti-trafficking personnel, and someone in neither category but relies on their smartphone), the following is some feedback received:

* Like the idea of a contextual/location-based firewall/permissions utility to manage app usage
* Wanted clarification on what kind of behavior it is used for blocking
* Were primarily interested in general GPS app prevention, less so on features that required heavier monitoring
* Really liked the “buddy system” of other users able to be used as accountability or enforce the rules being made.
* Were curious about options related to time usage per day/week as opposed to on/off switches.
* Were supportive of using the app, though as long as there was clarity as to what the app was accessing and what potential info could be shared or exposed because of the app.
* The app is a necessity for all parents and is a great asset to all people, in general. Like an antivirus.
* Some are susceptible to spam and scams (perhaps the app could help in this area).
* Anti-pornography apps have issues- they don’t recognise websites, VPN’s fail, they don’t let the accountability partner know activity until it is too late (like the next day). They are paid. They have too broad a scope of restrictions, or too small. Not versatile enough.
* Sample’s child gets solicited almost every day by exploiting individuals. She isn’t even one who posts typical teen girl revealing pictures. This is only known because the sample is a anti-trafficking minister and, thus, the child reports these things to her. Most children don’t.
* True scope of trafficking problem and grooming is probably much larger than the stats we have, which only report verified cases. Most are non-verified.
* People who struggle with pornography should not be demonized by their supporters, but rather supported. Otherwize, the habit can persist while becoming more secretive.
* Law enforcement usually doesn’t do anything about grooming. Most regions have terrible laws which prevent (or do not mandate/enforce) action having to do with runaways or grooming/child solicitation.
* Schools can use the app. Teachers. Anyone who can benefit from customizable restrictions that can be based on versatile variables.