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**Project Ideas**

**GPS based Shopping Cart**

This project idea will solve the issue of individuals who might be too busy to make complete shopping trips. This app will accomplish this by using active GPS tracking and based on the individual’s location it will suggest stores that are nearby that have the users created shopping cart in stock. This eliminating the need to check individual retailers’ sites for stock or inventory levels.

1. **Describe how you expect the outcome of this project to work and why it solves the problem?**

How I intend the outcome of this project to work is by utilizing a mobile app available to both android and IOS users. Allowing for flexibility no matter what brand that the user has chosen. I think by allowing for integration with peoples current shopping list tracking apps this will be useful to limit the amount of direct involvement the individual has to have for the application to start determining locations that have the product/groceries in stock. I think this solve the problem by presenting an alternative to those popular ordering apps such as Door Dash or Post Mates where an individual goes and picks up your groceries but prevents issues like out-of-stock items, substitutions for these out-of-stock items, and creates flexibility that fits to an individual own travel, and commitment patterns.

1. **Describe who will use the outcome of this project and why they will be convinced to use it.**

Those who will take advantage of the outcome for this project would be those who lead busy lives, have families, or those who are young and have long commutes. This will in general help those who lead busy lives because you don’t always have time to stop at a individual store and get a large list of shopping done. This can help those who have families because the ability to connect grocery list within the app so items can be split amongst multiple family members. Lastly this will help those who are young or have long commutes since the GPS based tracking checks individual store location along your route to work, or during your travels. Making this the perfect solution for those who are always on the go.

Hardware, Software, tools?

* Mobile Development Toolkits
* Mobile development packages
* JavaScript
* C++
* Running computer with Windows operating system.
* Access to server for testing purposes
* GPS Logging API/tracker
* DBMS for storing user login credentials.

**Skills**

* Determine best GPS application API that will gather correct information
* Learn how to integrate parts of JavaScript into backbone of code for shopping cart application.
* Understanding how SDK like Xamarin and React Native work for app development.
* Understanding of C# for object orientated programming
* Learn how to integrate LBS (location-based services) into application and also how to set up API for **location of individual** **and location on map.**

**Video & Content Monetization Tracker**

This project ideas will solve the issue of everyday content creators, individuals getting into uploading content, and anyone else who in general chooses to upload content. The purpose of the monetization tracker is to let an individual know that the video or content that they are uploading goes against the websites copyright laws, fair use policies, or inappropriate content, prior to uploading to a website. It will do this will variously checks and balances to ensure the video or creative content that you upload abides by social media, and video focused sites such as Facebook, YouTube, Vimeo, TikTok’s policies.

1. **Describe how you expect the outcome of this project to work and why it solves the problem?**

This will help inform individuals about new and ever evolving uploading policies and will give you the ability to add it as an extension in your browser. The process for the monetization tracker to work is you must enable to extension, after the extension has been enabled it will have two visual buttons one for pre-uploading the content into the extension and then another for checking the content that you uploaded into the extension. It will then reference ALL online and legal documentation on multiple different copyright, fair use and many other policies and then it will pre-flag the video that you uploaded into the extension and inform you about what possible issues you might run into across different social media platforms. This solves the problem of people’s videos being copyright stricken, taken down without warning, or ruining your chances of monetizing or making profit from your content you upload. Because it can be rather frustrating to put a video together, take your time to edit it and then not be able to even share the content that you chose to upload. The monetization tracker will act as a median between content platforms and the content maker.

1. **Describe who will use the outcome of this project and why they will be convinced to use it.**

Those who will use the monetization tracker is content creators, or general individuals who choose to upload “one-off” content. It’s frustrating to be any individual who chooses to upload content at any given time and for your content to get taken down. This can affect frequent uploaders or uploaders who might only do it casually and can leave a negative impact on how you view these platforms. Since this browser extension can determine what policy was flagged prior to upload this will also help educate the user on policies that are constantly being revised and changing across all these different media platforms.

Hardware, Software, Tools…etc.?

* Browser extension
* C++
* Internet crawling algorithm
* User-interface
* Database
* Upload Server

**Skills**

In order to complete this task there are a couple of skills I need to apply from my current understanding, but there are also some skills I need to develop over the next few months to appropriately start the initial steps for the monetization app. I’m familiar with creating GUIs in Visual Basic and in Java. I’m also familiar with the server side/client-side PHP that must be created to create a browser extension. Some skills that I still need to develop to complete this project is my knowledge beyond intermediate understanding of C++. Understanding how to properly interface coding, databases into the browser extension. I also determining what upload server I will be able to create/use in order to communicate directly to the media platforms video uploading software. The last thing I’ll need to develop to complete this project is understanding how to crawl the internet for any documentation, or literature on current/past/or future upload policies, regulations, and procedures.

**Aggregate Content Database**

This website takes advantage of already curated content but makes it easier to view under one streamline website. This aggregate music database will allow for individuals to view all their favorite artist content under one page. Rather it’s a band, content creator, actor, actress, etc. No matter what form of entertainment someone provides there will be a page for it. This is beneficial because if someone chooses to follow different artist, bands or general content creators it gets exhausting fast to have to bounce between all the different forms of social media to keep up with new and upcoming content. The Aggregate Content Database will create a page curated from multiple sources for that artist on content such as music released, the artist current schedule for touring, direct links to social media accounts, direct links to merchandise websites and much more.

1. **Describe how you expect the outcome of this project to work and why it solves the problem?**

I expect the outcome of this project to have individually integrated pages for different artists, or content creators, and rather than promoting content from those individual artists The Aggregate Content Database will be rather curating content from across the internet and giving direct links to the artists or content creator. This therefore solves the problem of resources being spread out and making it easier for individuals to get all their content in one place. This currently can be a problem if someone chooses to follow multiple different artists and social media accounts because there is no way to keep track of schedules for a artist, what merchandise is currently out, what social media accounts exists, and gets especially difficult when you might follow a professional athlete or a YouTuber who might not have someone helping run their social media accounts. The Aggregate content database simplifies this process.

1. **Describe who will use the outcome of this project and why they will be convinced to use it.**

In general, everyone has an artist, band, content creator, etc. that they enjoy watching or listening to, so all the Aggregate Content Database is doing is making it easier to navigate the content the user wants to see, rather than bouncing between multiple internet tabs or bouncing between multiple pages on a social media site. With a simple search bar on the site you can look for any artists, or content creator you want and have direct links to their pages and integrated features such as touring schedules, music playlist with direct links to Apple Music, Spotify, or wherever the artists content may be. This is just a couple of the great features that the Aggregate Content Database has to offer.

**Hardware, Software, Tools…etc.?**

* Web page
* Html
* JavaScript
* PHP
* Search Engine Bot
* DBMS
* APIs for mass searching
* Domain
* Web Server

**Skills**

The Aggregate Database will take advantage of creating a web page using HTML as the backbone and will utilize JavaScript and PHP for the client side/server-side processes. HTML and PHP are skills that I would say I have a pretty good understanding of how to create web pages that are effective, but will need to brush up on more my Java scripting skills as this will be what handles most of the server sides processes that eventually will store data in a database such as MySQL, which will just take some brushing up on since I have dealt with MySQL for database management before. Some other skills I will need to read up on more to understand will be utilizing AWS which can use Amazon Glue. A program that can store the web crawling data into a schema which can be later used for manipulation. This will be the main skill that I will have to build up on, as right now I have no familiarity with Web Crawlers.