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| **Name** | **Time** | **Description** |
| Matthew DeMott | 9/7/17 | Set up document |
| Brandon Jackson | 9/7/17 | Added function call tracker idea |
| Matthew DeMott | 9/8/17 | Added selling market idea |
| Matthew DeMott | 9/9/17 | Added clothing matcher idea |
| Joseph Herkness | 9/9/17 | Added Project 14 idea into consideration |
| Evan Bradley | 9/9/17 | Added Project 16 |
| Brandon Jackson | 9/9/17 | Added Cryptocurreny Trading Idea |
| Kyle Schrade | 9/9/17 | Job Recommendation Engine Idea |
| Joseph Herkness | 9/9/17 | Bird Call Idea and Wedding Streamer |
| Evan Bradley | 9/9/17 | Suggested Kaggle ideas for review |
| Matthew DeMott | 9/9/17 | Added more information for idea three |
| Erik Culberson | 9/10/17 | Added Pushbullet and game idea |
| Kyle Schrade | 9/10/17 | Image management idea |
| Evan Bradley | 9/10/17 | Directions app idea |
| Matthew DeMott | 9/10/17 | More info about idea three |

1. Function call tracker (Code Grapher)
   1. This will display a graphical view of a project. It will scan the code, much like a compiler does, and show where and what every line of code is doing. For example let's say you have a piece of code that you don't know what it does. You run this program on it and it will graphicly piece together the program so that you don't have to code hunt for all the different methods it calls. This was intended for someone who has never seen the code before to reduce ramp up time.
2. Selling market machine learning
   1. Not intended for the stock market but more for markets like ebay. Our algorithm will continually search for products that have high turnover and buy them when an item appears that it has a low price. Our algorithm will then flip it for a profit by posting it lower than any other listing will still making a profit. It will continually ensure that the listed products acquired by our system are the lowest listed price.
3. Clothing matcher machine learning
   1. Variation 1: User enters pictures of their clothing and our application will match their clothes based on colors and what type of clothing it is. In addition, it will track when the outfit was last worn and suggest outfits for the day/occasion.
   2. Variation 2: We acquire a source of purchasable clothing and suggest articles of clothing to the user based on their preferences. Pictures will pop up and the user can click like or dislike on the suggestions. Based off the likes and dislikes our app can suggest outfits based on the likes and suggest more clothing items. Our source could be clothing stores who pay us. Similar to a form of advertising. However, this is far less annoying than an advertisement on your facebook.
   3. Variation 3: Our app will scan trendy clothing websites and suggest outfits based on current trends and potentially take input from users.

Methods:

* Image Segmentation (<http://cs.brown.edu/~pff/segment/>)
* <http://colormind.io/>
* <https://www.technologyreview.com/s/608116/data-mining-100-million-instagram-photos-reveals-global-clothing-patterns/>

**Idea three expanded/generalized**

* First off, I want to present that as a good idea to Patel (if we choose it). My idea would be to create a proof of concept (more or less) to show what the idea can be. Obviously, there are a lot of parts and potential complexity to this. However, if we show a glimpse of its potential and show how good it can be (with a pretty design, Patel loves pretty), I think it can go far enough in Patel’s eyes to give us a chance to win and definitely get a good grade.
* General idea is to provide “channels” of different products. This entails a tinder/pandora type interface. So songs/people are now products where you can like or dislike a product. Products will be suggested by user input that being likes/dislikes and different types of tags that users enter upon starting of the app. This is similar to netflix where they ask you what type of genres or shows you like.
* The business idea behind this is, that customers have a central location where they can pick a channel of the type of product they are searching for and our application will search either the web or the entered products from businesses who want their products on our app. Our app will be doing the “dirty work” for the customer and the customer can have products brought to their attention that they otherwise may not have seen. This is essentially are more glorious and less annoying way for businesses to advertise. They are advertising to people who are actually actively looking for products.
* Our application will provide the company/website where the user can find the products they have liked.
* An idea for further thought/expansion would be to allow a search function using tags.
  + For example: I specifically want to see all the nike running shoes. So I, the user, would select tags running, shoes, nike. Or some other type of searching function. Our application will then bring forth the available options we have that fit those tags.
* For initial setup, we could have a basic database or website we set up where we can draw from that for start up.
* Name ideas
  + Brand central station (transportation theme)
* Logo rough draft
  + 

1. Project 14 from patel
2. Project 16 from patel
3. Cryptocurrency Trading Bot
   1. Use machine learning to predict trends in the cryptocurrency market and automatically sell/buy cryptocurrency with the intention of increasing profits.
   2. An easy front end for this is something like Yahoo finance. But if you have ever used it you can see there are some real problems with the interface. I think if we can improve this we can make a cool front end which will allow us to do as much as we can on the backend for the prediction side. This can be better fleshed out if this one is chosen.
4. Job Recommendation Engine
   1. User creates a profile.
   2. Employer creates a job listing.
   3. Employer gets recommendations for candidates, and requests meeting.
   4. User accepts or denies request and supplies a basic reason (pay too low, too far, not in michigan, etc.).
   5. Recommendation engine is improved using machine learning.
   6. This might be too similar to LinkedIn. Not sure how their service works.
5. Bird Call Identifier
   1. We all like birds, and can’t stand hearing a call we don’t recognize. What if there was a tool to identify a bird from it’s call.
6. Wedding Streamer
   1. This is more of a service i have been thinking about for a while but i am just going to throw it out there. It basically allows people who can't or was not invited to a wedding, such as grandparents that have trouble going places or people in other states, to watch the wedding online. This can be done with twitch but the real money maker is the service of doing it all, setup and such.
   2. Also it has a cool name i came up with, wedding streamer…
7. We can pick any one of these <https://www.kaggle.com/competitions>
   1. This is a cool data science competition website. We can get 1st place and win a competition on the website at the same time.
8. Pushbullet Alternative
   1. A self-hosted phone-computer connection that allows users to freely exchange data between their phone and computer. Also allows for texting on your computer by forwarding texts to the computer. The system will have a server component that the user registers with, which gives them a code to connect their devices. The computer and phone component will allow for data exchange between the user’s computer and phone. Everything will be end-to-end encrypted, so the information is secure, and since it is self-hosted, it will always be free.
9. Co op game
   1. This game revolves around 4 users playing as a team. If one user cannot complete their minigame in time then the teammate to the left loses a life. Ideally you can see all four players on the screen at once. Essentially this game is based on the weakest link.
10. Image Uploader Expanded
    1. This is an image management website that also users to upload their photos and organize them the way they see fit. We can have albums of the photos and a tagging system. In addition, we can create a way to display their photos as a slideshow for showing others.
11. Campus Direction App
    1. This app will solve the problem of finding your classes on the first day. It will provide a map on your phone, but also will direct you using the camera. It will identify the buildings the camera is pointed at and will use an arrow to point you in the direction you need to go in.