

Project Components:

- Scan paper receipts (image parsing)
- Keep record of scanned receipts and cross reference against PDF statements (PDF parsing)
- Capability of donating coupon on your receipt to another user (enters it into a centralized database)
- Display statistics on user's spending
- Give user option to download receipts, or statements

Tech/Skills/Resources:

- Xcode
- Firebase or some google product
- Create app in Xcode
- Send photos to the cloud (and then send back text packet)
- Focus on paper receipts
- Pdf parsing
- Python programs running on firebase platform which are accessed by the app
- Pytesseract - image to text

Resources

- <https://ericasadun.com/2016/12/04/running-python-in-xcode-step-by-step/>
- <https://firebase.google.com/docs/ios/setup>

Image Recognition Specs:

- Firebase manages the calling of the python script and passes in an image
- Python returns string packet

Database:

- Table to store all the receipts associated with a specific account
 - Store datetime, vendor, total, and last four digits of CC
 - Has the receipt been matched to a statement?
- Table to store all the statements associated with a specific account
- Table to store all publicly usable coupons

IOS App

- Login
- Take photo
- Upload photo (of receipt) and PDF (bank statement)
- Access to receipt/statement data
 - And ability to download
- Option to donate coupons during photo

File Parsing

- Use Python and various libraries to identify all the bank, credit card last four digits, and all the transactions from a statement PDF

- Currently optimized for a few different banks (Chase, BofA), and most likely will not work for others

<https://console.firebase.google.com/project/receiptsandmore-2c960/overview>