

Receipt Keeper

Receipt Management Application



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Mobile Solutions Development

Team members



Changho Choi

- Mobile UI/ Web Sync.



Hassan Nahhal

- Mobile UI/ Back-End



Nicholas Collins

- OCR/ Mobile Front-End



SungJoe Kim

- Web UI/ Front/ Back-End



➔ Introduction



- be familiar with spending
- avoid impulse buying
- manage your money
- save you time & effort
- here's the way ...





Agenda



- **problem**
- **solution**
- **technologies**
- **methodologies**
- **features (mobile/ web)**
- **future plans**
- **conclusion**

! Problem



- forget stuff bought
- tracking all of this is a handful
- strict budget
- alternative is not ultimate
- a long process to start using it
- offer limited functions
- focused on private, personal use

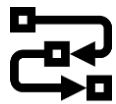


Our Solution

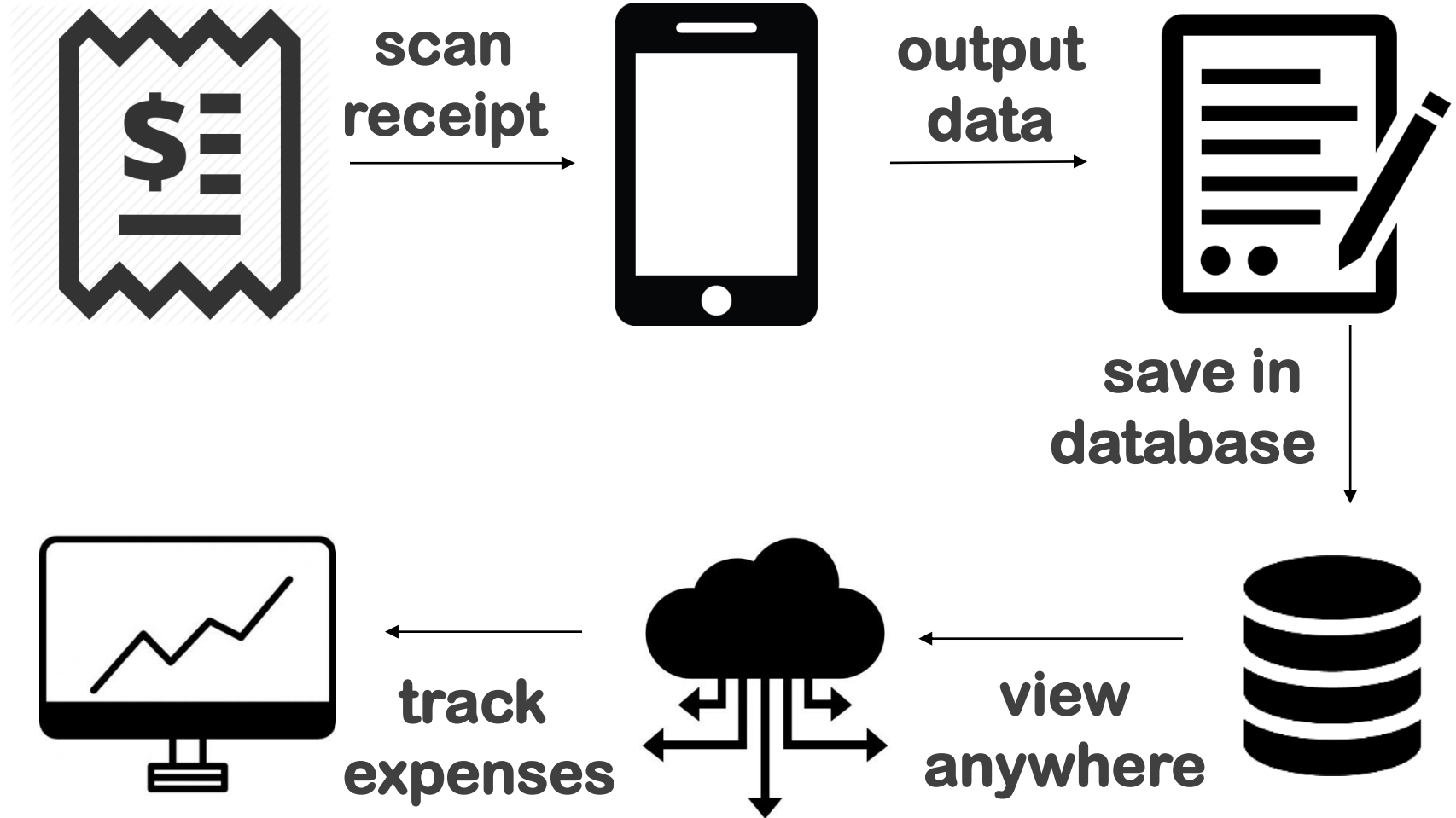


- quick and easy access to start
- no extra devices required
- scan receipt & store it online
- filter, search for receipts, export as files
- generate charts, reports feedback
- support working in groups





Work Process





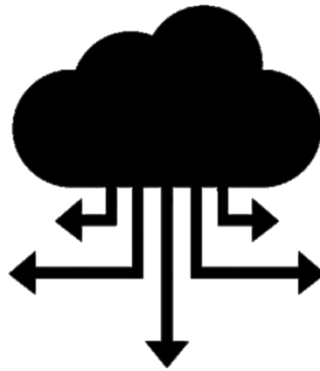
Technologies



BAAS



DAAS



PAAS / SVC



mobile



web



Methodologies



development methodology

- Agile Unified Process (2 week iterations)

source control & change management

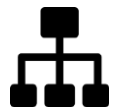
- 3 GitHub repositories
 - master and branch (dev_prod)
 - wiki to keep track of outcome
 - issues tracking to assign fixes or tasks



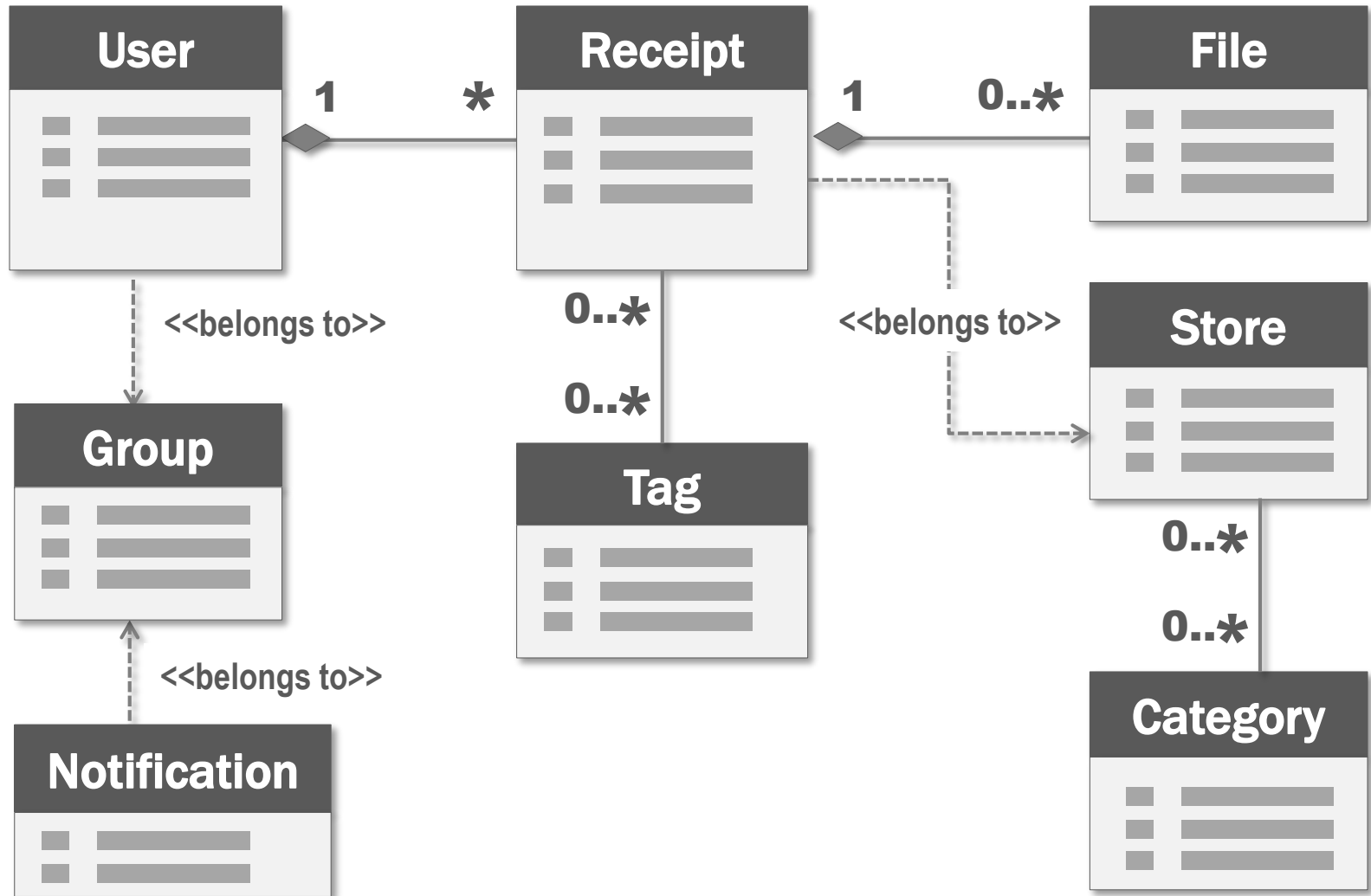
communication

- Slack and regular meetings



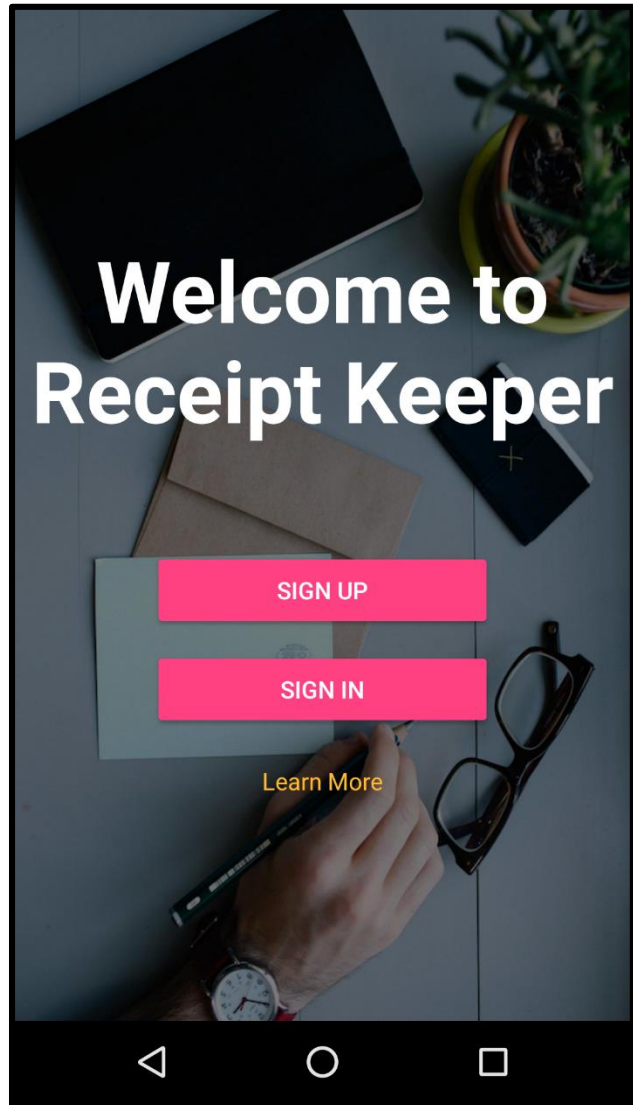


Domain Model





Features (mobile app)



Receipt Keeper

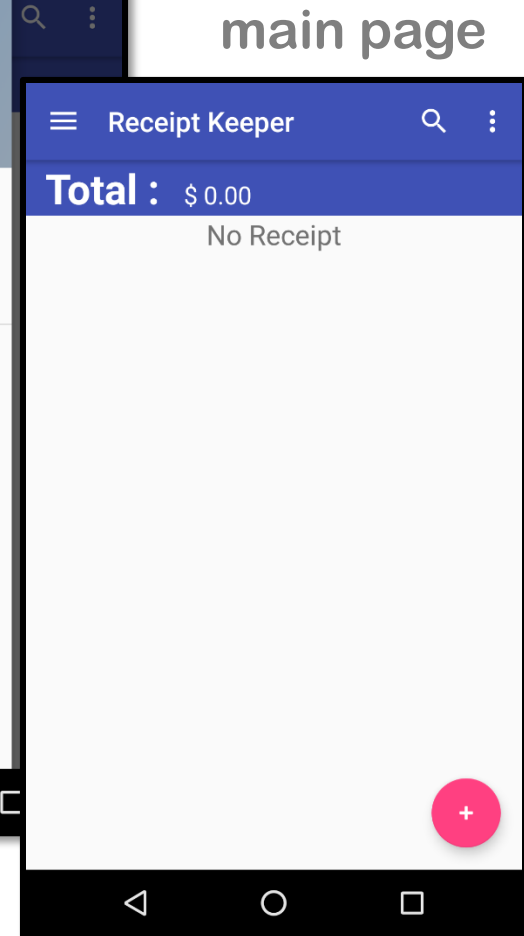
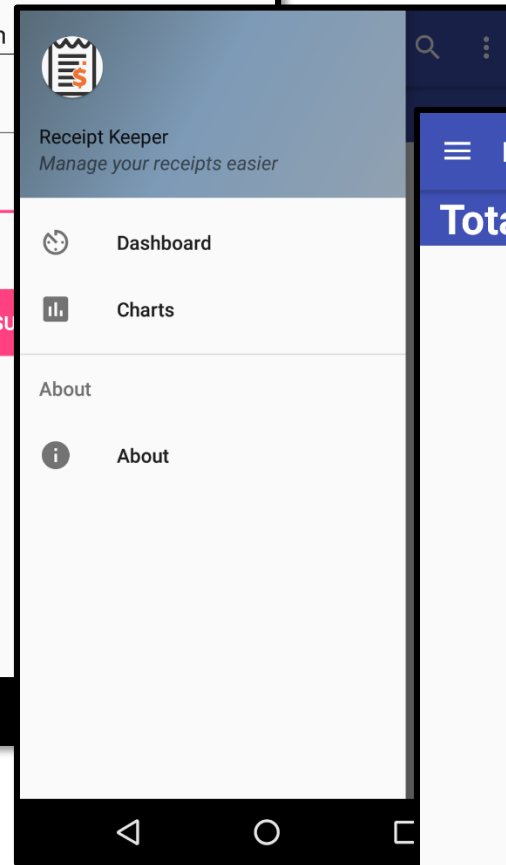
Email
hassan@test.com

Password
.....

Name
hassan

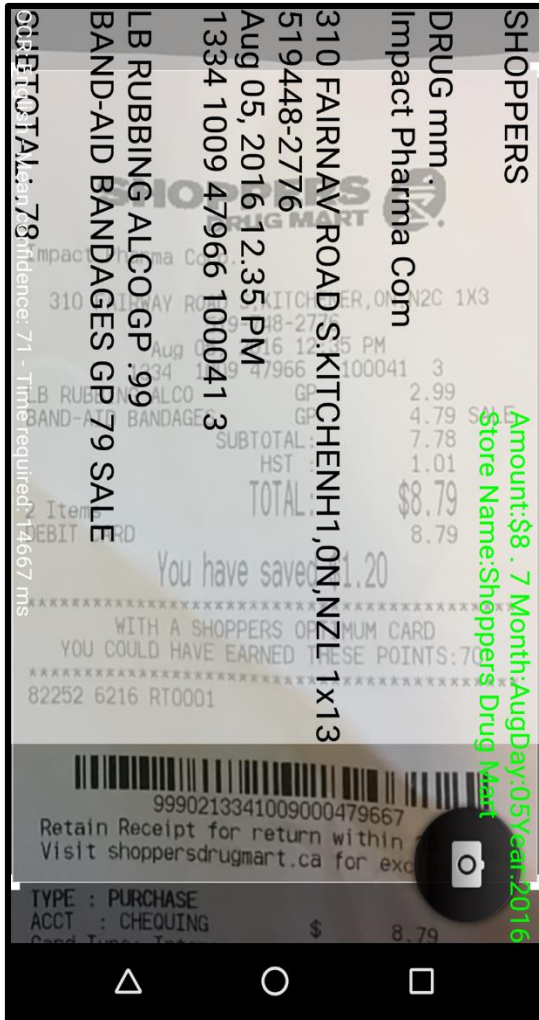
☒ Auto login

sign up/in

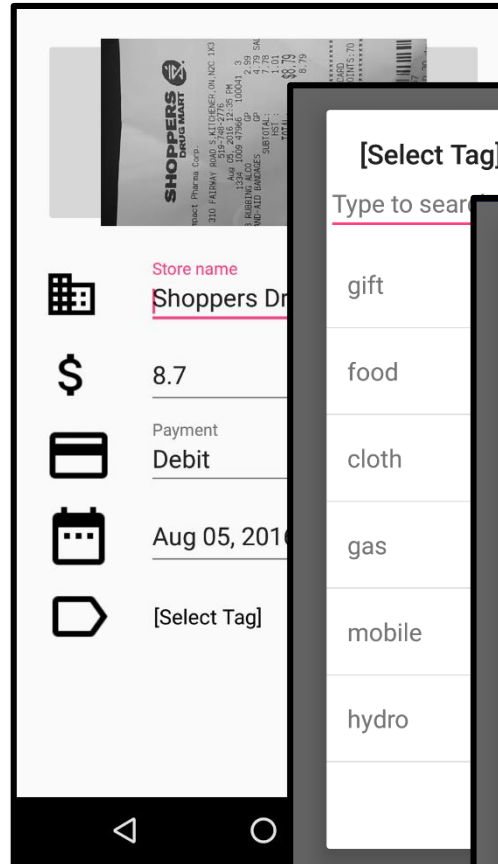




Features (cont.)

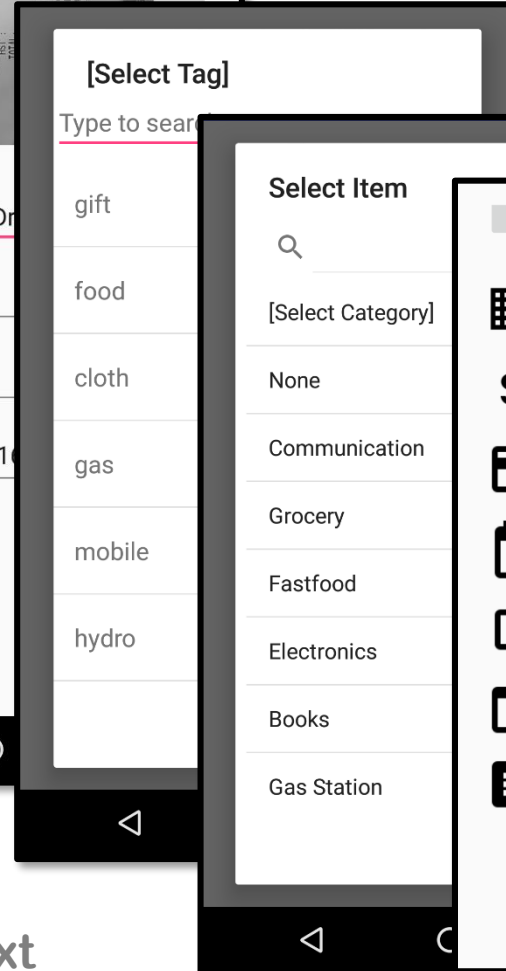


scanning receipt



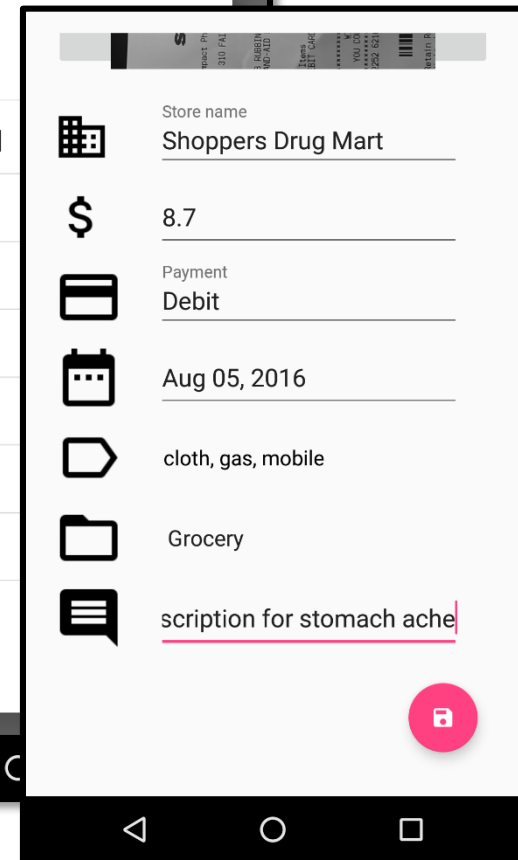
data collected through text recognition

add tag



select category

save receipt





filter results

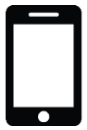
web
sync.



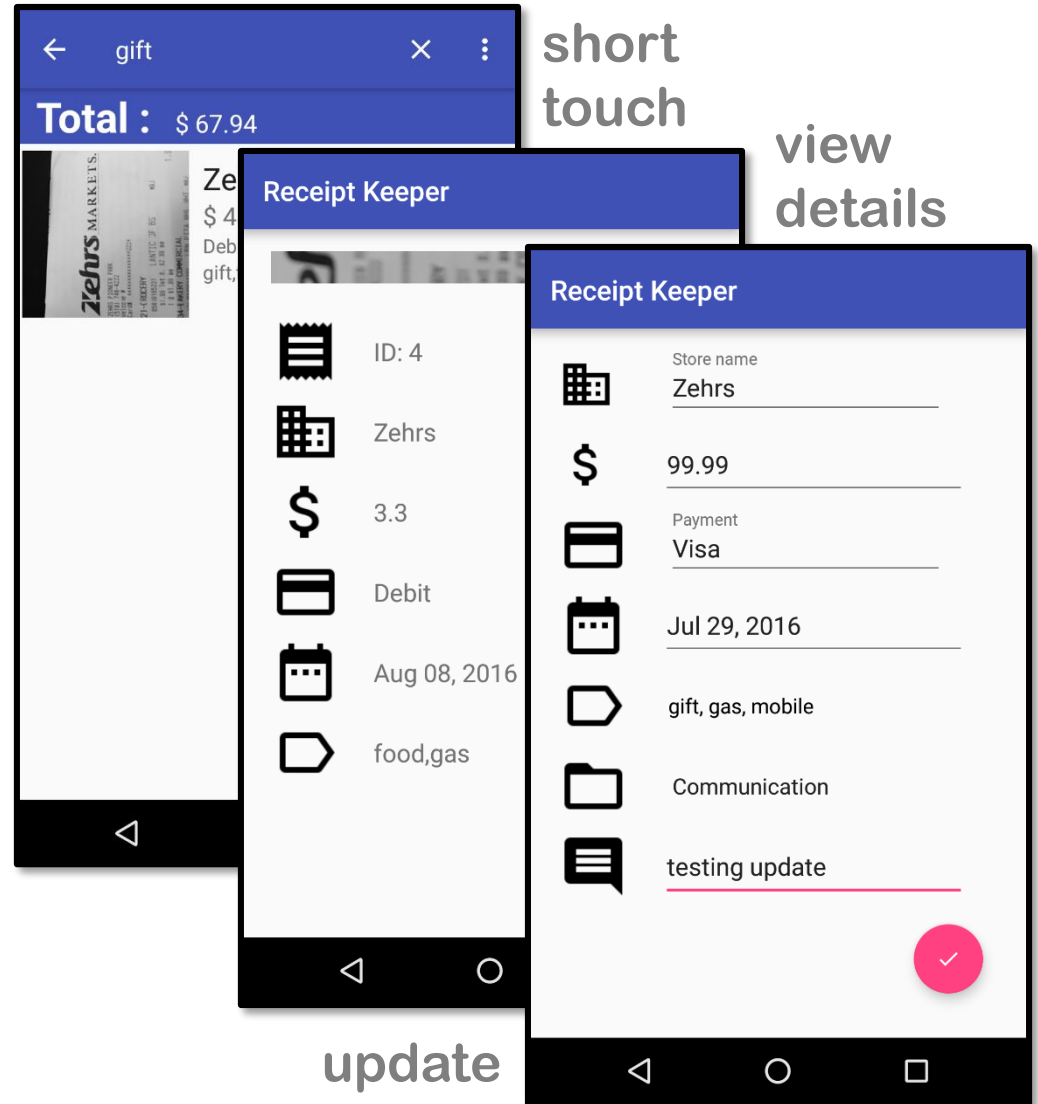
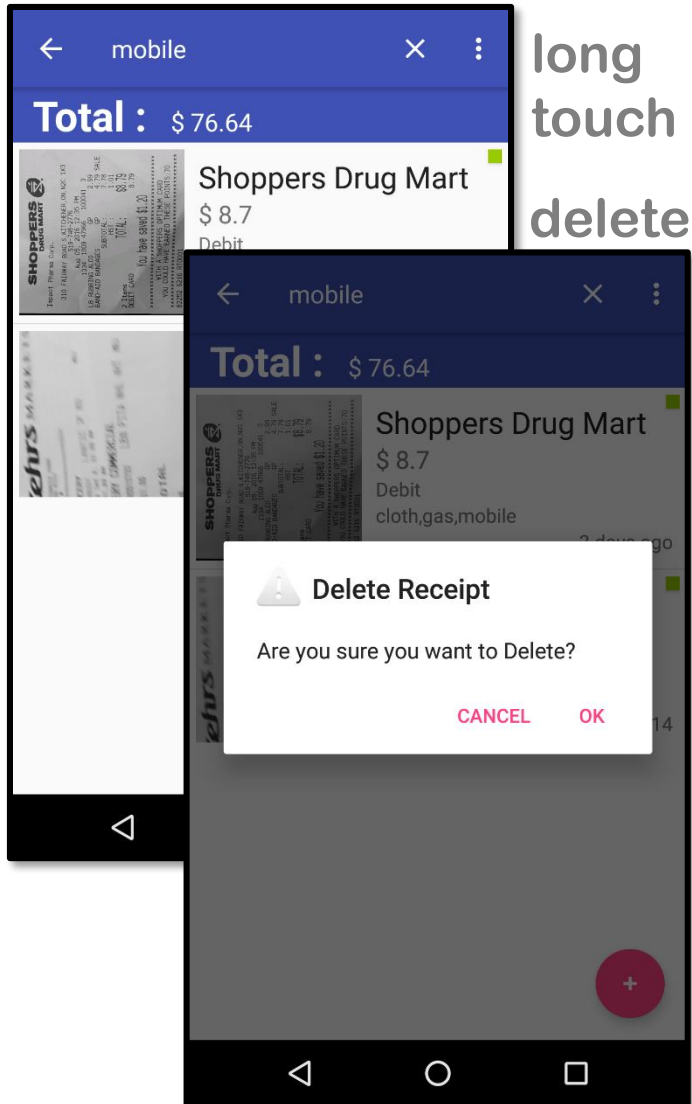
receipts list

RESET

APPLY FILTER

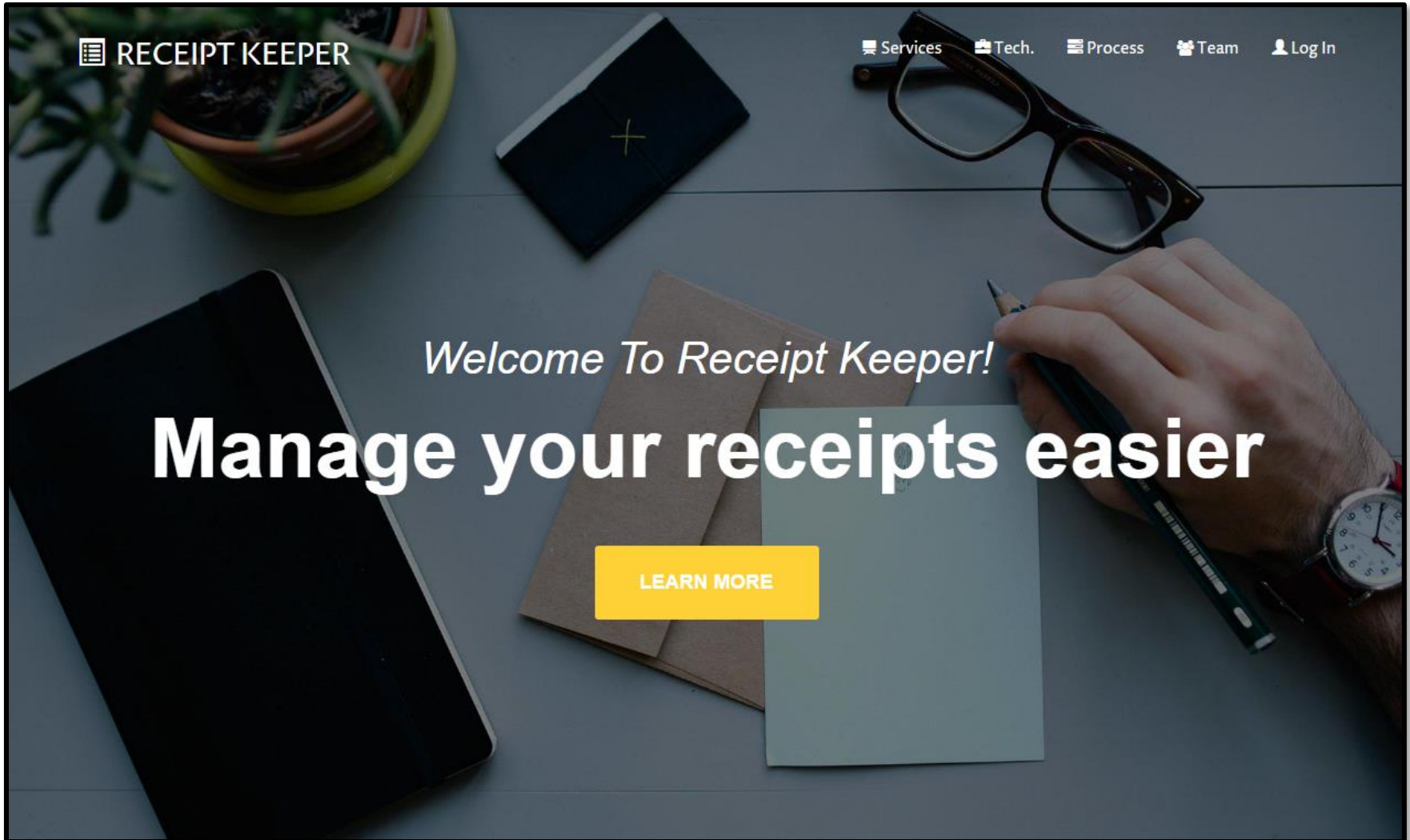


Features (cont.)





Features (web app)





Features (cont.)



RECEIPT KEEPER

Charts Receipts Groups Config User

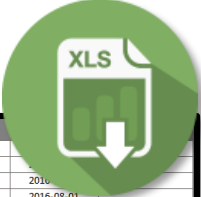
RECEIPTS

Search text

Store	Total	#Item(s)	Date	Comment
Food Basic	\$120.00	7	2016-08-04	
Tim Hortons	\$15.00	2	2016-08-03	
Walmart	\$50.00	2	2016-08-02	
Costco	\$250.00	13	2016-08-01	
Walmart	\$54.06	3	2016-07-31	
Sears	\$85.10	2	2016-07-30	
Walmart	\$25.13	2	2016-07-29	
Kumon	\$33.01	1	2016-07-28	
Hudson's Bay	\$67.12	5	2016-07-27	
Food Basic	\$75.62	11	2016-07-26	

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Add Receipt



Store	Total	#Item(s)
Food Basic	\$120.00	7
Tim Hortons	\$15.00	2
Walmart	\$50.00	2
Costco	\$250.00	13
Walmart	\$54.06	3
Sears	\$85.10	2
Walmart	\$25.13	2
Kumon	\$33.01	1
Hudson's Bay	\$67.12	5
Food Basic	\$75.62	11
Farm Boy	\$120.74	10
Food Basic	\$80.16	2
Costco	\$66.32	4
Canadian Tire	\$100.05	1
Best Buy	\$50.62	6
Food Basic	\$22.89	1
Zehrs	\$56.47	6
Walmart	\$130.56	1
Tim Hortons	\$33.19	7
The Home Depot	\$20.48	3

ADD RECEIPT

Store name: Category:

Date:

Total Price:

Comment:

Back Save Receipt


- search/ sort/ pagination/ excel export



Features (cont.)



RECEIPT PHOTO



Close

RECEIPTS IN TAG

Receipts in 'health'

Store	Total	#Item(s)	Date	Comment
	\$250.00	13	2016-08-01	purchase
	\$56.47	6	2016-07-19	
	\$66.00	3	2016-07-12	
Food Basic	\$1,000.00	12	2016-05-19	
Farm Boy	\$200.00	6	2015-06-22	
Canadian Tire	\$10.00	1	2015-06-21	
Shoppers Drug Mart	\$300.00	3	2015-06-02	July
Hudson's Bay	\$1,367.66	14	2015-03-22	

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Close

RECEIPT KEEPER

Charts Receipts Groups Config User

RECEIPT DETAILS



Store name	Costco	Category	Grocery
Date	2016-08-01	# Item(s)	13
Total Price	\$250.00	Tag(s)	food natural & organic health
Comment	purchase		

Back Receipt Photo Edit Receipt

CONTACT

Email
Changho Choi (Cchoi1803@conestogac.on.ca)
Hassan Nahhal (Hnahhal2602@conestogac.on.ca)
Nicholas Collins (Ncollins9293@conestogac.on.ca)
SungJoe Kim (Skim0082@conestogac.on.ca)

SOURCE LINKS

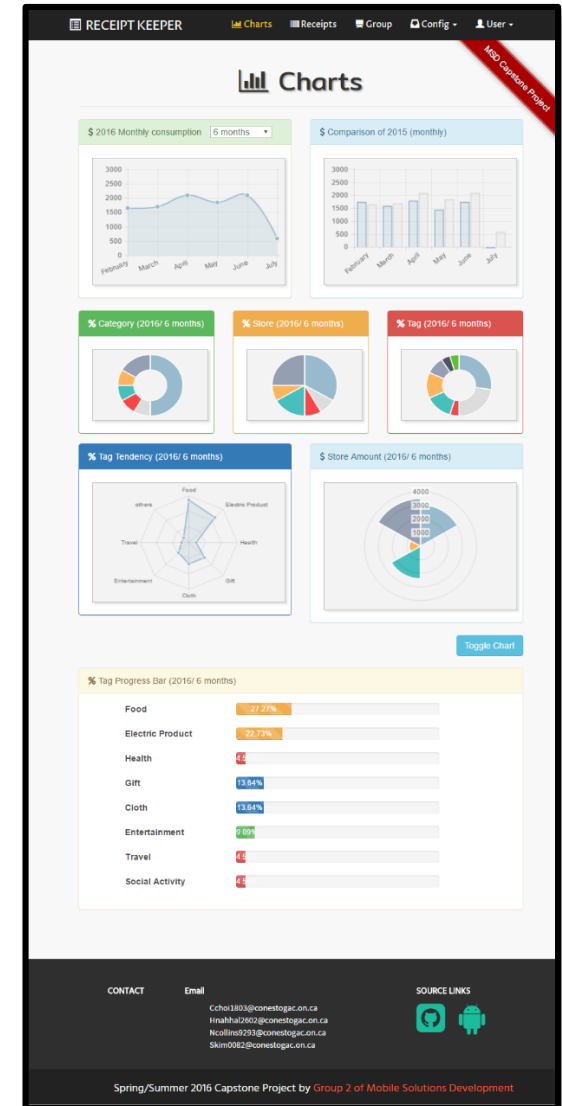
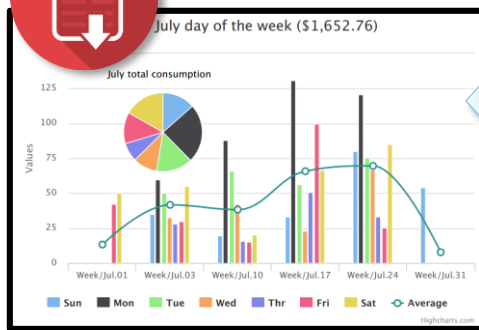
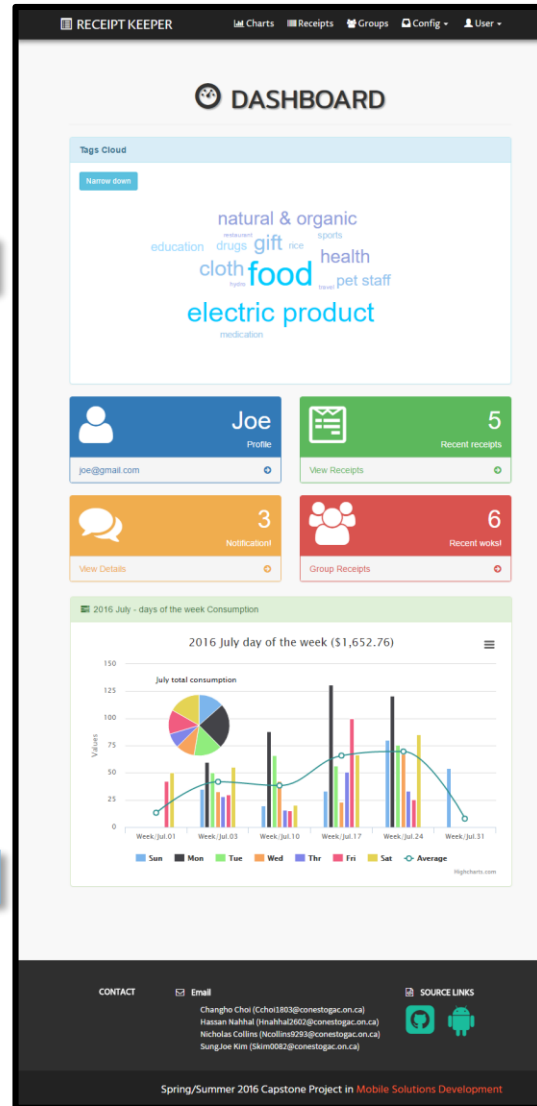
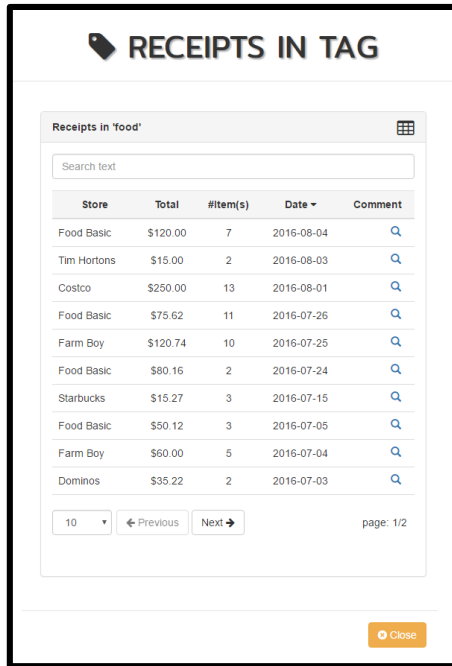


Spring/Summer 2016 Capstone Project in Mobile Solutions Development

- receipt photo/ extract receipts from tag

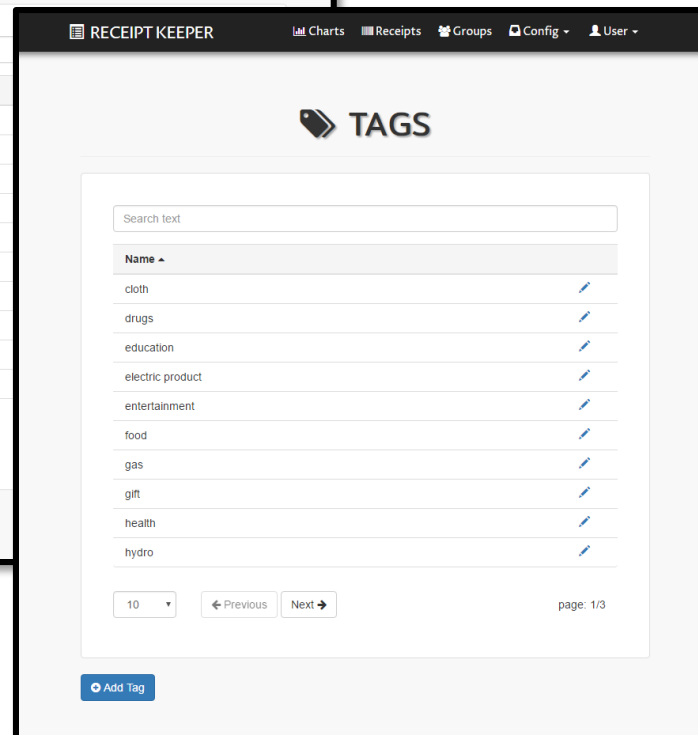
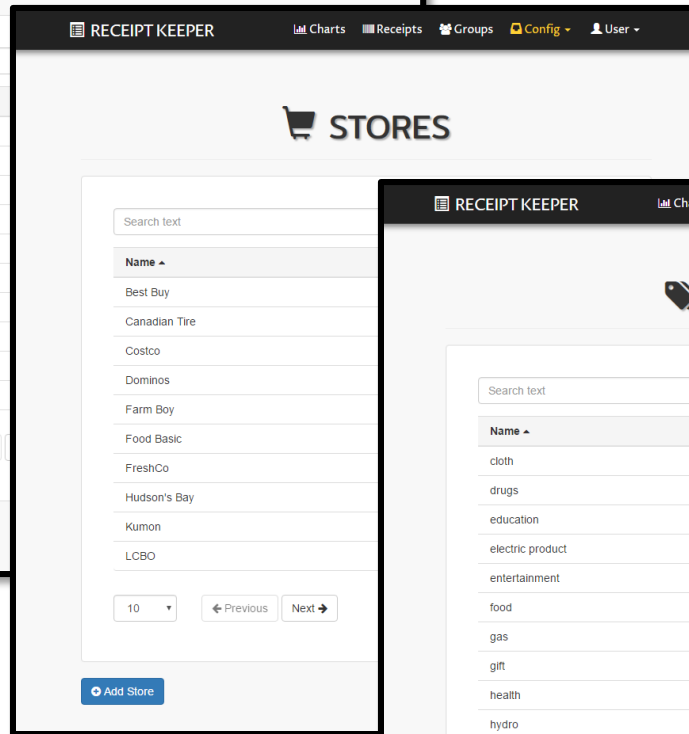
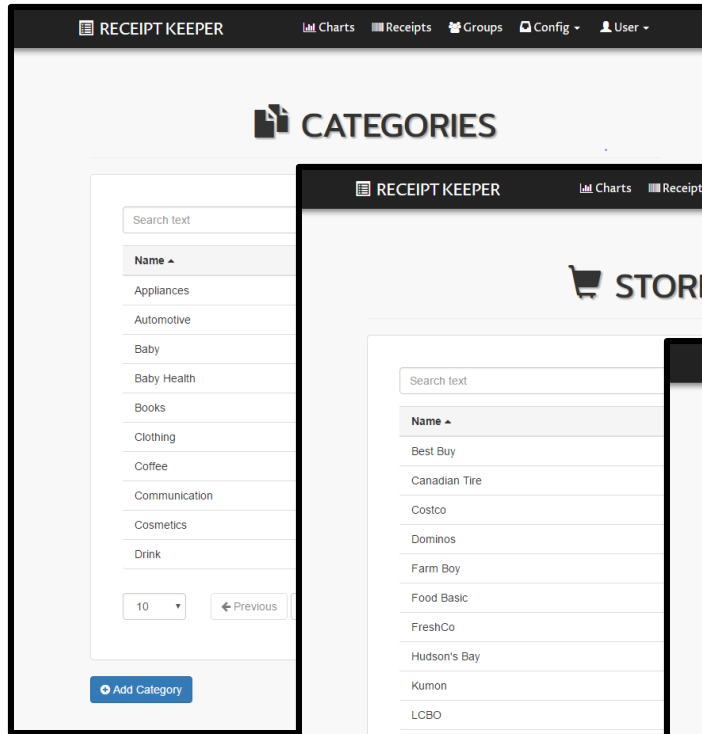


Features (cont.)





Features (cont.)



user organize data structure

- category/ store/ tag
- view reports based on them





Features (cont.)



- create group
- works in group
- invite member
- store & share

Member list

nnn@gmail.com

kkk@gmail.com

Invite member

Email

Invitation

Invitation list

yyy@gmail.com

sss@gmail.com

Leaving Group

nnn@gmail.com (request of leaving group)



RECEIPT KEEPER

Charts Receipts Groups Config User

GROUPS

Group as owner

MSD Group

Group as member

MMM Group

Notification

Invitation for a group (ooo@gmail.com)

Leaving Request

Request for leaving (nnn@gmail.com)

Back

CONTACT

Email

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SOURCE LINKS

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Future Plans



- **save daily paperless receipts**
- **import/ export in various formats**
- **switch between account type**
- **combine multiple images**
- **OpenCV to improve accuracy**
- **track each member in group**
- **retrieve from specific item**



✓ Conclusion



- scan receipts with mobile devices
- save data local or online
- track spending
- view and export reports as files
- provide various visual information
- access anywhere/ anytime
- support working in group



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