

The simple cost-effective inventory management solution for the small-sized Nonprofit organization (NJ Kkottongnae)

using a raspberry pi with React, Nodejs and Expressjs (web-app & mobile)

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1/8/2020

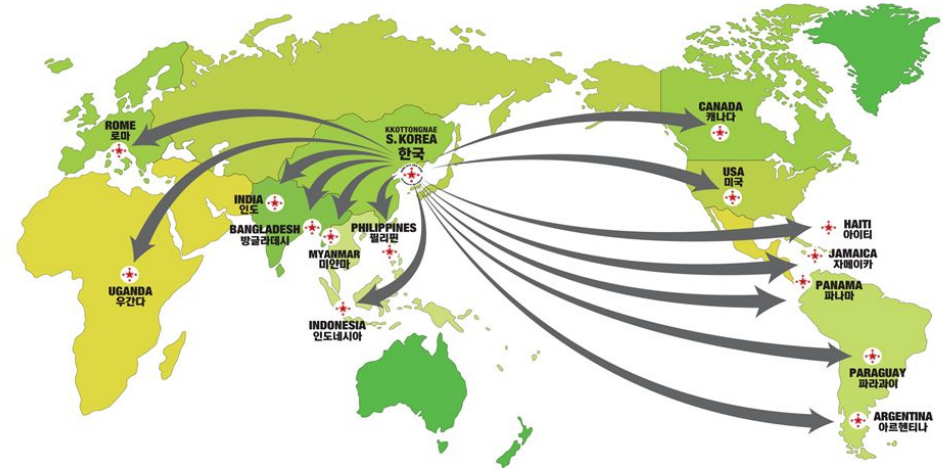
Kkottongnae

- Catholic non-profit community to help poor people
 - Running shelters for the homeless, the mentally ill, the elderly, the disabled, etc
 - Providing foods regularly
 - Sending the donated items to their branches in th poor countries



해외 꽃동네

OVERSEAS KKOTTONGNAE COMMUNITIES



Haiti

- One of the poorest countries in the Western hemisphere
 - One of the most densely populated & least developed
 - 80% of residents are in poverty
 - Politically unstable and extremely vulnerable to natural disaster

From <https://www.worldbank.org/en/country/haiti/overview>



Current volunteering work

- NJ Kkottongnae ships the donated items to the Haiti kkottongnae every month
 - Many volunteers help to classify the donated items and pack into boxes



Current volunteering work

- Limitations
 - Only 3 laptops & 3 barcodes (Budget limit)
 - Item and box information is stored in local copies of the master MS Excel file. (Sync problem)
 - Volunteers sometimes enter info incorrectly



LABEL	CONTENTS	BARCODE	CONTENT	QTY	Unit (oz)	Unit (g)	Unit (lbs)	Calc	Unit (\$)	Type	Category
SRN-1		87684000953	PACIFIC COOLER	1	60	0	0		3.17	Snacks/Juice	
		811964010819	corn meal	1	32	0	0		9	Grains/Cereals	
		83737290117	Seasoning Sauce	4	20	0	0		0	Necessities/Coffee	
		81508550119	Corned oil	2	27	0	0		3	0	
		8851954113207	Striqa Panich	6	19	0	0		0	Necessities/Coffee	
		50700058320	Mustard Sauce	1	12	0	0		0	Necessities/Coffee	
		48001219885	chicken flavor bouillon with other natural flavo	0	9.3	0	0		2.29	Necessities/Coffee	
		43000953032	Kodi-Ashi- Cherry	1	19	0	0		3.3	Flours	
		736011734990	CHOCOLATE BITES	6	4.5	0	0		0	Snacks/Juice	
		941840150073	YOGURT FRETZELS	11	4.5	0	0		1.76	Snacks/Juice	
		94184015004	blueberry pretzels	7	4.5	0	0		1.76	Snacks/Juice	
		---	---	0	---	---	---		---	---	
LABEL	CONTENTS	BARCODE	CONTENT	QTY	Unit (oz)	Unit (g)	Unit (lbs)	Calc	Unit (\$)	Type	Category
SRN-2		8851954113207	Striqa Panich	4	19	0	0		0	Necessities/Coffee	
		718460806309	Coco Lopez Real Cream of Coconut 15 oz	1	15	0	0		5.08	Cans/Glasses	
		72940756002	CRUSHED TOMATOES WITH BASIL	1	28	0	0		1.24	SOUCE	
		27700001042	DICED	2	28	0	0		2.4	Cans/Glasses	
		48001219885	chicken flavor bouillon with other natural flavo	30	9.3	0	0		2.29	Necessities/Coffee	
		852409030375	Potato Chips Barbecue	0	4	0	0		0	Snacks/Juice	
		---	---	0	---	---	---		---	---	
LABEL	CONTENTS	BARCODE	CONTENT	QTY	Unit (oz)	Unit (g)	Unit (lbs)	Calc	Unit (\$)	Type	Category
SRN-3		3800091608	Kellogg's Frost Loops Cereal - 43.6 oz.	1	43.6	0	0		6.15	Grains/Cereals	
		71300000795	Rotini No.75	6	16	0	0		1.72	Pastas/Noodles	
		48001219885	chicken flavor bouillon with other natural flavo	25	9.3	0	0		2.29	Necessities/Coffee	
		---	---	0	---	---	---		---	---	
LABEL	CONTENTS	BARCODE	CONTENT	QTY	Unit (oz)	Unit (g)	Unit (lbs)	Calc	Unit (\$)	Type	Category
SRN-4		2416000252	ADULT Beans	1	15	0	0		0	Cans/Glasses	
		13000000069	Real Mayonaisse	1	30	0	0		3.48	Necessities/Coffee	
		72940756002	CRUSHED TOMATOES WITH BASIL	1	28	0	0		1.24	SOUCE	
		3800091608	Kellogg's Frost Loops Cereal - 43.6 oz.	1	43.6	0	0		8.15	Grains/Cereals	
		24094071180	Zita Cul no.118	1	0	0	1		0	Pastas/Noodles	
		341531024964	Carrotini	1	16	0	0		0	Grains/Cereals	
		9434155440105	Mafia Cookies	9	7.04	0	0		0	Snacks/Juice	
		746734033521	Soda Crackers	26	1.06	0	0		0	Snacks/Juice	
		---	---	0	---	---	---		---	---	

Current volunteering work

Barcode	Barcode	Content	Unit (oz)	Unit (g)	Unit (lbs)	Unit (\$)	Category
11088500000000	COVIDIEN	COVIDIEN Gauze Sponges	3			1.9	
182741000000	NATURAL NECTAR	NATURAL NECTAR CHOCO COOKIES 15.87oz / x3	5.29			4.1	
185889000000	PEELED	PEELED ORGANIC CHILI MANGO 11.2oz / x4	2.8			3.9	
192699000000	SAMYANG	SAMYANG BIG BOWL 40.8oz / x2	20.4			3.9	
10041390024358	KIKKOMAN	HOISIN SAUCE	79.2			20.0	Cans/Glasses
10073141150054	GLICO	Pocky Strawberry Cream Covered Biscuit Sticks	24				Snacks/Juice
10073141152942	GLICO	POCKY	24				Snacks/Juice
10200229002	Indian	Indian Hexd White Corn Meal	80			2	Necessities/Coffee
10200231005	Indian Head	old fashioned stone ground yellow corn meal	32				
10300000136	Diamond Foods	Mixed Nuts	16			1.1	Grains/Cereals
10300000228	Diamond California	Hazelnuts	16				Snacks/Juice
10300000259	Diamond California	Almonds	16				Cans/Glasses
10300000303	Diamond California	brazil nuts		453			Snacks/Juice
10300102793	Emerald	Glazed Pecans 5oz	5				Grains/Cereals
10596500013	D'sabor	Whole jalapeno peppers	26				
10668000502	Cameron's	organic woods & water light roast	10			16.0	Necessities/Coffee
10700708106	PAYDAY	Peaunt Caramel Bar 11.6oz	11.6				
10900003308	Cut-Rite	Wax Paper 75 sq ft					
10900005104	reynolds Kitchens	Oven Bags TuKl size	1			2.1	Others
10900080316	Reynolds	Aluminum Foil 30 sq ft					
10909029576	Luker	Bitter Chocolate	8.8			3.9	Snacks/Juice
10909029590	Casa Luker	Sweet Chocolate	17.6			4.5	Snacks
110080196031689	medline	Alcohol prep Pad	5			32.6	Medical
110884521084254	COVIDIEN	Gauze Sponges	3			1.9	Medical-Supplies
110884527022007	COVIDIEN	SureCare Bladder Control Pads			1	11.1	Diaper/Pads/Etc
1108850000000000	COVIDIEN	COVIDIEN SureCare Bladder Control Pads 1lbs / x1				11.1	
111116000000	Belma	Sardinas Picantes En Aceite			120		
11111608658	Lever 2000	Original for healthy fresh skin	3.15			3.9	Others
111240000000	Titus	Sardinas En Aceite 125g		125			
11132136062	PURINA	ALPO Chop House	13				Others
11140871023	Hungry Jack	Hungry Jack Naturally Flavored Mashed Potatoes 15.3	15.3			1.8	Snacks/Juice
11141100290	TATA	Eight o'clock coffee 12oz	12				
11141102713	eight o'clock	100% colombian peaks coffee	11			8.9	Necessities/Coffee
11152034256	Jfc international	Jasmine Rice 50lb			50	19	Grains/Cereals
11152263557	Dynasty	Jasmine Rice	32			3.7	Grains/Cereals
11152286501	Dynasty	Dynasty chili sauce	6.5				
11152453828	Myojo	udon	7.22			1.4	Others
11152453910	Myojo	Udon	7.22			1.4	Others

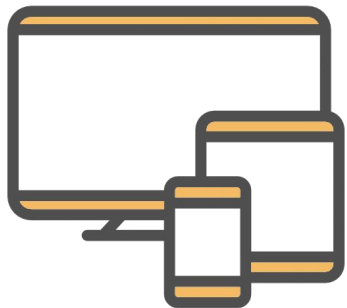
Item category list (Proven)

- Cans / Glasses
- Clothing / Shoes
- Diaper / Pads / ETC
- Flours
- Grains / Cereals
- Medical - Supplies
- Necessities / Coffee
- Noodles / Pastas
- Others
- Sauces
- Snacks / Juice

Examples of wrong item category

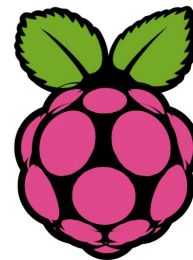
- Papper (<- typo)
- Pastas
- Peanut
- Pouder (<- typo)
- Powder
- Powder/Drink
- Powder/Food
- Ramen
- Rice
- Saly <==???
- Snack
- Snackd (<- typo)
- Snacks / Chip
- Snzcks (<- typo)
- Souce (<- typo)
- Souces (<- typo)
- Soup
- Sources
- Spaghetti
- Starch
- Syrup/Glass

Solution

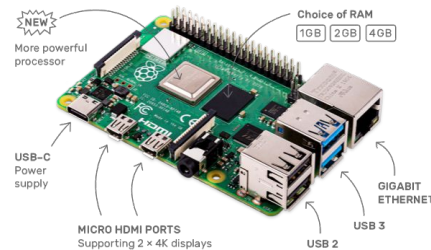


- Mobile app for an admin to enter item info
- Web app for volunteers to enter box info

Express JS



Raspberry Pi








DEMO


- Web app

Summary


BOX NAME

YUNDT





















DATE CREATED

**6/16/2019,
5:06:07 PM**

CONTRIBUTORS

elisha05

DESCRIPTION

**Eveniet atque
ipsum dolor
excepturi.**

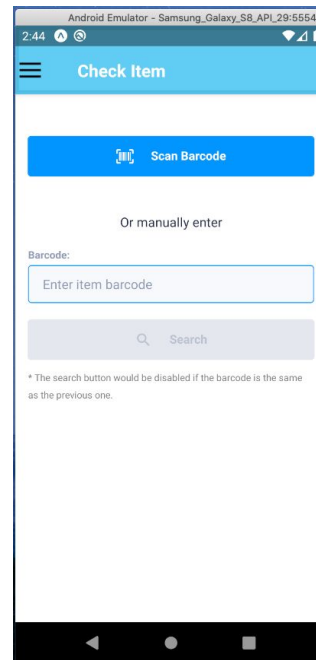
Item Table

 Add a new item

Item Name	Brand	Category	Action	Created	Price (\$)	Weight (lbs)
FUGAT-2	Walsh Group	dooley.christ	 4 	04/19/2014, 00:01:00	3223773.49	1226
EVENIET-1	Stofenberg Ltd	mitlie.bashirian	 8 	11/14/2002, 00:01:00	0.11	605.623
QUIA-6	Hermann-Vandervort	melyna.swift	 2 	06/31/1996, 00:01:00	0.8	6257300
ET-6	Spirka, Koelpin and Armstrong	hills.mabele	 0 	08/19/1961, 00:01:00	140.4	764.8
QUOS-7	Johnston-Koch	karl.schiller	 6 	09/19/1984, 00:01:00	5070667.81	31862800
REPELLAT-19	Howell-Jenkins	nwintheiser	 5 	09/23/1978, 00:01:00	208	5.74807
VITAE-5	Powkowski-Pouros	mosciak.lannabel	 5 	00/13/1979, 00:01:00	515674.86	1121.32
CULPA-6	Blanda-Duigley	efranecki	 4 	00/19/1971, 00:01:00	1009.47	27009500
QUAERAT-14	Toy Inc	langosh.samara	 1 	09/21/1970, 00:01:00	0.81	58.0643
REERUM-15	Bergnaum, Little and Strain	ylang	 1 	05/26/1970, 00:01:00	182	0

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- Mobile app





Next steps

- **Import the existing item list**
 - From the master file to the mySQL DB (WS & HY)
- **Standardize incorrect item category list** (WS & HY)
- Add more features
 - Export to CSV file to for printing box labels (**DONE**)
 - Authentication using Passport.js (SP)
 - Automate to create quarterly / annual reports (SP)
 - Next quarterly / yearly prediction??? (WS)
 - Integration with AWS. (SP)