

Favourites Finder and the trundler api

Lindt Excellence is delicious. It is also pricy. Which is why I stock up when I happen to notice that they are on special. If only I had an app where I can check for Lindt Excellence specials...

The **Favourites Finder** does exactly that. The r shiny app allows you to select up to 5 retailers, give up to 3 key words the product has in common across the retailers and click find. Within minutes the **Favourites Finder** lists the Retailer, Product and up to date price.

<https://techstrat.shinyapps.io/SpecialsAlert/>

Retailer	Product	Date	Price	Discounted
Dachern	Lindt Excellence 100g	2020-09-16	49.95	0.00
Dachern	Lindt Excellence 100g Cherry and Hazelnut	2020-09-16	54.95	0.00
Dachern	Lindt Excellence 100g Dark 95%	2020-09-16	49.95	0.00
Dachern	Lindt Excellence 100g Dark 90%	2020-09-16	59.95	0.00
Dachern	Lindt Excellence 100g Lemon Zinger	2020-09-16	49.95	0.00
Post & Pay	Lindt Excellence 70% Cocoa Dark Chocolate 100g	2020-09-20	49.99	0.00
Cherchier	Lindt Excellence 70% Dark Chocolate Bar 100g	2020-09-16	49.95	0.00
Woolworths	Lindt Excellence 70% Cocoa Dark Chocolate 100g	2020-09-15	47.99	0.00
Cherchier	Lindt Excellence 70% Cocoa Dark Chocolate Bar 100g	2020-09-17	49.99	0.00
Woolworths	Lindt Excellence 95% Cocoa Dark Chocolate 100g	2020-09-17	59.99	0.00
Post & Pay	Lindt Excellence Caramel with a Touch of Sea Salt Dark Chocolate 100g	2020-07-23	49.99	0.00
Post & Pay	Lindt Excellence Dark 95% 100g	2020-09-20	59.49	0.00
Cherchier	Lindt Excellence Dark Orange Chocolate Bar 100g	2020-09-16	49.95	0.00
Woolworths	Lindt Excellence Extra Creamy Milk Chocolate 100g	2020-09-17	59.99	0.00
Cherchier	Lindt Excellence Intense Milk Chocolate Bar 100g	2020-09-16	49.99	0.00
Post & Pay	Lindt Excellence Intense Orange Dark 100g	2020-09-21	49.99	0.00
Woolworths	Lindt Excellence Luscious Dark Chocolate 100g	2020-09-07	47.99	0.00
Cherchier	Lindt Excellence Luscious Dark Chocolate Bar 100g	2020-09-17	49.99	0.00
Post & Pay	Lindt Excellence Milk 70% Cocoa 100g	2020-07-21	49.99	0.00
Woolworths	Lindt Excellence Ruscus Intense Dark Chocolate 100g	2020-09-17	49.99	0.00

Users steps

Select up to 5 retailers in the Retailer List

Enter up to 3 key words to find the product

Select Find and....

See the latest listings

Make-up

The Shiny app uses the **trundler api**. It calls three functions from the trundler package:

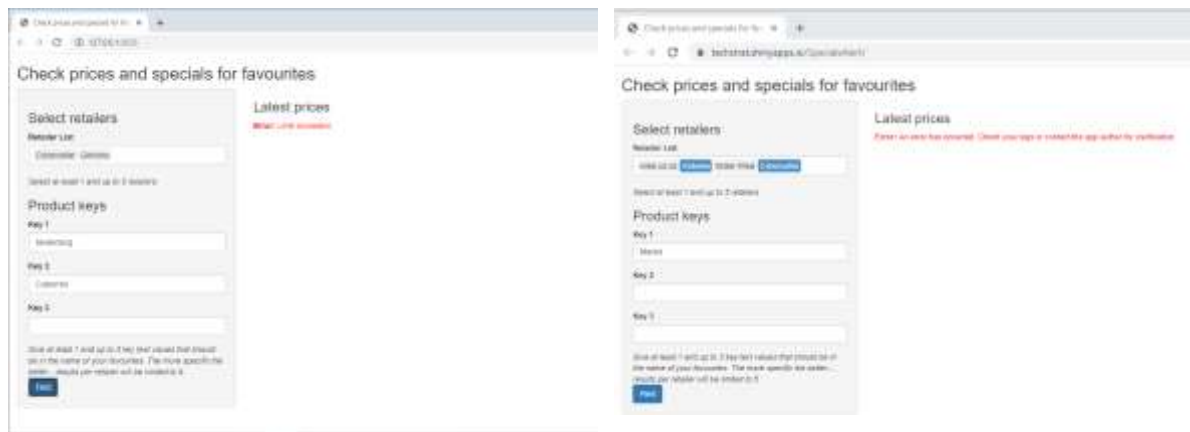
- `retailer()` – returns the complete list of retailers
- `retailer_products()` – returns a list of products containing the key phrases per retailer
- `product_prices()` – returns recent prices for a specific product

Other package used are

- shiny
- tibble
- dplyr

Issues

When the same site is query frequently, the thundler api return an error message: Limit Exceeded.



It appears when a single web page is queried to frequently the web server temporarily locks the algorithm from querying.

The application has a 2 second delay built in before each time the `retailer_products()` or `product_prices()` functions are called. This helps to minimize the error feedback but does not remove the issue completely and negatively impacts the application response time.

Queries are also limited – a maximum of five retailers with a limited number of products per retailer and limited price history returned.

Suggested additions to the trundler api

1. A function that returns the latest price for a product. Currently the `product_prices()` function returns a history of prices for the product. This application only needs the latest price.
2. A function that returns a list of products along with their latest prices. This application calls `retailer_products()` to return the product list and then makes a call for each product with `product_prices()` to get the latest price.