Project 1 Alpha Prototype: Snack Chips

San Jose State University - School of Information

INFO 202

The combination of a sandwich and chips is a common meal offered at many deli and sub shops. Snack-sized chips are a popular grab-and-go food for customers looking for a quick pairing to complete their meal. One can also easily find the snack-sized goodies for sale at their local convenience store as an individual treat.

In addition, there are food aficionados who are deeply invested in finding a good bag of chips to go with their sandwiches. Deli enthusiasts have chosen some combinations as their top preference: bacon, lettuce, and tomato (BLT) with Flamin' Hot Cheetos, or a French Dip with Hawaiian Sweet Maui Onion Rings (Thompson, 2019).

Flamin' Hot Cheetos are a common option for those looking for a spicy and crunchy snack. There is an intentional design element that goes into the creation of snack foods. Flamin' Hot Cheetos uses cheese, Monosodium Glutamate (MSG), and food coloring, for example, in order to make their product more appealing. This is partially so that they do not resemble "whitish worms," as this is "not a look that signals hot and cheesy to your brain," according to Tonn (2016).

Not all patrons of a sandwich shop, however, would be interested in purchasing Flamin' Hot Cheetos. Consumers have distinct preferences in texture, flavor, and degree of spiciness. These characteristics are therefore fundamentally important for the query, and are thus reflected in the data structure. The data structure includes all possible flavors of the snack-sized chips, based on their respective ingredients.

Sometimes, the flavor and ingredient combinations can be unexpected. One would not have anticipated cheese to appear in the ingredients for barbecue-flavored chips, for example (Lay's, n.d.). The snacks therefore have a wide option of flavor profiles, ranging from sweet and

spicy to more exotic flavors, such as smoky. The database is indicative of the wide range of

flavor combinations potentially presented in each snack, and can easily be expanded for future

product additions.

Our database objective is to find the appropriate chips to satisfy the customer base of

snack-sized chips. A sandwich shop owner would need to appeal to 18-34 year olds in particular,

as they are in the age range when they are most receptive to trying new flavors, and tend to use

the chips as a "gateway snack," (Frito-Lay, n.d). For example, Firehouse Subs' website has a

category simply labeled, "Chips," and names the brands that they carry in-store. Some of these

brands include: Miss Vickie's, SunChips, Lay's, Baked Lay's and Ruffles (Firehouse Subs, n.d.).

Ultimately, there will be differing trends based on consumer whim, as well as what the

user (in this case, a sandwich shop owner) requires in order to do business. For this reason, brand

names are highly important for the database user. Buying in bulk for resale can often be easier

when searching for a large name brand, and searches from the user would reveal their preference

in name brands for their business. Finally, this gives the sandwich shop patrons peace of mind, as

the chip bag is familiar, yet exciting new flavors potentially await.

References

Firehouse Subs. (n.d.). *Chips*. Retrieved March 7, 2023, from
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Frito-Lay. (n.d.). *2022 Summer Snack Index*. Retrieved March 7, 2023, from
https://www.fritolay.com/2022-summer-snack-index

Lay's. (n.d.). *Lay's Sweet Southern Heat BBQ Flavored Potato Chips*. Retrieved March
7, 2023, from https://www.lays.com/products/lays-sweet-southern-heat-bbq-flavored-
potato-chips

Thompson, K. (2019). *These Are the Perfect Sandwich and Chip Pairings*. Thrillist.
Retrieved March 7, 2023, from https://www.thrillist.com/eat/nation/best-sandwich-and-
chip-combinations

Tonn, S. (2016). *What's Inside Flamin' Hot Cheetos? Probably Something Spicy*. Wired. Retrieved March 7, 2023 from https://www.wired.com/2016/04/whats-inside-flamin-hot-cheetos/

Data Structure Plan:

Field	Field Values (potential)	Datatype	Search Page form element & comparison type	Submission Form element
Product Name	Ruffles Queso Cheese, Lay's Sweet Southern Heat BBQ, Cheetos Crunchy Flamin' Hot, Chester's Flamin' Hot Fries, Cheetos Crunchy Cheddar Jalapeño	text (255)	Text Field, not Equal	Text Field
Manufacturer	Frito-Lay, Inc.	text (255)	Text Field, Not Equal	Text Field
Starch Type	Corn, Potato, Other, Unknown	List-string	Multiselect Dropdown, Contains	Multiselect
Spicy	Yes or No	Yes or No	Checkbox, Not Equal	Checkbox
Baked	Yes or No	Yes or No	Checkbox, Not Equal	Checkbox
Texture	Crunchy, Wavy, Smooth, Airy, Other	List-string	Multiselect Dropdown, Contains	Multiselect
Flavor	Smoky, Cheesy, Vinegary, Other	List-string	Multiselect Dropdown, Contains	Multiselect
Price (USD)	Price ranges: Under $3, $3 to $4, $4 to $5, $5 and up	List-string	Multiselect Dropdown, Contains	Multiselect
Size (Ounces)	Size ranges: Under 4 oz., 4 to 8 oz., 8 oz. and up	List-string	Multiselect Dropdown, Contains	Multiselect

Caspio Search Page: https://c8cmr345.caspio.com/dp/b114c000ddc51a85c14f43a8b984

Submission Form: https://c8cmr345.caspio.com/dp/b114c000ae30fb1416644df483ab

Rules

Field Name: Product Name
Form Type: Text
Dropdown Required: Yes
Definition: This field identifies the name given to the chip product by the manufacturer.
Rule: Enter the product name found on the product page of the manufacturer's website, including any accent marks and punctuation marks. Do not include trademark symbols. Capitalize product name using title case capitalization. Do not include manufacturer name or descriptive text found on packaging.

Product Name Examples: "Ruffles Queso Cheese", "Lay's Sweet Southern Heat BBQ", "Cheetos Crunchy Flamin' Hot", "Chester's Flamin' Hot Fries", "Cheetos Crunchy Cheddar Jalapeño".

Field Name: Manufacturer
Form Type: Text
Dropdown Required: Yes
Definition: This field identifies the name of the manufacturer or subsidiary that manufactures, markets, and sells the chip product.
Rule: Enter the full manufacturer name, including abbreviations for different kinds of business entities (LLC, Inc., and Corp.). Manufacturer name is found on the back of the product package, printed underneath the list of ingredients. Include any accent marks or punctuation marks. Do not include trademark symbols or copyright year. Capitalize manufacturer name using title case capitalization.

Manufacturer Name Examples: Frito Lay, Inc.

Field Name: Starch Type
Form Type: List
Dropdown Required: Yes
Definition: This field identifies the starch ingredients in the chip product. This may include cereals (rice, wheat, and corn) and root vegetables (potatoes and cassava).
Rule: Determine the starch ingredients in the chip product based on the product ingredient list. Ingredient list is found on the back of the product package. Select all starch types from the list that are applicable. Starch ingredients may include cereals (rice, wheat, and corn) and root vegetables (potatoes and cassava). If the ingredient list says, "(Enriched) Corn Meal" or "Corn Flour", select "Corn". If the ingredient list says, "Potatoes", "Potato Flour", "Potato Starch", or "Dried Potatoes", select "Potato". If starch type is not found within the list, select "Other". If the starch type is unknown and cannot be determined, select "Unknown".

Field Name: Spicy
Form Type: Yes or No
Dropdown Required: No

Definition: This field identifies whether the chip product is spicy or not, as stated by the manufacturer.

Rule: Determine if the chip flavor is spicy based on the manufacturer's product description on the product package or product page of the manufacturer's website. Descriptive language may include "Spicy", "Heat", or "Hot". If the manufacturer clearly indicates on the product package or product page of the manufacturer's website that the product is spicy, check the box. If there is no indication on the product package or product page of the manufacturer's website that the product is spicy, leave the box unchecked. If unknown and cannot be determined, leave the box unchecked.

Field Name: Baked
Form Type: Yes or No
Dropdown Required: No
Definition: This field identifies whether the chip product is baked or not, as stated by the manufacturer.
Rule: If the manufacturer clearly indicates on the product package or product page of the manufacturer's website that the product is baked, check the box. If there is no indication on the product package or product page of the manufacturer's website that the product is baked, leave the box unchecked.

Field Name: Texture
Form Type: List
Dropdown Required: Yes
Definition: This field identifies the overall texture and/or mouthfeel of the product(s).
Rule: The current options available are: crunchy, wavy, smooth, airy, and other. Use product packaging descriptions as an aid. When texture is not clearly defined by packaging or website description, choose "Other".

Field Name: Flavor
Form Type: List
Dropdown Required: Yes
Definition: This field indicates the overall taste and flavor profile of the product, as stated by product packaging.
Rule: Use the approximate overarching flavor as spelled and described on the packaging and in the database. For flavors that contain cheese, select "Cheesy". For flavors that contain BBQ seasoning, select "Smoky". For flavors that contain spices or vinegar flavor, (examples: "Flamin' Hot" or "Salt and Vinegar"), select "Vinegary". You can also find this information on the manufacturer's website (such as Frito-Lay). Compare these options to the options available in the database, and select the categories as stated above. It is acceptable to use multiple categories. If this information is not available for use, or there is no additional flavoring added, choose "other".

Field Name: Price

Form Type: List
Dropdown Required: Yes
Definition: The market value of the manufactured product.
Rule: List all prices in USD format, for example: "$5.65". Since prices fluctuate within geographic areas, place each price in the following general categories: "Under $4", "$4 to $8", "$8 and up". If looking for more specific prices, use a major retailer (such as Walmart) in order to discern appropriate costs.

Field Name: Size (oz.)
Form Type: List
Dropdown Required: Yes
Definition: The package size as listed by weight (in ounces).
Rule: List weight in ounces, using the exact figure provided on manufacturer's packaging. If another measurement is provided, convert this unit to ounces, using whole numbers and fractions where applicable. Example: "3 and ⅝ oz" as opposed to a measurement in grams (g). There are currently three size ranges available: "Under 4 oz", "4 to 8 oz", "Over 8 oz".

Supplemental Document: Sample objects from the collection.

Sample Chips #1

Ruffles Queso Cheese **(Front)**
APA Citation:
Target. (n.d.). [Photograph of the front of a Ruffles Queso Cheese bag]. [Photograph]. Retrieved March 11, 2023. Target. http://www.bit.ly/3mIqSZs

Ruffles Queso Cheese **(Back)**
APA Citation:
Target. (n.d.). [Photograph of the back of a Ruffles Queso Cheese bag]. [Photograph]. Retrieved March 11, 2023. Target. http://www.bit.ly/3mIqSZs

Lay's Sweet Southern Heat BBQ **(Front)**
APA Citation:
Walmart. (n.d.). [Photograph of the front of a Lay's Sweet Southern Heat BBQ bag]. [Photograph]. Retrieved March 11, 2023. Walmart. http://www.bit.ly/3FghjXW

Lay's Sweet Southern Heat BBQ **(Back)**
APA Citation:
Walmart. (n.d.). [Photograph of the back of a Lay's Sweet Southern Heat BBQ bag].
[Photograph]. Retrieved March 11, 2023. Walmart. http://www.bit.ly/3FghjXW

Cheetos Crunchy Flamin' Hot **(Front)**
APA Citation:
Target. (n.d.). [Photograph of the front of a Cheetos Crunchy Flamin' Hot bag]. [Photograph].
Retrieved March 11, 2023. Target. http://www.bit.ly/3ywpHyL

Cheetos Crunchy Flamin' Hot **(Back)**
APA Citation:
Target. (n.d.). [Photograph of the back of a Cheetos Crunchy Flamin' Hot bag]. [Photograph].
Retrieved March 11, 2023. Target. http://www.bit.ly/3ywpHyL

Chester's Flamin' Hot Fries **(Front)**
APA Citation:
Target. (n.d.). [Photograph of the front of a Chester's Flamin' Hot Fries bag]. [Photograph].
Retrieved March 11, 2023. Target. http://www.bit.ly/3FkNOVc

Chester's Flamin' Hot Fries **(Back)**
APA Citation:
Target. (n.d.). [Photograph of the back of a Chester's Flamin' Hot Fries bag]. [Photograph].
Retrieved March 11, 2023. Target. http://www.bit.ly/3FkNOVc

Cheetos Crunchy Cheddar Jalapeño **(Front)**
APA Citation:
Target. (n.d.). [Photograph of the front of a Cheetos Crunchy Cheddar Jalapeño bag].

[Photograph]. Retrieved March 11, 2023. Target. http://www.bit.ly/3YGa2rs

Cheetos Crunchy Cheddar Jalapeño **(Back)**
APA Citation:

Target. (n.d.). [Photograph of the back of a Cheetos Crunchy Cheddar Jalapeño bag]. [Photograph]. Retrieved March 11, 2023. Target. http://www.bit.ly/3YGa2rs