Model Development Phase Template

Date	15 March 2024
Team ID	SWTID1720184497
Project Title	Cereal Analysis Based on Ratings by using Machine Learning Techniques
Maximum Marks	5 Marks

Feature Selection Report Template

In the forthcoming update, each feature will be accompanied by a brief description. Users will indicate whether it's selected or not, providing reasoning for their decision. This process will streamline decision-making and enhance transparency in feature selection.

Feature	Description	Selected (Yes/No)	Reasoning
calories	Number of calories per serving	Yes	Nutritional information is critical for predicting the healthiness and rating of cereal.
protein	Grams of protein per serving	Yes	Protein content is an important nutritional aspect influencing cereal ratings.
fat	Grams of fat per serving	Yes	Fat content impacts the health perception and rating of cereals.
sodium	Milligrams of sodium per serving	Yes	Sodium content affects healthiness and taste, influencing the ratings.

fiber	Grams of dietary fiber per serving	Yes	Fiber is a key nutritional factor, especially in health-conscious consumers.
carbo	Grams of carbohydrates per serving	Yes	Carbohydrate content is important for energy levels and overall nutrition.
sugars	Grams of sugars per serving	Yes	Sugar content is crucial for taste and health perception, directly affecting ratings.
potass	Milligrams of potassium per serving	Yes	Potassium is an essential nutrient that can impact health ratings.
vitamins	Vitamins and minerals per serving (percent of daily requirements)	Yes	Vitamin content enhances the nutritional profile, affecting cereal ratings.
shelf	Display shelf position in stores	Yes	Shelf position can influence sales and perceived quality of cereals.
weight	Weight of one serving in ounces	Yes	Serving weight impacts portion size and consumer perception.
cups	Number of cups per serving	Yes	Portion size is essential for understanding the serving size and consumer intake.
type	Type of cereal (hot or cold)	Yes	The type of cereal affects its use case and consumer preference.

mfr (General Mills, Kellogg's, etc.)	Manufacturer of the cereal	Yes	Manufacturer branding can influence consumer trust and preferences.