**Background**    
 A website that allows users to search for and compare products sold at local businesses. The intended user base is the students attending Texas State University in San Marcos, Texas. The website will initially only contain data on the products of local big-box stores such as Walmart, Target, Best Buy, and Office Depot, but it is a goal to add small businesses later. Product data will include things such as prices, sales, specifications, reviews, and modes by which to purchase the product.

Rising prices are the main reason for the creation of the website. Since 2021 the entire world has seen an increase in inflation, the effects are especially apparent when shopping. Between paying for food, rent, utilities, tuition, and expensive equipment and books for school, many college students are feeling the strain on their wallets. The goal of the website is to help users make informed decisions about the purchases they make, by providing as much information as possible. So not only can users find the best deals and save their money, but they can be assured of the quality of the product they are buying.

The second reason for the creation of the website is to help small local businesses compete against large businesses. Many people choose to go to big-box stores instead of small locally owned businesses because of their presence and prices. As a result, small businesses are forced out of business, and consumers may suffer. A lack of competition can lead to a decrease in innovation, product variety, competitive prices, and jobs, and an increase in income inequality. By eventually working in accounts for business owners, local businesses can have their name and product as present in the public eye as those of big-box stores. And that visibility may increase income whether due to better prices, better products, convenience, or even a consumer’s desire to help locally owned businesses survive.

**Definition**

The website will have two ways to search for a product, by category or through a search bar. All results can be filtered or sorted to make finding the right product easier for the user. When displaying products that may match the product the user is interested in, an overview of product details will be available for each product. Upon choosing a particular product a new page will open giving a more detailed description of the product; as well as stores it may be purchased at, their corresponding prices and sales, and any relevant coupons that may be applied to the purchase. Other product details include name, UPC, a product description, product specific specifications, reviews, images, and manufacturer details.

Currently the website will only be offering products sold by select big-box stores in the San Marcos, Texas area. The product data of these stores is more easily attainable than small local businesses. Parsehub, a third party web scraping tool, will be used to gather product data from these store’s websites. Selenium, a Python library, may be used to automate a browser when needed. All information gathered will be stored in a [type] database which will interact with a PHP server to disperse information to the user.