Students Discover the Personal and Environmental Impacts of Food Choices

- The Food Hero Calculator is a collaborative effort involving Dr. Siew Sun Wong from the College of Nutrition and Dr. Sharon Shen from the College of Forestry. This project aims to develop a web-based nutritional calculator designed to inspire middle schoolers at summer camps to choose their food more mindfully.

- Our mission is to enhance the health of children and the environment by fostering climate-resilient food citizenship. Through the creation of interactive tools and games, the project educates about food systems and the impact of climate change, targeting both children and young adults.

- The project seeks to equip children with scientific resources, enhancing their understanding of how climate change intersects with their everyday choices. A key objective is to ensure that children's interactions with food are consistently positive, from selection to consumption.

- Education on the environmental effects of various foods is delivered through a star-rating system, with a focus on making the information child-friendly and easily understandable.

Food Hero Calculator

Fun and Informative: A Nutritional App for Middle School Students to Understand Their Food Choices
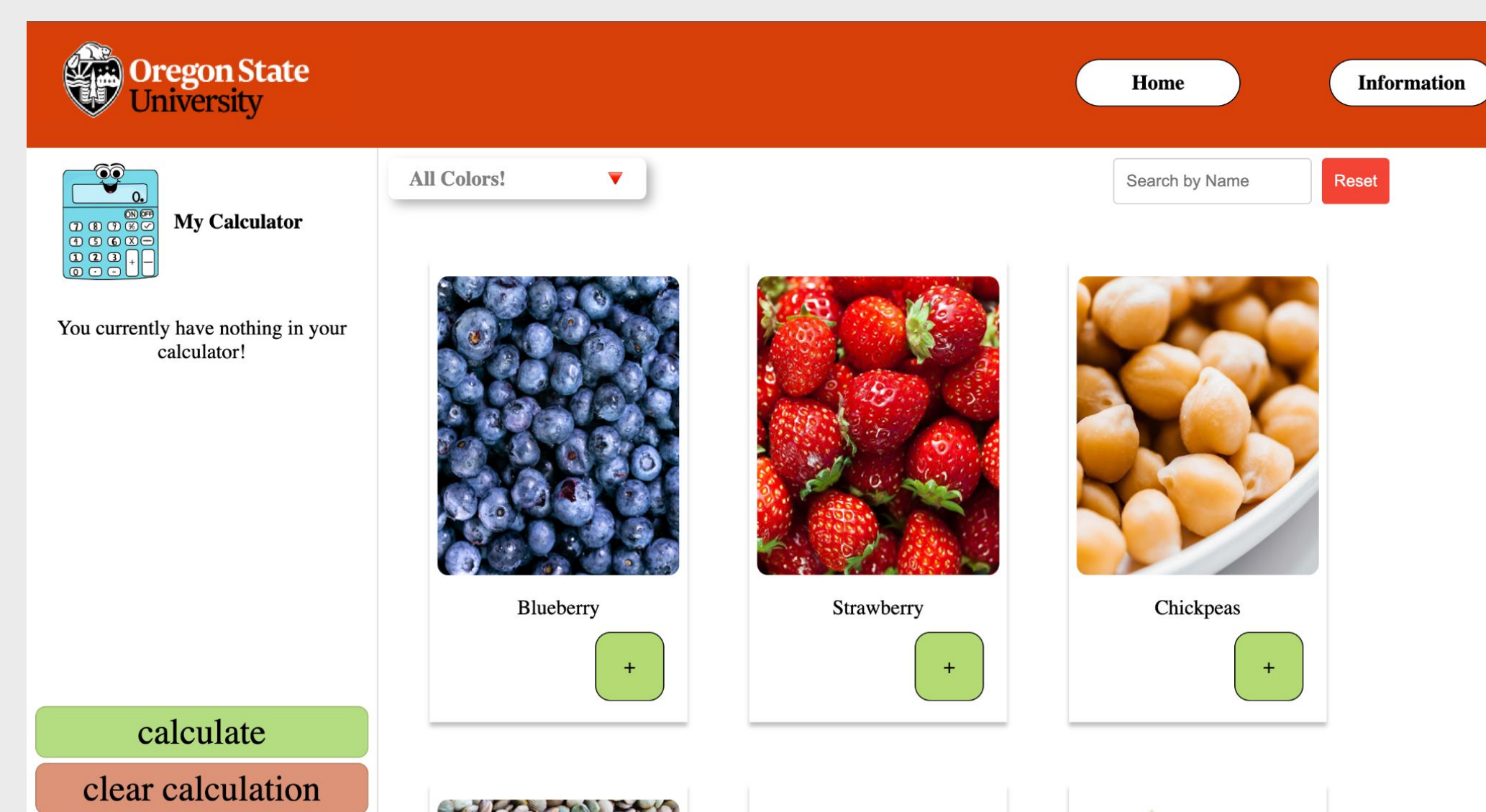

Figure 1: Food Hero Calculator Home Page

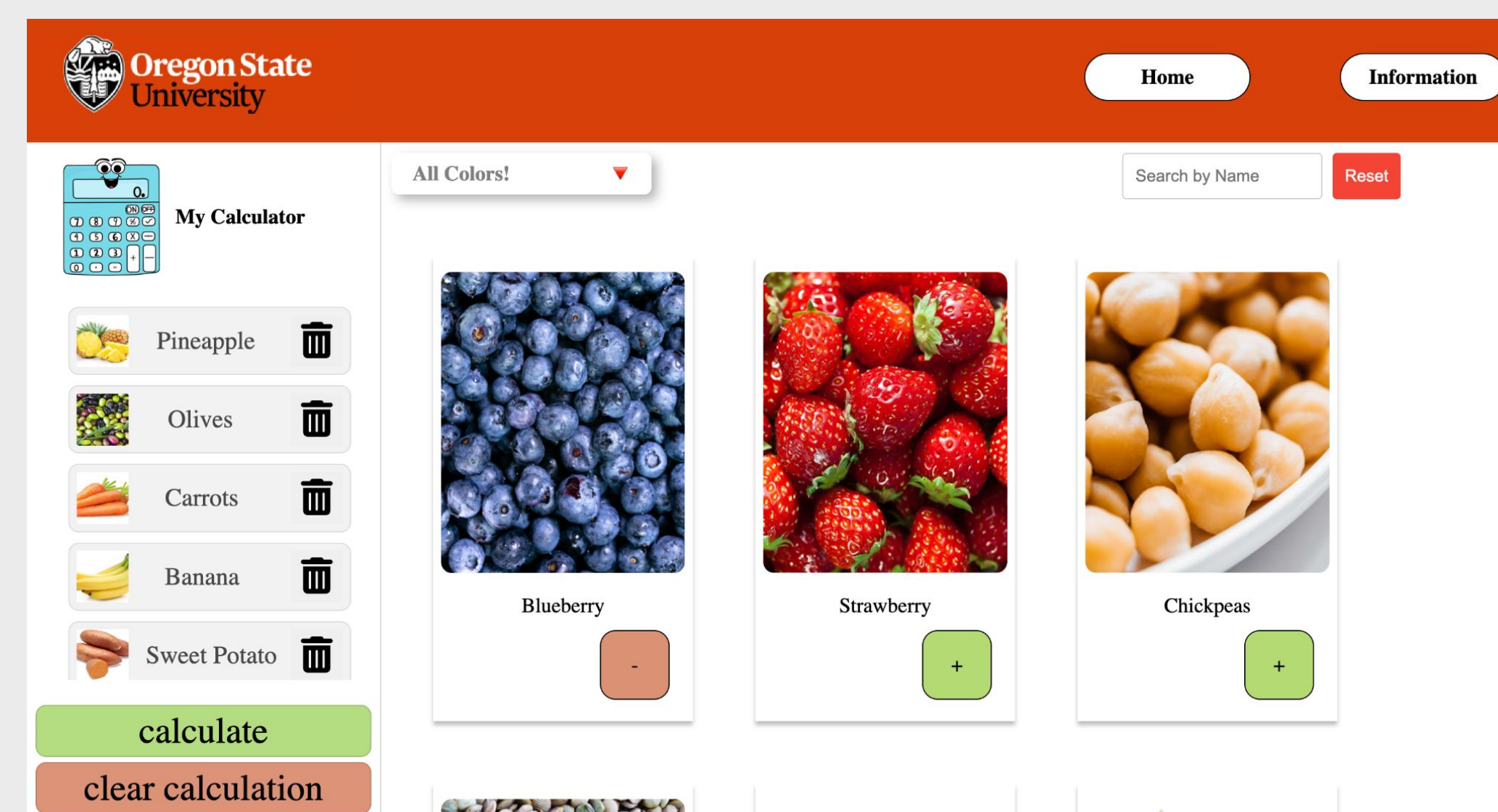

Figure 2: Initial Calculator Main Food Page

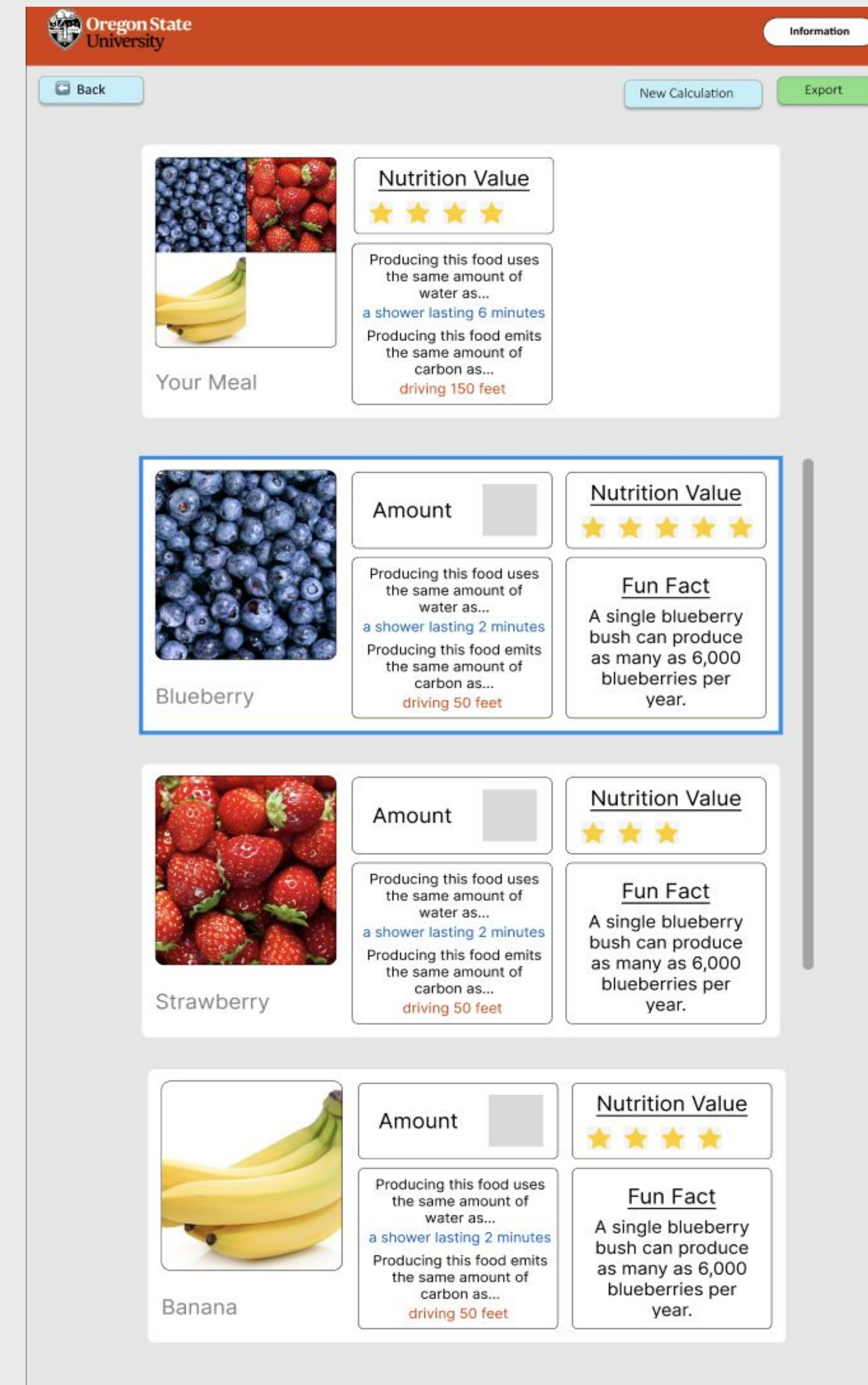Figure 3: Food Selections from Main Food Page

Collaborative Innovation with Conscientious Development

The team dedicated considerable effort to crafting an app that educates in an empowering manner. It's designed to inspire children to make informed food choices by highlighting positive actions they can take to help the environment, rather than instilling fear about the potential negative impacts of their decisions.

Figure 4: Results Page Prototype

Community Engagement and Education: From Feedback to Field Implementation

- Our team engineered a web application with a JavaScript-based Next.js front end, paired with a PostgreSQL Supabase database backend for dynamic data retrieval.

- We worked to tailor the app to resonate with our primary audience of 4th and 5th-grade students.

- The app features an intuitive selection of food items, which can be analyzed for their water and carbon footprints, as well as nutritional scores.

- Additionally we incorporated a user-friendly interface for serving size customization.