**System Description**

*Ice Cream System*

Created: 12/16/21 by Tom Lever

Updated: 02/20/21 by Tom Lever

**Context: Merkury**

*Tom’s Understanding of Functionality*

Merkury is a front-end that provides Merkle clients capability to design and submit advertisements to companies for display on the companies’ websites.

*Tom’s Conjecture about Implementation*

Merkury is implemented using the React JavaScript library. Users use browsers to request HTML from a server. When the HTML is rendered, complex JavaScript functions are loaded and executed. The JavaScript functions render beautiful, dynamic user-interface components, listen for user input, and submit requests for information to the server.

**Opportunity Ice Cream System Will Address**

Ice Cream System will provide Tom a foundation for developing server functionality to listen for client requests, receive requests, interpret requests, complete actions based on requests, and provide responses to clients and third parties based on requests.

**What Ice Cream System will Do**

Ice Cream System will be a client / server system that a human Requester may use to submit by-ingredient search parameters and receive information or matching ice cream products.

**Phases of Software Development**

At the end of Phase…

1. Ice Cream System will have its minimum viable capability of listening for client requests, receiving requests, extracting by-ingredient search parameters from the request, handling alternate requests, querying an ice cream database for products based on the search parameters, and providing a response including information or matching products to the client.
2. Users will have the capability to submit search parameters based on other attributes of ice cream products (e.g., sourcing values like Fairtrade) other than ingredients.
3. Users will have the capability to not only Read info or matching products but also Create products, Update products, and Delete products.