Software Requirements Specification

for

BabyBites

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1.   Introduction

In this section we will introduce the BabyBites web-based application.

1.1   Purpose

This document provides detailed specifications and requirements for BabyBites, a web-based application to assist parents and caregivers in making feeding transitions for their children.

1.2   Scope

BabyBites is designed to help you navigate the transition from milk to solids and beyond. It removes the uncertainty from feeding with expert resources and alert notifications, ensuring your child's meals are safe and nutritious.

1.3 Definitions, Acronyms, and Abbreviations

Baby Profile	A user-created profile to categorize their children within the application.
Daily Report	A summary of user milestones and pertinent information regarding their child (i.e. food consumption, milestones, allergies).
Dashboard	The home page of the user. It features shortcuts to relevant pages and displays daily reports.
Filter	A sorting function that will allow specific items to be displayed based on input.
Food Database	A comprehensive database that allows users to look up various food, view nutritional information and access preparation tips.
Food Tracker	A log the user can modify to maintain a history of foods given to the child.
FoodData Central API	USDA's database for food that will be used as a source of information for the BabyBite's food data table.
IDE (Integrated Development Environment)	A software application, such as VSCode, that provides tools for writing, testing, and debugging code.
Notification	An alert that will notify the user of important information (i.e. allergies, choking hazards).
Search	BabyBites' food search feature.
User	Any person who has created an account and utilizes the application.

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1.5   Overview

The remaining sections of this document are divided into two main parts: Overall Description and System Requirements. Section 2 provides a brief overview of BabyBites. Section 3 contains specific requirements, organized by feature.

2.   Overall Description

In this section we will introduce the functions and characteristics of BabyBites.

2.1   Product Perspective

BabyBites will offer food database and nutrition information through the FoodData Central API. The product will be developed as a web application, where users access the system through a mobile browser or computer. The application's backend will be implemented using Django and Python, while the frontend will utilize HTML, CSS, and JavaScript. Data will be stored in a PostgreSQL database, with hosting provided locally during development and through ODU servers for demonstration.

2.2   Product Functions

BabyBites will provide users with a range of features that guide and track their child's nutrition and feeding progress. These include, integration with the FoodData Central API to provide accurate nutritional data, logging of both food and milk consumption to monitor daily intake patterns, automated reminders for feeding schedules or new milestones and summarized views of daily activity.

2.3   User Characteristics

Parents and caregivers will be able to login to their account, to log and track feeding activities, view guidance and receive alerts. The administrators will be able to manage the system's user accounts, databases and content updates.

2.4   Constraints

N/A

2.5   Assumptions and Dependencies

N/A

3. System Requirements

3.1 System Features

3.1.1 Account Management

3.1.2 Login

3.1.3 Baby Profile Management

3.1.4 Food Tracking

3.1.5 Daily Reports

3.1.6 Food Database

3.1.7 Expert Resources

3.2 Performance Requirements

3.2.1 Speed of Response

3.2.2 Throughput

3.2.3 Execution Time

3.2.4 Storage Capacity

3.3   Design Constraints

3.3.1   Compatibility Requirement *(O: Last Name(s))*

3.3.2   Scalability Requirement (*O: Last Name(s))*

3.4   Software System Attributes

3.4.1   Reliability

3.4.2   Availability (*O: Last Name(s))*

3.4.3   Security (*O: Last Name(s))*

3.4.4   Maintainability (*O: Last Name(s))*

3.4.5   User Portability (*O: Last Name(s))*

3.5   Other Requirements

3.5.1   Regulatory Requirements (*O: Last Name(s)*)

3.5.2   Copyright Compliance (*O: Last Name(s)*)

3.5.3   User Feedback (*O: Last Name(s)*)