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iEAT

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iEAT
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Mission Statement: Using technology today to facilitate a child’s development of autonomy and health knowledge to improve nutritional eating habits for better health outcomes tomorrow.

OVERVIEW

What: iEAT is a meal ordering service and database for school meal distribution, accessible via a smart device.

Why: Interactive way to increase awareness of portion control and appropriate nutrition in an effort to build autonomy in elementary and middle school age children.

Problem Solved: Research indicates that young children are highly susceptible to overeating when given larger portion sizes, eating about 16% more. iEAT addresses proper portion control pertinent to the child’s age. Further, it increases a child’s autonomy and health knowledge when making dietary decisions impacting health outcomes.

How: iEAT features an empty plate compartmentalized into five colored sections reflective of reflect appropriate USDA recommended portion size, each corresponding with a food group. On the side of the plate is a list of food items served by the school for that meal. The user drags and drops food items into the proper location on the plate. The plate can only be filled with proper food group requirements (ex: meat section could only have chicken or red meat, not both). iEAT also serves as an informational hub for the user’s dietary preferences or needs.

iEAT will support Sacramento County public Elementary and Middle schools including:
- Sacramento County = 994 square miles
- ~80% of students enrolled in free and reduced-price meals
- 285 elementary schools
- ~164,258 elementary school students
- 127 middle schools
- ~82,737 middle school students

COMMUNITY IMPACT

Community Impact:
- Increase access to well-balanced nutritional foods for students who access meals through school meal programs.
- Provide the opportunity for education on self-feeding, health management by creating own meals and help build lifelong nutritious eating habits.
- Support the school system by minimizing food waste by distributing food items more effectively.

SOCIAL IMPACT

Social Impact:
- iEAT addresses food waste by giving users food choices and providing schools with data on student preferences to increase the school’s meal efficiency and thereby reducing food waste.
- iEAT’s user interface (UI) offers adaptable visual color coordination options for individuals with sensory sensitivities.
- iEAT’s drag and drop option is visually and kinesthetically pleasing, enabling users to feel in control and allows for easy navigation when using the app.

DEVELOPMENT

Development:
- Further development can include additional services and resources such as telehealth appointments to consult with doctors, social workers, dietitians, nutritionalists, and occupational therapists.
- An interface can be programmed for switch accessibility.

Influences:
- Population that apps currently serve are adults
- Bento, UberEATS, DoorDash, Postmates
- MyPlate
- Our product turns information into lifestyle choices for students

REFERENCES


iEAT Mock-up

What’s On Your Plate?

Cost to Actualize Project:
- $120,000 to plan, develop, and test application
- $24,000 per year maintenance cost of servers and data collection

Institution Costs:
- $1,000 per institution for every 300 users each academic year

High Cost Alternatives:
- App integration with SMARTBoard
- Native and web based accessibility
- App integration with biometric wearable devices

Low Cost Alternatives:
- Students purchase application individually
- Main computer(s) on site/campus for access

Implementation & Occupational Impact

Implementation
- Elementary and Middle Schools in Sacramento
- School Principal and Teachers
  - Trained by OTs to use and teach students how to use App
- Morning selection of Food in classroom
- iEAT resource team available to assist and answer questions

Occupational Impact
- Education
  - Knowledge-learning healthy nutritional habits within their day
  - Autonomy-choice on food eaten at school
- Meal Preparation
  - Developing healthy meal selection habits and routines
  - Feelings of confidence and competence with healthy meal selection skills

DISSEMINATION

Dissemination:
- Start locally to kickstart, determine app’s usability, and beta testing
- Contract with school districts in and around Sacramento → NorCal region → SF Bay Area → Central Valley → SoCal
- Make adjustments and partner with other states
- School lunch policies may differ state to state

iEat Resource Team available to assist and answer questions