

# Family FEW

The main purpose of this app is to teach middle school students to look at the complex relationship between food, water, and energy consumption. This relationship is known as FEW in research, which is where the app name, Family FEW, comes from. This app will help teach students about this relationship in the form of a game that consists of buying food for a family while balancing costs and keeping consumption costs between some pre-set limits.

There will be two types of users, middle schoolers and teachers/parents. We expect the middle schoolers to be around 10 - 14 years old and to have a good amount of experience with technology, but nothing too advanced. We expect that parents and teachers will have a broad range of skill levels due to differences in age or background.

Middle school students use this game to simulate shopping for grocery items and add them to their cart. While items are being added, a receipt is made to calculate the cost of items, as well as an environmental impact cost based on each item in the cart. Levels could be implemented to give limits to the environmental impact cost to reduce it. Parents and teachers will interact with the game by viewing the results of their children/students.

Any required data will be provided as a spreadsheet by the team of scientists that will include the energy and water consumption details, nutrition, and impacts. The app will be responsible for collecting usage related data and gameplay statistics for reporting, analytical purposes, and educational statistics for teachers. This data will likely be utilized for in-game level-ups or any similar comparable features.

Burndown Graph for Family FEWd

