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|  | *Cost-Effective Food Monitoring System* |
| **Major:** | **Name:** |
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**Design Objectives**

The designed system utilizes commonly available NFC tags and data from the Internet to allow the user to track food expiration dates, suggest recipes based on items about to spoil, and helps to automate the process of deciding if a specific food item is safe or not to eat. Additionally, sensors can be attached to raw meat or similar, which can measure pH or humidity levels for a more concrete analysis.

Objective 1:

The system will be able to be directed and controlled from a typical smartphone, communicating with sensors over Bluetooth, and the tags with the NFC module included inside most smartphones.

Objective 2:

The smartphone app, being the centerpiece of the system, will have a straightforward interface with options for food expiration data, recipe suggestions, sensor analytics, and online item data lookup for nutritional information and product specifics.

Objective 3:

The system will make use of notifications and alerts to inform the user of expiring or expired food items.

Objective 4:

The system will allow the reuse of NFC tags from one product to another.