



### **Benefits for Wheelchair Users**

- easily attached and detached
- allows for full wheeling stroke
- intuitive and simple operation for a variety of users
- customizability for different wheelchairs
- adjustable for different body types
- multiple methods of use, not just grocery shopping
- conveniently stowed

### **About Us**

We are 2.009's Purple Team, a group of 16 undergraduates in the Mechanical Engineering Department at MIT. Our task was to design and develop a finished product related to both food (our class theme) and accessibility (our team's theme).

### **Questions or Comments? Contact Us:**

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ALSO SEE OUR CLASS WEBSITE:  
[HTTP://WEB.MIT.EDU/2.009](http://web.mit.edu/2.009)

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## **THE GROCERY MATE**

### **Basket Attachment for Wheelchairs**



### **Concept**

The Grocery Mate will allow many wheelchair users to shop both conveniently and independently.



# The Grocery Mate

## The Problem

Currently, when wheelchair users grocery shop, they must either carry a basket in their lap or use a store-owned scooter. These methods can be time-consuming, uncomfortable, and limiting.



## The Solution

The Grocery Mate is the first product that is both quickly attached and completely adaptable for individual users and wheelchairs.



## Our Design

Our basket design maximizes convenience and adaptability. The Grocery Mate can be quickly assembled and disassembled, and can attach to wheelchair foot posts that vary from 1 to 1.25 inches in diameter.



## Attachment and Frame



The clamps have a large interface to easily latch the Grocery Mate to the wheelchair. The frame locks to a tube on the clamps. The user can customize the Grocery Mate by adjusting the frame both horizontally and vertically.

## Basket

The basket easily latches to the frame, and is designed to collapse for easy transportation. It can also double as a utility tray.



## Specifications

Attachment in less than 30 seconds

Carries up to 40 lbs in weight

Height and lateral adjustments

Adaptability for different wheelchairs