#### **Model-Based Selection Lists**

### foods

id	name	category_id
1	Apple	2
2	Banana	2
3	Mushroom	3

## categories

id	name	
1	Cookie	
2	Fruit	
3	Vegetable	

```
@fruit = Food.new
@categories = Category.order("name asc")
```

```
<select name="food[category_id]">
        <option value="">Choose a category</option>
        <option value="1">Cookie</option>
        <option value="2">Fruit</option>
        <option value="3">Vegetable</option>
</select>
```

### **Associations**

## brands

id	name	
1	Apple	
2	Reebok	

# products

id	brand_id	name	price
1	1	iPod	129
2	2	Treadmill	99
3	2	Sneakers	49

### reviews

id	user_id	product_id	rating	description
1	19	1	5	
2	42	2	3	
3	6	1	4	

### orders

id	name	date	total
1	Jeff Cohen	12/6/2011	228
2	Bob Smith	1/15/2012	49

## order\_items

id	order_id	product_id
1	1	1
2	1	2
3	2	3

#### **Associations**

```
class Brand < ActiveRecord::Base
   has_many:products
    has_many :reviews, :through => :products
end
class Product < ActiveRecord::Base
   belongs_to:brand
   has_many :reviews
end
class Review < ActiveRecord::Base
   belongs_to:product
end
class Order < ActiveRecord::Base
   has_many :order_items
    has_many:products,:through => order_items
end
class OrderItem < ActiveRecord::Base
   belongs_to :order
    belongs_to:product
end
```

#### **Associations**

```
# Add the iPhone as an Apple product
apple brand = Brand.find by name("Apple")
apple_brand.products.create :name => "iPhone",
                            :price => 299
# Add a review for the treadmill
reebok = Brand.find by name("Reebok")
tm = reebok.products.find by name("Treadmill")
tm.reviews.create :rating => 5,
                  :description => "Works great!"
# Generate a new order for a pair of sneakers
reebok = Brand.find by name("Reebok")
sneakers = reebok.products.find by name("Sneakers")
order = Order.new
order.order items.build :product => sneakers
order.save
# Get the average rating for all Apple products
apple brand = Brand.find by name("Apple")
puts apple brand.reviews.average(:rating)
```