



Elkridge Food Pantry and Garden

Matthew Arbaugh, Jonathan Buck, Lynn
Durholz, Bruno Franchini

Taget Business

- We have designed a database to be used by a local Food Pantry.
- The Food Pantry volunteers serve the needs of the Elkridge and Hanover areas who need food assistance.
- Our database will allow volunteers who give groceries to needy local residents to record data about the families receiving the groceries.
- The database will also facilitate the recording of data regarding the day to day operations of the Food Pantry.

User Requirements

- Record data about the families that visit the Food Pantry.

| Family |
|--------------------------|
| Family_Number INT |
| Last_Name VARCHAR(45) |
| Primary_Name VARCHAR(45) |
| No_Children INT |
| No_Adults INT |
| Creation_Time DATE |
| Indexes |

| Family_Address |
|--------------------|
| Family_Number INT |
| House_Number INT |
| Street VARCHAR(45) |
| City VARCHAR(45) |
| State VARCHAR(45) |
| Zip INT(5) |
| Creation_Time DATE |
| Current BOOLEAN |
| Indexes |

| Family_Phone_Number |
|---------------------|
| Family_Number INT |
| Phone_Number INT |
| Type VARCHAR(10) |
| Creation_Time DATE |
| Current BOOLEAN |
| Indexes |

User Requirements

- Record data about the volunteers that help at the Food Pantry.

| Volunteer |
|------------------------|
| Volunteer_Number INT |
| First_Name VARCHAR(45) |
| Last_Name VARCHAR(45) |
| Creation_Time DATE |
| Indexes |

| Volunteer_Address |
|----------------------|
| Volunteer_Number INT |
| House_Number INT |
| Street VARCHAR(45) |
| City VARCHAR(45) |
| State VARCHAR(45) |
| Zip INT(5) |
| Creation_Time DATE |
| Indexes |

| Volunteer_Phone_Number |
|------------------------|
| Volunteer_Number INT |
| Phone_Number INT |
| Type VARCHAR(45) |
| Creation_Time DATE |
| Indexes |

User Requirements

- On a night when the Food Pantry is open, the volunteers will keep a list of the families that come to the Food Pantry and record the stations that they visit.
- The data from this list will be stored for later reference.

User Requirements

| Visit_Pantry |
|-----------------------|
| Date_Visited DATE |
| Family_Number INT(11) |
| Arrival_Time TIME |
| Number INT(10) |
| Indexes |

| Pantry_Dates |
|-------------------|
| Date_Visited DATE |
| Indexes |

| Station_Record |
|--------------------|
| S_Name VARCHAR(20) |
| Family_Number INT |
| Date_Visited DATE |
| Indexes |

| Station |
|--------------------|
| S_Name VARCHAR(20) |
| Date_Visited DATE |
| Indexes |

User Requirements

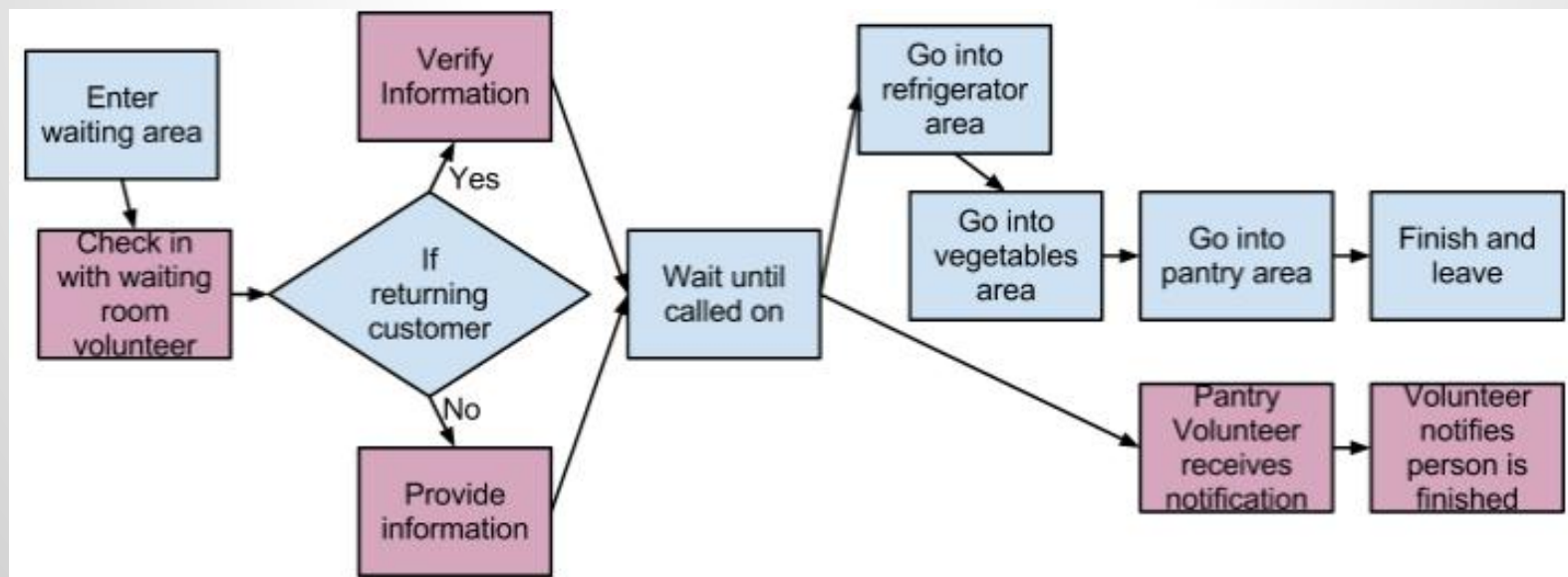
- When a family comes into the pantry, they will be signed into the system by a volunteer.
- If this is a returning family their information will be verified.
- Otherwise, the family's information will be added to the database.

User Requirements

- The family will then wait to be called before they are able to pick items up from the different food stations available.
- The families will go through the stations in the following order and will pick items from some or all the stations: refrigerator, vegetables, pantry.

User Requirements

- The family's visit information will be added to the day's list of families that visited the pantry
- The family will then leave the pantry with their items.

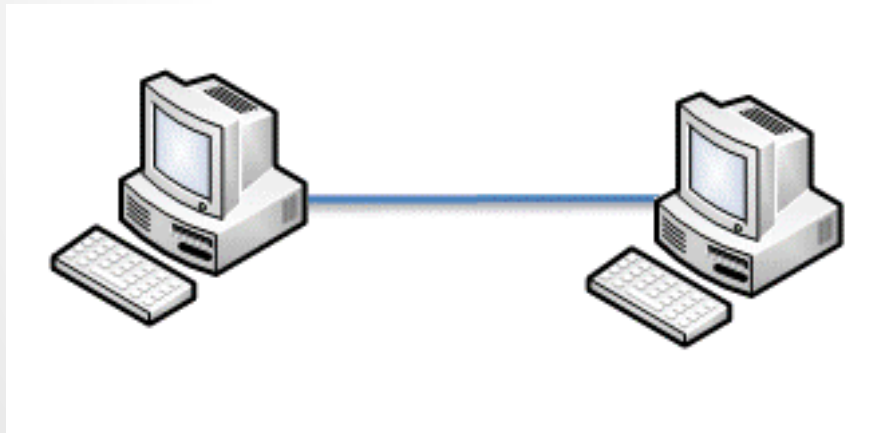


Implementation

- Java GUI interface with MySQL database.
- Application security implemented via usernames and encrypted passwords.
- Remote hosted database

Implementation: Hardware

- Two computers required:
 - Main waiting room
 - Pantry room



Implementation: Main Interface

The screenshot shows a window titled "Food Pantry" with a standard macOS-style title bar (red, yellow, green buttons). Below the title bar, the text "The Connection is active Welcome, bob!" is displayed. To the right of this text is a button labeled "Administration". Below this, there is a button labeled "Add Family To List". The main content area features a section titled "Waitlist - Date: 2012-05-10" followed by a table. The table has columns: Order, Name, # in gr..., Baking, Frig, Pantry, tools, and Veg. The rows are as follows:

| Order | Name | # in gr... | Baking | Frig | Pantry | tools | Veg |
|-------|----------|------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 0 | Buck | 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Feight | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Bond | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Power | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Mouse | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | Welsch | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | McDon... | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Implementation: Basic Functionality

- Logging In



A standard macOS-style dialog box titled "Login". It contains two text input fields: "Username:" with the text "bob" and "Password:" with seven dots. Below the fields are two buttons: "Login" (highlighted in blue) and "Cancel".



Implementation: Basic Functionality

- Adding a family to waitlist

Food Pantry

The Connection is active Welcome, bob! Administration

Add Family To List

Waitlist - Date: 2012-05-10

| Order | Name | # in gr... | Baking | Frig | Pantry | tools | Veg |
|-------|----------|------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 0 | Buck | 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Feight | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Bond | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Power | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Mouse | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | Welsch | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | McDon... | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Add a family to the waitlist

Add Selection Create Family Edit Family

Families

| Select | ID | Last Na... | Primary | # Adults | # Child... | Phone | Address |
|-------------------------------------|----|------------|----------|----------|------------|-------|-------------|
| <input type="checkbox"/> | 1 | Arbaugh | Matthew | 2 | 2 0 | | 1 road... |
| <input type="checkbox"/> | 1 | Arbaugh | Matthew | 2 | 2 0 | | 2 road... |
| <input type="checkbox"/> | 2 | Buck | Jonathan | 1 | 1 0 | | 0 n/a... |
| <input type="checkbox"/> | 3 | Franchini | Bruno | 1 | 2 0 | | 0 n/a... |
| <input type="checkbox"/> | 4 | Durholz | Lynn | 2 | 1 0 | | 0 n/a... |
| <input type="checkbox"/> | 13 | Bruno | Dave | 1 | 1 0 | | 0 n/a... |
| <input type="checkbox"/> | 14 | McDon... | Kelli | 3 | 2 0 | | 0 n/a... |
| <input checked="" type="checkbox"/> | 15 | Johnson | Peter | 1 | 1 12345... | | 12 str... |
| <input type="checkbox"/> | 16 | Wilner | Larry | 2 | 2 23456... | | 2 stre... |
| <input type="checkbox"/> | 17 | Hong | Sung... | 3 | 2 34567... | | 123 ch... |
| <input type="checkbox"/> | 18 | Welsch | Jack | 3 | 2 0 | | 123 ch... |
| <input type="checkbox"/> | 19 | Reil | Mike | 4 | 2 0 | | 98 lk lk |
| <input type="checkbox"/> | 20 | Feight | Jim | 3 | 3 0 | | 3 klj El... |
| <input type="checkbox"/> | 21 | Bond | James | 4 | 3 0 | | 2 13 d... |
| <input type="checkbox"/> | 22 | Power | Austin | 4 | 3 0 | | 2 13 d... |
| <input type="checkbox"/> | 23 | Mouse | Mickey | 3 | 3 0 | | 0 n/a... |
| <input type="checkbox"/> | 24 | Duck | Donald | 3 | 3 0 | | 4 j Elk... |
| <input type="checkbox"/> | 25 | Brown | Murphy | 2 | 2 0 | | 2 e e |
| <input type="checkbox"/> | 26 | Johnson | William | 136 | 2 0 | | 2 Pine... |
| <input type="checkbox"/> | 27 | Simpson | Bart | 3 | 3 0 | | 4 s Elk... |
| <input type="checkbox"/> | 28 | Cook | Sue | 3 | 2 0 | | 3 lk El... |
| <input type="checkbox"/> | 29 | Larson | Patti | 4 | 3 0 | | 3 sd El... |
| <input type="checkbox"/> | 30 | San Diego | Carmen | 8 | 2 0 | | 8 lkj El... |
| <input type="checkbox"/> | 31 | Pope | Eric | 9 | 3 0 | | 8 lkj El... |

Implementation: Basic Functionality

- Managing waitlist order

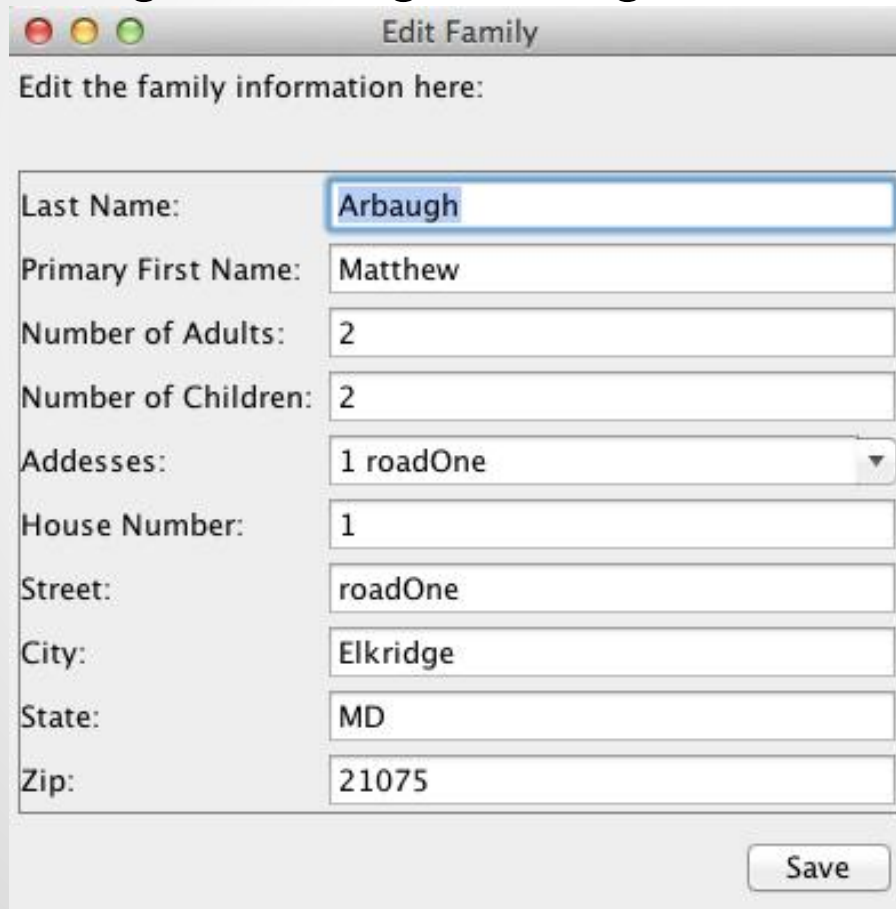
The screenshot shows a web application window titled "Food Pantry". At the top, it says "The Connection is active Welcome, bob!" and has an "Administration" button. Below that is an "Add Family To List" button. The main section is titled "Waitlist - Date: 2012-05-10" and contains a table with the following data:

| Order | Name | # in gr... | Baking | Frig | Pantry | tools | Veg |
|-------|----------|------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 0 | Buck | 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Feight | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Bond | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Power | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Mouse | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | Welsch | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | McDon... | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

A large red arrow points upwards from the text "Drag and Drop" to the row with Order 1 (Welsch), indicating that this row can be moved in the waitlist.

Implementation: Basic Functionality

- Family information management
 - adding, deleting, editing



A screenshot of a software window titled "Edit Family". The window has a standard macOS-style title bar with red, yellow, and green window control buttons. Below the title bar, the text "Edit the family information here:" is displayed. The form contains several input fields:

| | |
|---------------------|-----------|
| Last Name: | Arbaugh |
| Primary First Name: | Matthew |
| Number of Adults: | 2 |
| Number of Children: | 2 |
| Addresses: | 1 roadOne |
| House Number: | 1 |
| Street: | roadOne |
| City: | Elkridge |
| State: | MD |
| Zip: | 21075 |

At the bottom right of the window is a "Save" button.

Implementation: Basic Functionality

- Volunteer information management
 - adding, deleting, editing



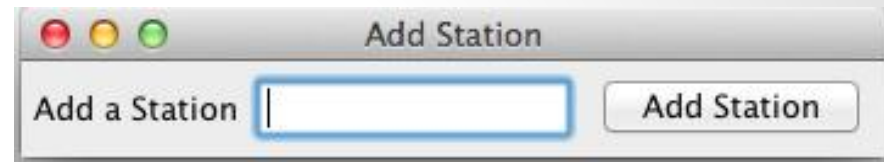
The screenshot shows a window titled "Modifying User" with a standard macOS-style title bar (red, yellow, green buttons). Inside the window, there is a section titled "Modify Users" containing a table with three columns: "User_Name", "Password", and "Admin". The table lists six users: bob, Bruno, David, Jonathan, Matt, and Pete. The "Admin" column for each user contains a checkbox. The checkboxes for bob, Bruno, David, Jonathan, and Pete are checked, while the checkbox for Matt is unchecked. To the right of the table, there is a button labeled "Modify!".

| User_Name | Password | Admin |
|-----------|----------|-------------------------------------|
| bob | secret | <input checked="" type="checkbox"/> |
| Bruno | password | <input checked="" type="checkbox"/> |
| David | 3edC | <input checked="" type="checkbox"/> |
| Jonathan | jonathan | <input checked="" type="checkbox"/> |
| Matt | 1qaZ | <input type="checkbox"/> |
| Pete | 2wsX | <input checked="" type="checkbox"/> |

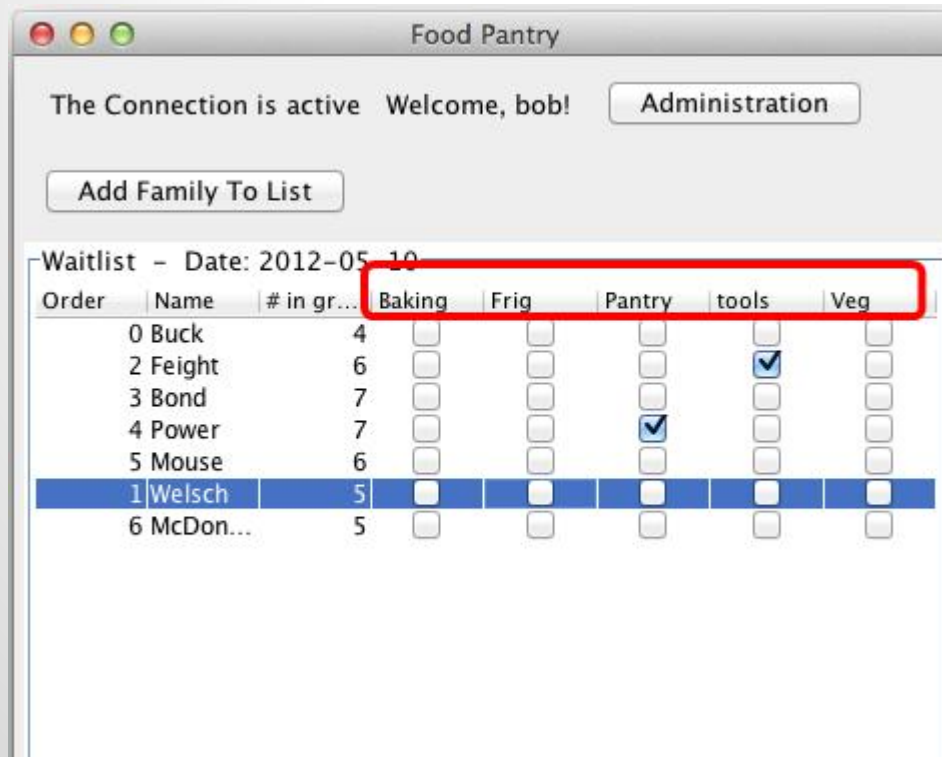
Modify!

Implementation: Basic Functionality

- Station information management
 - adding



A dialog box titled "Add Station" with a text input field labeled "Add a Station" and an "Add Station" button.



The "Food Pantry" application window displays a welcome message, a status bar, and a table of the waitlist. A red rectangle highlights the header row of the table.

The Connection is active Welcome, bob! Administration

Add Family To List

Waitlist - Date: 2012-05-10

| Order | Name | # in gr... | Baking | Frig | Pantry | tools | Veg |
|-------|----------|------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 0 | Buck | 4 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Feight | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Bond | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | Power | 7 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | Mouse | 6 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | Welsch | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | McDon... | 5 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

