

Carton Builder-

Background

CTDI is in the repair and logistics business in which our customer packages equipment into cartons to send back to our warehouse.

Task

We expect this task to take between 30-45 mins. Please do not spend significantly more time than this.

In the database (located in the App_Data folder) is a list of **Equipment** and **Model Types**. There are also tables for **Cartons** and **CartonDetails**. Each piece of equipment has a Model Type and a unique serial number. Note- a DbContext and corresponding Entity Framework models have been added to the project.

A **Carton** is essentially an empty box that can hold equipment (**CartonDetails**)

We have provided a mechanism to create new cartons and add equipment to a carton and delete cartons.

Last remaining development item for this iteration:

1. Implement the RemoveEquipmentOnCarton action on the CartonController, right now it is just throwing a BadRequest.

Our customers has reported the following bugs:

1. We can delete empty cartons from the system, but cannot delete cartons that have items. We should be able to delete a carton at any time.
2. We can add the same piece of equipment to 2 different cartons, this doesn't make sense. We should only be able to add a piece of equipment to 1 carton, once a piece of equipment is on a carton it should be unavailable to place on another carton.
3. Our cartons can physically hold up to 10 pieces of equipment, but the application allows us to put an unlimited number of equipment on the carton, please only allow up to 10 pieces of equipment on the carton.

Our customers have asked for the following enhancements:

1. The carton index screen should show the # of pieces of equipment on the carton
2. We need a quick way to remove all the items from the carton with 1 click.

Environment

Database access should all be done in Entity Framework. The application server side changes should remain in C# ASP.NET MVC. Client side changes should remain in MVC Razor views.