# Hack-A-Thon Related Items Customization Specifications

I propose we change the name of our project to “Related Items” as it will be very simple to add functionality for both companion items and replacement items. This gives the user the ability to see both items that might be sold along with the selected item as add-ons, and items that might be sold in place of the selected item (perhaps we are out of stock or want to up-sell or cross-sell.)

## New Table – HATInventoryRelatedItem

* CompanyID (int)
* RecordID (int) – Auto Sequence
* InventoryID (int)
* InventoryRelatedItemID (int)
* RelationshipType (char(2)) – Dropdown of types (CI - Companion Item, RI - Replacement Item)
* Descr (nvarchar(150)) – Optional description of relationship
* Tstamp (timestamp)
* CreatedByID (uniqueidentifier)
* CreatedByScreenID (char(8))
* CreatedDateTime (datetime)
* LastModifiedByID (uniqueidentifier)
* LastModifiedByScreenID (char(8))
* LastModifiedDateTime (datetime)

## New DAC – HATInventoryRelatedItem

* RecordID – Marked as the Key Field
* InventoryID – Parent to the InventoryItem DAC
* InventoryRelatedItemID – Filter to the Parent InventoryID for List
* RelationshipType – Default “Companion Item”
* Descr
* Tstamp – Default Timestamp
* CreatedByID – Default CreatedByID
* CreatedByScreenID – Default CreatedByScreenID
* CreatedDateTime – Default CreatedDateTime
* LastModifiedByID – Default LastModifiedByID
* LastModifiedByScreenID – Default LastModifiedByScreenID
* LastModifiedDateTime – Default LastModifiedDateTime

## Stock Item/Non-Inventory Forms

* Add a new Tab called ‘Related Items’
* Add a grid to the tab that will display the list of related items for the selected item record
* Be able to Add/Edit/Delete related items
* Should be able to add both stock and non-stock related items to an item record
* Should be able to select the type of relationship from dropdown (Companion/Replacement)
* Should be able to enter a description of the relationship. This is likely more important in replacement type items as they could describe the up-sell benefits to help sell the more expensive item. Remember that this record sits between the parent and child item so this description is specific to their relationship. Ie: “Comes with metal case”.
* Be sure RI (referential integrity) is maintained. If the item is deleted, cascade deletion of the child records.

## Sales Order Entry Form

* Add a new button on the form that says ‘See Related Items’
* When the user presses this button, popup a form (similar to the ‘Add Stock Item’ popup) that will display the list of related items for the selected item we are on in the grid.
* Information on this popup can contain:
  + Selected
  + Quantity to Add
  + Related Item ID
  + Item Description
  + Relationship Type
  + Relationship Description
  + Quantity Available
  + Quantity OnHand
  + Selling Price (If we can get it, meaning not just the default selling price but if the customer has specific pricing for this item)
* User will be able to either select the item (which will move in a one into the Quantity to Add field) or simply enter a quantity into the Quantity to Add field (which will turn around and update the Selected field)
* When user is done, select the ‘Add Items’ button at the bottom

### If there is time:

* Add the ‘Add’ and ‘Add & Close’ option like the other popup
* Add a filter that will display only related items in stock
* Add a filter to the sales order entry popup to filter the list to either companion or replacement items
* Create a generic inquiry to provide outside reporting on the related items allowing us to select a parent and see its children, or select a child and see all the parents it’s attached to.
* Perhaps we could create a report similar to the generic inquiry.
* Display the customer specific price as stated above
* Display the difference between the selected item price and the replacement item price to help up-sell (This item is only 8 dollars more but comes with a metal case)
* Check/add functionality to ensure copying an item copies the related item records.
* Handle the case where a related item is inactivated and should not appear in the lists.

### Division of work:

We can try and break down the project as follows so several people can work at the same time in different areas:

* If we can get the table and DAC generated quickly, then we can build the input tabs on the item forms.
* Once these are complete, we can begin entering sample data into the system to use throughout our development, testing, and demo.
* Once we have data, someone can build the generic inquiry
* If someone has free time and wants to build a report similar to the generic inquiry, we could have that as well.
* The bulk of the work will probably be in the sales order entry pop-up form and its logic
* We’ll need some documentation
* We’ll need Simon to help us through the tough parts!