	Item					
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented.	2		Υ	
name	STRING	The name of this item.	Black House of Staunton vinyl chess board		Y	
inventory_level	INTEGER	The current number of this item in storage.	29		Y	
reorder_level	INTEGER	The number of items at which the store should make another purchase from the manufacturer.	15		Y	
weight	FLOAT	The weight of this item in pounds.	12		Υ	
category	STRING	The type of this item.	board	Must be one of: "piece", "board", "supply" or "clock".	Y	
subcategory	STRING	The subcategory of this item.	vinyl		Υ	
color	STRING	The color of this item.	red		Υ	
description	STRING	The description of this item's color, brand, features, etc.	These Vinyl Chess Boards are just what their name implies - a good basic chess board which meets all tournament standards		Y	
active	BOOLEAN	A boolean to indicate whether the item is being offered in the store.	TRUE		Y	

ItemPrice						
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented.	2		Y	
item_id (FK)	INTEGER	The ID for the Item this ItemPrice record is referring to.	2		Y	
start_date	DATE	The date the prices were assigned to the item.	2016-12-31		Y	
end_date	DATE	The date the Item was assigned to a new ItemPrice record.	2017-01-17		N	
price	FLOAT	The price of this Item in dollars.	10.9		Υ	
type	STRING	The type of price described in a string.	manufacturer	The value must be either "manufacturer" or "wholesale".	Y	

ManufacturerPurchase						
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented	2		Υ	
item_id (FK)	INTEGER	The ID for the Item this Manufacturer Purchase record is referring to.	2		Y	
date	DATE	The date on which this purchase was made.	2017-01-20	The date value must be before today's date.	Υ	
quantity	INTEGER	The quantity of items purchased.	1000		Υ	

ItemOrder						
Field Data Type Description Example Constraints Rec						
id (PK)	INTEGER	The ID for this table; auto-incremented	2		Υ	
item_id (FK)	INTEGER	The ID of the item purchased.	1		Υ	

order_id (FK)	INTEGER	The ID of the order this ItemOrder is a part of.	3		Y
shipped_date	DATE	The date when this order was shipped. If NULL, this ItemOrder either still in the user's cart or still being processed.	2017-01-01	The value must either be NULL or a date value before today's date.	N
quantity	INTEGER	The quantity of this item ordered.	5		Υ

Order						
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented.	2		Υ	
user_id (FK)	INTEGER	The ID of the user that placed this order.	2		Y	
school_id (FK)	INTEGER	The ID of the school to which this order is being delivered. If the value is NULL, the user has not selected a school to deliver to. This implies that the order has not yet been placed by the user.	2		N	
order_date	DATE	The date when this order was placed. If NULL, this order has not yet been placed by the user.	2016-12-25	The value must either be NULL or a date value before today's date.	N	
payment_receipt	STRING	An encoded payment receipt string for future use with a payment gateway.	0xug93S85js		Y	

School						
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented.	2		Υ	
name	STRING	The name of the school.	Singapore American School		Y	

address1	STRING	The first address line of the school.	5000 Forbes Avenue		Y
address2	STRING	The second address line of the school.	SMC 1102		N
zipcode	INTEGER	The school's zipcode.	15289		Y
city	STRING	The city in which the school is located.	Pittsburgh		Y
state	STRING	The state in which the school's city is located.	PA		Y
min_grade	INTEGER	The lowest grade of students that attend this school. 0 indicates pre-school; 13 indicates post-high school.	3	Must be an INT value between 0 and 13.	Y
max_grade	INTEGER	The lowest grade of students that attend this school. 0 indicates kindergarten; 13 indicates post-high school.	8	Must be an INT value between 0 and 13.	Y
active	BOOLEAN	A boolean to indicate whether the school is active.	TRUE		Y

User						
Field	Data Type	Description	Example	Constraints	Required	
id (PK)	INTEGER	The ID for this table; auto-incremented.	2		Υ	
username	STRING	The user's username. This will be used to log into the system.	seanpark		Y	
password	STRING	The user's password. This will be used to log into the system.	Password123		Y	
access_type	STRING	The user's access level.	admin	Must be one of: "admin", "manager", "shipper" or "customer"	Y	
first_name	STRING	The user's first name.	John		Υ	

last_name	STRING	The user's last name.	Doe	Υ
email	STRING	The user's e-mail address.	johndoe@an drew.cmu.edu	Υ
phone	STRING	The user's phone number in formatted varchar.	(412)111-1111	Y
active	BOOLEAN	A boolean to indicate whether the user is active.	TRUE	Υ