

James Gallmeister

HW1: Normalization of Data

September 26, 2018

Unnormalized Form	1st Normal Form	2nd Normal Form	3rd Normal Form
<b>PRODUCT SALES REPORT</b>	<b>PRODUCT SALES REPORT</b>	<b>PRODUCT SALES REPORT</b>	<b>PRODUCT SALES REPORT</b>
prod_num	prod_num	prod_num	prod_num
prod_desc	prod_desc	prod_desc	prod_desc
inv_num			
invoice_date	<b>PRODUCT INVOICE</b>	<b>PRODUCT INVOICE</b>	<b>PRODUCT INVOICE</b>
cust_id	inv_num	inv_num	inv_num
cust_name	prod_num	prod_num	prod_num
prod_qty	invoice_date		
prod_price	cust_id	<b>CUSTOMER INVOICE</b>	<b>CUSTOMER</b>
	cust_name	inv_num	cust_id
<b>CUSTOMER INVOICE</b>	prod_qty	invoice_date	cust_name
inv_num	prod_price	cust_id	cust_addr
invoice_date		cust_name	
cust_id	<b>CUSTOMER INVOICE</b>	cust_addr	<b>CUSTOMER INVOICE</b>
cust_name	inv_num	invoice_total_qty	inv_num
cust_addr	invoice_date	invoice_total_price	invoice_date
prod_num	cust_id		cust_id
prod_desc	cust_name	<b>INVOICE DETAIL</b>	invoice_total_qty
std_price	cust_addr	inv_num	invoice_total_price
disc_code	invoice_total_qty	prod_num	
disc_price	invoice_total_price	prod_desc	<b>INVOICE DETAIL</b>
prod_qty		std_price	inv_num
prod_price	<b>INVOICE DETAIL</b>	disc_code	prod_num
invoice_total_qty	inv_num	disc_price	disc_code
invoice_total_price	prod_num	prod_qty	prod_qty
	prod_desc	prod_price	prod_price
<b>CUSTOMER DATA ENTRY SCREEN</b>	std_price		
cust_id	disc_code	<b>CUSTOMER DATA ENTRY SCREEN</b>	<b>DISCOUNT</b>
sales_terr	disc_price	cust_id	disc_code
warehouse	prod_qty	sales_terr	disc_price
cust_name	prod_price	warehouse	
cust_addr		cust_name	<b>PRODUCT</b>
disc_code	<b>CUSTOMER DATA ENTRY SCREEN</b>	cust_addr	prod_num
credit_lim	cust_id	disc_code	prod_desc
delivery_instr	sales_terr	credit_lim	std_price
	warehouse	delivery_instr	
	cust_name		<b>CUSTOMER DATA ENTRY SCREEN</b>
	cust_addr		cust_id
	disc_code		sales_terr
	credit_lim		warehouse
	delivery_instr		disc_code
			credit_lim
			delivery_instr