

Paul McCusker

Part 1:

#1

I would reply that although this is not an altogether horrible design for the data to be organized it is also not the best. I would say that they need a better way to lay out the data to minimize redundancy and to organize tables more clearly. Using normalization would more clearly depict the data while maintaining organization and eliminating dependency.

#2

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-2005	380.00
DB32	37691	06-15-2005	380.00
DB33	57772	05-27-2005	412.77
WP08	32808	01-12-2006	185.00
WP08	37691	06-15-2005	227.50
WP08	57222	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

#3

Because none of the columns consist of unique keys alone the Primary key must be made up as a composite key. This uses the combination of PackageID and TagNumber to create a unique ID for each row.

Part 2:
#1

PackageID	TagNumber	InstallDate	SoftwareCostUSD	Sofrwarepackagename	Computermodel
AC01	32808	09-13-2005	754.95	World of Warcraft	DELL
DB32	32808	12-03-2005	380.00	Battlefield	DELL
DB32	37691	06-15-2005	380.00	Battlefield	Apple
DB33	57772	05-27-2005	412.77	Trine 2	AlienWare
WP08	32808	01-12-2006	185.00	League of Legends	DELL
WP08	37691	06-15-2005	227.50	League of Legends	Apple
WP08	57222	05-27-2005	170.24	League of Legends	Sabre
WP09	59836	10-30-2005	35.00	Dark Souls	ASUS
WP09	77740	05-27-2005	35.00	Dark Souls	HP

#2

There are 3 Functional Dependencies in this table :

TagNumber > ComputerModel

PackageID Tagnumber (composite key) > SoftwareCostUSD, InstallDate

PackageID > PackageName

#3