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CMPT308N-111-15S

Labouseur

Normalization 1

Part I

1. I would tell Mr. Merservy that he did a good job organizing the data, then think to myself about all the mistakes I'll need to fix.

2.

PackageID	Tag Number	Install Date	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. The primary key is composed of the columns PackageID, TagNumber, and Install Date. The reason for this is because the install date also affects the price of the Software.

Part II

4.

PackageID	TagNumber	InstallDate	PCModel	SoftwareName	SoftwareCostUSD
AC01	32808	09-13-2005	Apple	Unity	754.95
DB32	32808	12-03-2005	Apple	Unreal	380.00
DB32	37691	06-15-2005	Windows	Unreal	380.00
DB33	57772	05-27-2005	IBM	RPG Maker	412.77
WP08	32808	01-12-2005	Apple	GameSalad	185.00
WP08	37691	06-15-2005	Windows	GameSalad	227.50
WP08	57222	05-27-2005	Ouya	GameSalad	170.24
WP09	59836	10-30-2005	OpenSource	GameMaker	35.00
WP09	77740	05-27-2005	PlayStation	GameMaker	35.00

5. PCModel is affected by just the TagNumber, SoftwareName is affected by PackageID, SoftwareCostUSD is affected by PackageID, TagNumber, and InstallDate.

6. The reason for the table not being in the 3rd Normal Form is that some of the columns in the table only have partial dependencies, where some columns are not affected by every row in the primary key.

7. Software Table – Primary key PackageID

Console Table – Primary key TagNumber

Install Table – Primary Key TagNumber, PackageID, and InstallDate

8. In the Software table, PackageID affects SoftwareName. In the Console Table, TagNumber affects PCModel. In the Install Table, SoftwareCostUSD is affected by the PackageID, TagNumber, and InstallDate.

9. The tables now follow all the rules to be in the third normal form. The columns that aren't part of a primary key are only affected by the columns that make up the primary key. The relations between columns are either 1 to 1 or Many to 1, so the table follows all the rules.

10. Check the other file.