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CPSC 321 01

Fall 2021

HW 01

Part 1: Relational Design

1. LegoBrick(element id, design id, name, color, price)

LegoSet(item number, name, age range, price, minifigure count, vip points, height, width, depth, theme, category)

Foreign keys: theme, category

Theme(name, description, license)

PartList(set, brick, number of pieces)

Foreign keys: set, brick

2.

LegoSet	
PK	Item number
	Name
	Age Range
	Price
	Minifigure Count
	VIP points
	Height
	Width
	Depth
FK	Product Line
FK`	Category
	Total Pieces

PartList	
FK	Set
FK	Brick
	Number of Pieces

LegoBrick	
PK	Element id
	Design id
	Name
	Color
	Price

Theme	
PK	Name
	Description
	License

3.

LegoBrick				
<u>Element id</u>	Design id	Name	Color	Price
300121	3001	BRICK 2x4	Bright Red	\$0.21
300122	3002	BRICK 1x4	Orange	\$0.15
300123	3003	BRICK 1x3	Blue	\$0.13

LegoSet											
<u>Item #</u>	Name	Age Range	Price	Minifigure Count	VIP Points	Height (cm)	Width (cm)	Depth (cm)	Product Line	Category	Total Pieces
21328	Minecraft House	18+	\$79.99	5	520	6	13	8	Minecraft	buildings	1326
21329	Big Tree	10+	\$49.99	3	300	15	5	5	Trees	Nature	973

Theme		
<u>Name</u>	Description	License
Minecraft	The game with blocks	Mojang
Trees	Collection of Trees	Null

PartList		
Set #	Brick id	Number of Pieces
21328	300121	20
21328	300122	4

4. It helps to break information up into multiple tables so someone looking at it is not overwhelmed with a wall of information. Having multiple tables gives more information about specific aspects of the attributes that would not be necessary in the main table. I believe that my schema design is pretty decent. If I had more information, I think it would be helpful to create a new table for category.

Part 2: Project Idea

1. I would like to focus my project on Music. I love to surround myself with music especially because I am a musician so this is a topic I would enjoy working with. I would want to create a web app that stores a database of my spotify music data.

2. I would enable my music database to support adding new song entries, updating entries, and searching. I would add a feature where I can sort the song entries by songs that I listen to the

most and songs that I skip the most. I would also add where it can be sorted by genre and alphabetically by artist or song name so it can be easier to read.