Report

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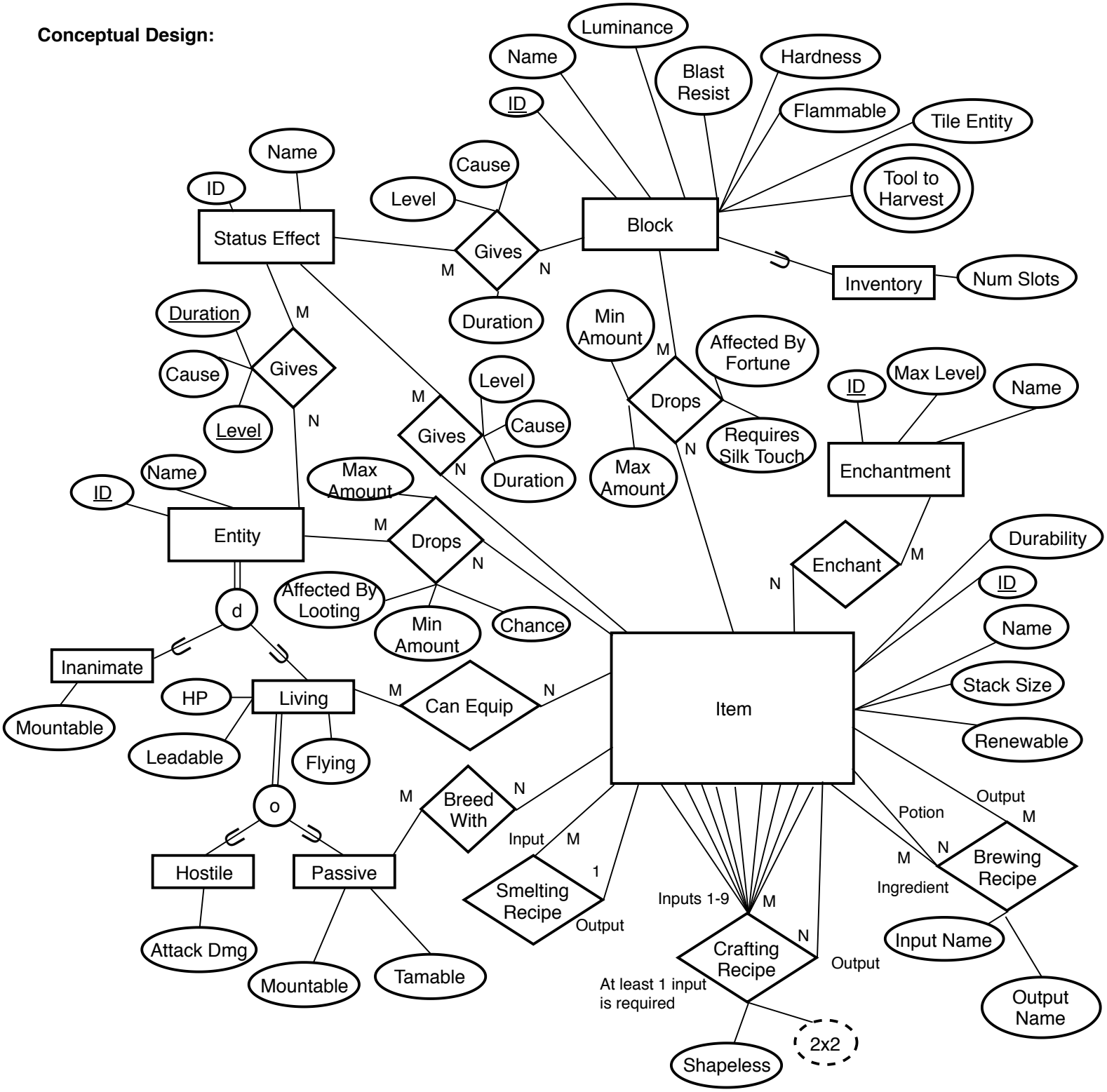
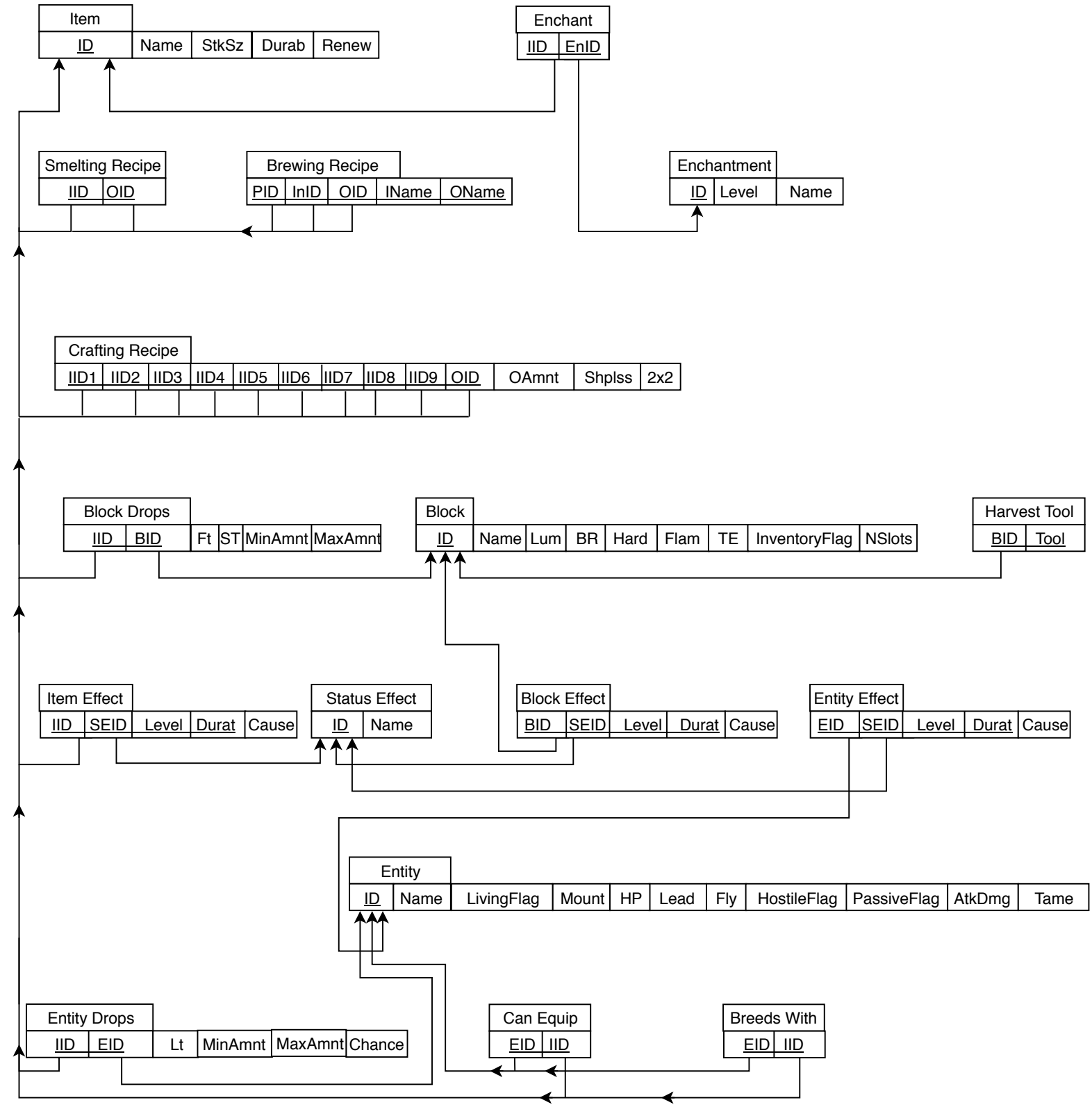
Conceptual Design:



Logical Design:



Entity	Attribute	Type	Meaning	Integrity Constraints
Item	ID	String	ID of the Item	Primary Key
	Name	String	Name of the Item	Not Null
	StkSz	Int	Maximum Stack Size	Not Null
	Durab	Int	Durability of an Item	
	Renew	Bool	Is an Item Renewable	Not Null
Crafting Recipe	IID1-IID9	String	Inputs 1 through 9 of the Recipe	Foreign Key, Part of Primary Key
	OID	String	Output ID of Item	Foreign Key, Part of Primary Key
	OAmnt	Int	Number of Output Created	Not Null
	Shplss	Bool	Is the Recipe Shapeless	Not Null
	2x2	Bool	Is the Recipe Craftable in 2x2 Grid	Not Null
Smelting Recipe	IID	String	Input ID of Item	Foreign Key, Part of Primary Key
	OID	String	Output ID of Item	Foreign Key, Part of Primary Key
Brewing Recipe	PID	String	Input ID of Potion	Foreign Key, Part of Primary Key
	InID	String	Input ID of Ingredient	Foreign Key, Part of Primary Key
	OID	String	Output ID of Item	Foreign Key, Part of Primary Key
	IName	String	Name of the Input Potion	Part of Primary Key
	OName	String	Name of the Output Potion	Part of Primary Key
Enchantment	ID	Int	ID of the Enchantment	Part of Primary Key
	Level	Int	Level of the Enchantment	Not Null
	Name	String	Name of the Enchantment	Not Null
Enchant	IID	String	ID of the Item Being Enchanted	Foreign Key, Part of Primary Key
	EnID	Int	ID of the Enchantment	Foreign Key, Part of Primary Key
Block	ID	String	ID of the Block	Primary Key
	Name	String	Name of the Block	Not Null
	Lum	Int	Luminance of the Block	Not Null
	BR	Int	Blast Resistance of the Block	Not Null
	Hard	Int	Hardness of the Block	Not Null
	Flam	Bool	Is the Block Flammable	Not Null
	TE	Bool	Is the Block a Tile Entity	Not Null
	InventoryFlag	Bool	Is the Block an Inventory	Not Null
	NSlots	Int	Number of Slots if Inventory	Null if InventoryFlag is false
Block Drops	IID	String	ID of the Dropped Item	Foreign Key, Part of Primary Key
	BID	String	ID of Broken Block	Foreign Key, Part of Primary Key
	Ft	Bool	Is the Drop Affected by Fortune	Not Null
	ST	Bool	Is the Drop Affected by Silk Touch	Not Null
	MinAmount	Int	Minimum Drop Amount	Not Null
	ST	Bool	Maximum Drop Amount	Not Null
Harvest Tool	BID	String	ID of the Block Being Mined	Foreign Key, Part of Primary Key
	Tool	String	Tool Used to Mine Block	Part of Primary Key
Status Effect	ID	Int	ID of the Status Effect	Part of Primary Key
	Name	String	Name of the Status Effect	Not Null
Item Effect	IID	String	ID of the Item Causing the Effect	Foreign Key, Part of Primary Key
	SEID	Int	ID of the Effect	Foreign Key, Part of Primary Key
	Level	Int	Level of the Effect	Foreign Key, Part of Primary Key
	Cause	String	Cause of the Effect	Not Null
	Durat	Int	Duration of the Effect in Ticks	Part of Primary Key
Block Effect	BID	String	ID of the Block Causing the Effect	Foreign Key, Part of Primary Key
	SEID	Int	ID of the Effect	Foreign Key, Part of Primary Key
	Level	Int	Level of the Effect	Foreign Key, Part of Primary Key
	Cause	String	Cause of the Effect	Not Null
	Durat	Int	Duration of the Effect in Ticks	Part of Primary Key

Entity	Attribute	Type	Meaning	Integrity Constraints
Entity Effect	EID	String	ID of the Entity Causing the Effect	Foreign Key, Part of Primary Key
	SEID	Int	ID of the Effect	Foreign Key, Part of Primary Key
	Level	Int	Level of the Effect	Foreign Key, Part of Primary Key
	Cause	String	Cause of the Effect	Not Null
	Durat	Int	Duration of the Effect in Ticks	Part of Primary Key
Entity	ID	String	ID of the Entity	Primary Key
	Name	String	Name of the Entity	Not Null
	LivingFlag	Bool	Is the Entity Alive	Not Null
	Mount	Bool	Is the Entity Mountable	Null if LivingFlag is true and PassiveFlag is false
	HP	Int	Amount of HP an Entity Has	Null if LivingFlag is false
	Lead	Bool	Can a Lead be Used on the Entity	Null if LivingFlag is false
	Fly	Bool	Can the Entity Fly	Null if LivingFlag is false
	HostileFlag	Bool	Is the Entity Hostile	Not Null
	PassiveFlag	Bool	IS the Entity Passive	Not Null
	AtkDmg	Int	Attack Damage of the Entity	Null if HostileFlag is false
	Tame	Bool	Can the Entity be Tamed	Null if PassiveFlag is false
Entity Drops	IID	String	ID of the Item Being Dropped	Foreign Key, Part of Primary Key
	EID	String	ID of the Dying Entity	Foreign Key, Part of Primary Key
	Lt	Bool	Is the Drop Affected by Looting	Not Null
	Min Amount	Int	Minimum Amount of the Item That is Dropped	Not Null
	Max Amount	Int	Maximum Amount of the Item That is Dropped	Not Null
	Chance	Float	Percent Chance of the Item Being Dropped	Not Null
Can Equip	EID	String	ID of the Entity	Foreign Key, Part of Primary Key
	IID	String	ID of the Item Being Equipped	Foreign Key, Part of Primary Key
Breeds With	EID	String	ID of the Entity	Foreign Key, Part of Primary Key
	IID	String	ID of the Item Being Fed to the Entity	Foreign Key, Part of Primary Key

Problem Statement:

The purpose of the database is to store information about the many blocks, items, entities, etc. in Minecraft. A user will be able to search for the information that they desire about something in the game. An example would be looking up a recipe to see how to craft an item or what enchantments can be applied to an item. The database would help new players understand that game better and also allow more experienced players to discover something that they might not have know about some aspect of the game. The database will also be able to store information about items that are added to the game in the future and even works for storing information about blocks, items, entities, etc. that are added by mobs.