

Entity: LED_PROJECT

Field Names:	Project_Name	Description	Song_Path
Datatype:	VarChar(50)	VarChar(50)	VarChar(100)

Domain Description: Project_Name - Primary Key

Description: Holds distinct project names and descriptions for keeping effects grouped together and exportable together

Entity: LIGHTING_EFFECTS

Field Names:	Lighting_Effect	Description
Datatype:	Int	VarChar(100)

Domain Description: Lighting_Effect - Primary Key

Description: Holds all selectable lighting effects available for composer and microcontroller performance. Lighting_Effect corresponds with a struct valuepassed to microcontroller

Entity: MCU

Field Names:	MCU_Name	Description	Project_Name
Datatype:	VarChar(50)	VarChar(50)	VarChar(50)

Domain Description: MCU_Name - Primary Key Project_Name - Foreign Key on LED_Project

Description: Holds distinct microcontroller names for projects. Allows user to name and keep track of which effects will run on which microcontroller, and which microcontrollers will attach to which costume

Entity: MCU_PINS

Field Names:	Pin_Setup	Description	MCU_Name	Data_Pin	Clock_Pin
Datatype:	BigInt	VarChar(50)	VarChar(50)	TinyInt	TinyInt

Domain Description: Pin_Setup - Primary Key MCU_Name - Foreign Key on MCU

Description: Holds distinct data - clock pin setups for different microcontroller. Allows program to distinguish between multiple led strips, and lets user program multiple strips on one microcontroller using multiple data and clock pins

Entity: LED_EFFECT

Field Names:	Effect_Num	Project_Name	MCU_Name	Pin_Setup	Num_LEDs	Lighting_Effect	Effect_Start	Effect_Duration	Delay_Time	Led_Position_Array	LED_Color_Array	Iterations	Bounces	Brightness	Incr_Brightness	Brightness_DelayTime
Datatype:	BigInt	VarChar(50)	VarChar(50)	BigInt	SmallInt	Int	Float	Float	Float	VarChar(999)	VarChar(999)	SmallInt	SmallInt	SmallInt	SmallInt	Float

Domain Description: Effect_Num - Primary Key Project_Name - Foreign Key on LED_Project Lighting_Effect - Foreign Key on Lighting_Effects MCU_Name - Foreign Key on MCU Pin_Setup - Foreign Key on MCU_Pins

Description: Holds distinct effect sequences for a data-clock pin pair. Allows lighting effects to be added and timed by user to play as required per led strip. Also holds values that can be exported to a text file as structs and uploaded into microcontroller