

## Locations Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
Region_ID	VARCHAR(2)	KA		Unique abbreviation of region name	Primary Key, NOT NULL
Region	TEXT	Johto		Name of the region	
Capital City	TEXT	Violet		Capital City of the Region	
Biome	TEXT	Tundra		Description of the landscape/terrian	

## Trainers Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
Trainer_ID	VARCHAR(5)	TR000		Unique Trainer identification number	Primary Key, NOT NULL
Name	TEXT	Brock		Name of the Trainer	
Gym	TEXT	Pewter Gym		The Trainer's Gym	
Specialist_Type	TEXT	Rock		Type of Pokemon that the Trainer specialises in.	
Type_1	TEXT	Gym Leader		The trainers speciality (e.g. Breeder, Trainer, etc).	
Type_2	TEXT	Breeder		The trainers speciality (e.g. Breeder, Trainer, etc).	
Gender	VARCHAR(6)	Female		The trainers Gender (e.g. Male or Female)	
Region_ID	VARCHAR(2)	KA		The region which the trainer comes from. This dictates their home town advantage.	Foreign Key
Hometown	TEXT	Pewter		The Trainers hometown. If two trainers are from the same region this will dictate the advantage.	

## Pokedex Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
<b>Pokedex_ID</b>	INTEGER	12		Unique identifier for the Pokemon species.	Primary Key, NOT NULL
<b>Species</b>	TEXT	BULBASAUR		The species of the Pokemon (not unique), there can be many of the same Pikachu.	
<b>Type</b>	TEXT	GRASS		The type of Pokemon (e.g. GRASS, ROCK, etc).	
<b>Attack</b>	INTEGER	11		Default attack strength value	
<b>Defense</b>	INTEGER	11		Default defense strength value	
<b>Spec_Attack</b>	INTEGER	12		Default special attack strength value	
<b>Spec_Defense</b>	INTEGER	14		Default special defense strength value	
<b>XP</b>	INTEGER	10		Default experience (XP) value	
<b>Health</b>	INTEGER	100	100	Default Health value	
<b>Location</b>	VARCHAR(2)	KA		Region_ID borrowed from Location table	Foreign Key (Region_ID)
<b>Captured_By</b>	VARCHAR(5)	TR001		Trainer_ID borrowed from Trainer table	Trainer_ID (Region_ID)

## Battle Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
<b>Battles_ID</b>	INTEGER	AUTO INCREMENT		Unique Battle ID	Primary Key, NOT NULL
<b>Timestamp</b>	DATETIME	YYYY-MM-DD		Time and Date when the battle occurred.	
<b>Pokedex_ID</b>	INTEGER	12		The opponents Pokdex_ID (which Pokemon was used?)	Foreign Key
<b>Trainer_ID</b>	VARCHAR(5)	TR001		The opponents Trainer_ID (which Trainer was battled?)	Foreign Key
<b>Region_ID</b>	VARCHAR(2)	KA		Where did the battle take place? Determine home advantage	Foreign Key
<b>Home_Adv</b>	BOOLEAN	YES/NO		Was there a home town advantage?	
<b>Result</b>	TEXT	WIN, LOSS OR DRAW		What was the result of the battle?	

## Encounters Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
<b>Encounters_ID</b>	INTEGER	AUTO INCREMENT		Unique Battle ID	Primary Key, NOT NULL
<b>Timestamp</b>	DATETIME	YYYY-MM-DD		Time and Date when the battle occurred.	
<b>Pokedex_ID</b>	INTEGER	12		The opponents Pokdex_ID (which Pokemon was used?)	Foreign Key
<b>Region_ID</b>	VARCHAR(2)	KA		Where did the battle take place? Determine home advantage	Foreign Key
<b>Home_Adv</b>	BOOLEAN	YES/NO		Was there a home town advantage?	
<b>Result</b>	TEXT	WIN, LOSS OR DRAW		What was the result of the battle?	

## Training Table

Element Name	Data Type	Size / Format	Default	Description	Constraint
<b>Trainer_ID</b>	VARCHAR(5)	TR000		Borrowed Primary Key from Trainer Table	Composite Key, NOT NULL
<b>Pokedex_ID</b>	INTEGER	1		Borrowed Primary Key from Pokedex Table	Composite Key, NOT NULL
<b>Count_Encounters</b>	INTEGER	12		Count the number of encounters in the Encounters table the Trainer has had.	
<b>Count_Battles</b>	INTEGER	12		Count the number of battles in the Battles table the Trainer has had.	
<b>Attack</b>	INTEGER	9		Default Attack value from Pokedex Table	
<b>Defense</b>	INTEGER	5		Default Defense value from Pokedex Table	
<b>Spec_Attack</b>	INTEGER	4		Default Spec_Attack from Pokedex Table	
<b>Spec_Defense</b>	INTEGER	2		Default Spec_Defense from Pokedex Table	
<b>XP</b>	INTEGER	12		Default XP from Pokedex Table + No. Encounters + 2x No. Battles	
<b>Health</b>	INTEGER	100	100	Default Health value from Pokedex Table	