

PHYSICAL DATA MODEL

- Transaction

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	Name			Varchar(45)	Yes	Transaction name
3.	Code			Varchar(100)	Yes	Code of transaction
4.	Time			Date	Yes	Time of transaction
5.	Content			Varchar(100)	Yes	Content of transaction
6.	Amount			Integer	Yes	Amount of transaction

- Bike

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	Value			Integer	Yes	Price of bike
3.	isBeingUsed			Small integer	Yes	bike is used
4.	licence_plate			Varchar(100)	Yes	License Plate of bike
5.	bike_image_url			Text	Yes	Image URL of bike
6.	brand			Varchar(100)	Yes	brand of bike
7.	dock_id		x	Integer	Yes	Id from Dock
8.	bike_type_id		x	Integer	Yes	Id from bike type

- StandardEBikeAttribute

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	name			Varchar(100)	Yes	name of attribute
3.	value			Text	Yes	value
8.	bike_id		x	Integer	Yes	Id from bike

- TwinBikeAttribute

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	name			Varchar(100)	Yes	Name of attribute
3.	value			Text	Yes	Value
8.	bike_id		x	Integer	Yes	Id from bike

- Bike Type

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	id	x		Integer	Yes	ID, auto increment
2.	Name			Varchar(45)	Yes	Name of bike type
3.	value			SmallInt	Yes	Id from Bike

- **Rental Bike Code**

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	Barcode			Varchar(100)	Yes	Barcode of rental code
4.	BikeId		x	Integer	Yes	Id from bike

- **Dock**

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	Name			Varchar(45)	Yes	Name of dock
3.	DockImageUrl			Text	Yes	Image URL of dock
4.	Address			Varchar(100)	Yes	Address of dock
5.	DockArea			Float	Yes	Area of dock

- **DockEmptyPoint**

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	x		Integer	Yes	ID, auto increment
2.	EmptyPoint			Integer	Yes	Empty point of bike type
3.	MaxAvailablePoints			Integer	Yes	Max Available point of each type bike
4.	BikeTypeId		x	Integer	Yes	Id from BikeType
5.	DockId		x	Integer	Yes	Id from Dock