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 With Time Zone	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.	Name			Varchar(45)	Yes	Name
3.	Value			Integer	Yes	Price of bike
4.	is_used			SmallInt	Yes	bike is used
5.	licence_plate			Varchar(100)	Yes	Licence Plate of bike
6.	bike_image_url			Varchar(30)	Yes	Image URL of bike
7.	brand			Varchar(100)	Yes	brand of bike
8.	dock_id		x	Integer	Yes	Id from Dock
9.	bike_type_id		x	Integer	Yes	Id from bike type

- **Bike Attributed**

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	id	x		Integer	Yes	ID, auto increment
2.	bike_id		x	Integer	Yes	Id from Bike
3.	Name			Varchar(45)	Yes	Name of attribute
4.	Value			Varchar(100)	Yes	Value of attribute

- **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.	bar_code			Varchar(100)	Yes	Barcode of bike
3.	Bike_id		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.	Dock_image_url			Varchar(100)	Yes	Image URL of dock
4.	Address			Varchar(100)	Yes	Address of dock
5.	Area			Float(20)	Yes	Area of dock

- **DockEmptyPoint**

#	Column Name	PK	FK	Data type	Mandatory	Description
1.	Id	X		Integer	Yes	ID, auto increment
2.	empty_points			Integer	Yes	Empty point of bike type
3.	max_available_ points			Integer	Yes	Max available point of bike type
2.	bike_type_id		x	Integer	Yes	Id from BikeType
3.	dock_id		x	Integer	Yes	Id from Dock