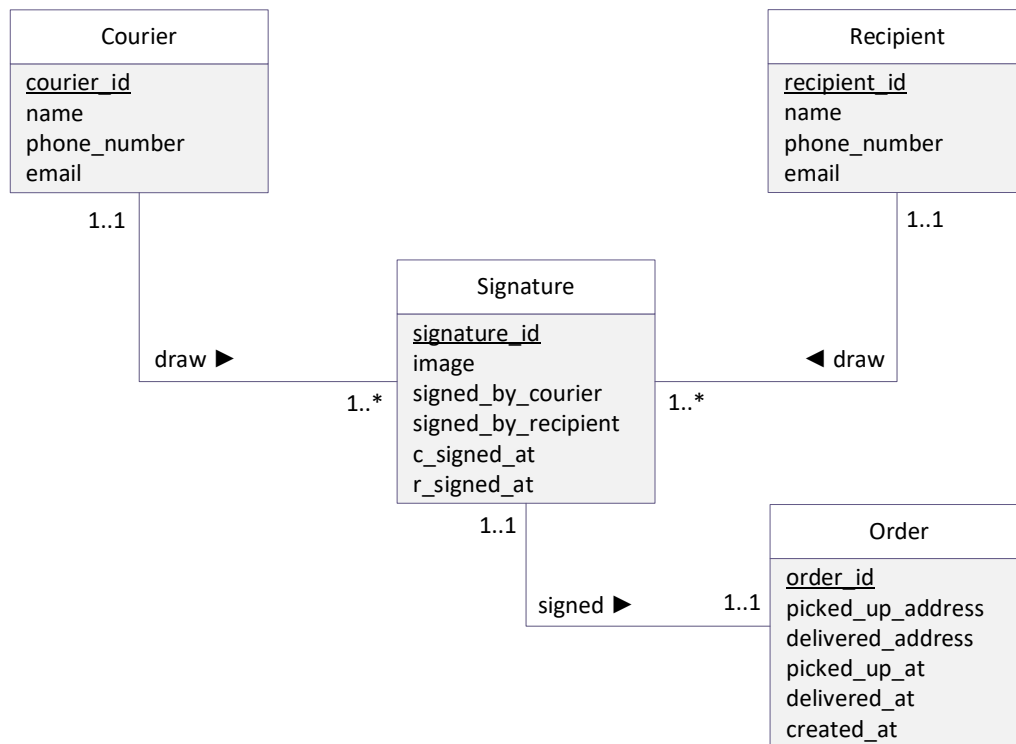# 1 ER DIAGRAM

Clarifications

1. Courier, Recipient, and Order entities are created to support the Signature entity
2. All the fields or the Courier, Recipient, and Order entities are the basic necessary fields for us to imagine the real-life scenario
3. The Order entity's fields are made up based on the customer's proof-of-delivery MVP

2 RELATIONAL SCHEMA

COURIER (courier_id, name, phone_number, email)

RECIPIENT (recipient_id, name, phone_number, email)

ORDER (order_id, picked_up_address, delivered_address, picked_up_at, delivered_at created_at)

SIGNATURE (signature_id, image, signed_by_courier, signed_by_recipient, c_signed_at, r_signed_at, courier_id, recipient_id, order_no)

        FK (courier_id) REFENRENCES COURIER (courier_id)

        FK (recipient_id) REFENRENCES RECIPIENT (recipient_id)

        FK (order_no) REFENRENCES ORDER (order_no)

2.1 ATTRIBUTE TYPE DESCRIPTIONS

Courier

Attribute Type	Description	Data Type	Value Required	Identity Attribute or part of it	Special Domain
courier_id	Courier's identifier	Text	Yes	Yes	Valid UUID format
name	Courier's name	Text	No	-	-
phone_number	Courier's phone number	Text	Yes	-	-
email	Courier's email	Text	No	-	Valid email format

Recipient

Attribute Type	Description	Data Type	Value Required	Identity Attribute or part of it	Special Domain
recipient_id	Recipient's identifier	Text	Yes	Yes	Valid UUID format
name	Recipient's name	Text	No	-	-
phone_number	Recipient's phone number	Text	Yes	-	-
email	Recipient's email	Text	No	-	Valid email format

Order

Attribute Type	Description	Data Type	Value Required	Identity Attribute or part of it	Special Domain
order_id	Order's identifier	Text	Yes	Yes	Valid UUID format
picked_up_address	Order's picked-up address	Text	No	-	-
delivered_address	Order's delivered address	Text	Yes	-	-
picked_up_at	Order's picked-up timestamp	Timestamp	Yes	-	-
delivered_at	Order's delivered timestamp	Timestamp	Yes	-	-
created_at	Order's created timestamp	Timestamp	Yes	-	-

Signature

Attribute Type	Description	Data Type	Value Required	Identity Attribute or part of it	Special Domain
signature_id	Signature's identifier	Text	Yes	Yes	Valid UUID format
Image	Signature's image	Blob	Yes	-	-
signed_by_courier	The existence of courier's signature	Boolean	Yes	-	0 or 1
signed_by_recipient	The existence of recipient's signature	Boolean	Yes	-	0 or 1
c_signed_at	Courier signature's timestamp	Timestamp	Yes	-	-
r_signed_at	Recipient signature's timestamp.	Timestamp	Yes	-	-

2.2 TABLE DESCRIPTIONS

Courier

Column	Description	Data Type	Value Required	Key	Special Domain
id	*Unique courier identifier*	VARCHAR (36)	Yes	PRIMARY KEY	UUID
name	Courier's name	VARCHAR (50)	No	-	-
phone_number	Courier's phone number	VARCHAR (50)	Yes	-	-
email	Courier's email	VARCHAR (50)	No	-	Check '@'

Recipient

Column	Description	Data Type	Value Required	Keys	Special Domain
id	*Unique recipient identifier*	VARCHAR (36)	Yes	PRIMARY KEY	UUID
name	Recipient's name	VARCHAR (50)	No	-	-
phone_number	Recipient's phone number	VARCHAR (50)	Yes	-	-
email	Recipient's email	VARCHAR (50)	No	-	Check '@'

Order

Column	Description	Data Type	Value Required	Key	Special Domain
id	*Unique order identifier*	VARCHAR (36)	Yes	PRIMARY KEY	UUID
picked_up_address	Order's picked-up address	VARCHAR (50)	No	-	-
delivered_address	Order's delivered address	VARCHAR (50)	Yes	-	-
picked_up_at	Timestamp when the order is picked up	TIMESTAMP	Yes	-	YYYY-MM-DD hh:mm:ss
delivered_at	Timestamp when the order is delivered	TIMESTAMP	Yes	-	YYYY-MM-DD hh:mm:ss
created_at	Timestamp when the order is first created	TIMESTAMP	Yes	-	YYYY-MM-DD hh:mm:ss

Signature

Column	Description	Data Type	Value Required	Key	Special Domain
id	*Unique signature identifier*	VARCHAR (36)	Yes	PRIMARY KEY	UUID
Image	Signature's image	BLOB	Yes	-	-
signed_by_courier	Courier signature status "true" = is signed "false" = not yet signed	TINYINT(1)	Yes	-	1, 0 Default to 0
signed_by_recipient	Recipient signature status "true" = is signed "false" = not yet signed	TINYINT(1)	Yes	-	1, 0 Default to 0
c_signed_at	The timestamp when the courier signs	TIMESTAMP	Yes	-	YYYY-MM-DD hh:mm:ss
r_signed_at	The timestamp when the recipient signs	TIMESTAMP	Yes	-	YYYY-MM-DD hh:mm:ss
courier_id	*Unique courier identifier*	VARCHAR (50)	Yes	FOREIGN KEY 1 => Courier	UUID
recipient_id	*Unique recipient identifier*	VARCHAR (50)	Yes	FOREIGN KEY 2 => Recipient	UUID
order_id	*Unique order identifier*	VARCHAR (50)	Yes	FOREIGN KEY 3 => Order	UUID