

PointConfig			
bigint	id	PK	AUTO_INCREMENT
varchar	config_key	UK	UNIQUE, NOT NULL
varchar	config_value		NOT NULL
varchar	description		
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

Member			
bigint	id	PK	AUTO_INCREMENT
varchar	member_no	UK	UNIQUE, NOT NULL
varchar	name		NOT NULL
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

PointUsage			
bigint	id	PK	AUTO_INCREMENT
varchar	point_key	UK	UNIQUE, NOT NULL
bigint	member_id	FK	NOT NULL
varchar	order_number		NOT NULL
decimal	total_amount		NOT NULL, CHECK(total_amount > 0)
decimal	cancelled_amount		NOT NULL, DEFAULT 0
varchar	status		NOT NULL
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

PointAccumulation			
bigint	id	PK	AUTO_INCREMENT
varchar	point_key	UK	UNIQUE, NOT NULL
bigint	member_id	FK	NOT NULL
decimal	amount		NOT NULL, CHECK(amount > 0)
decimal	available_amount		NOT NULL, DEFAULT 0
date	expiration_date		NOT NULL
boolean	is_manual_grant		NOT NULL, DEFAULT FALSE
varchar	status		NOT NULL
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

MemberPointBalance			
bigint	member_id	PK	NOT NULL, FK to Member
decimal	available_balance		NOT NULL, DEFAULT 0
decimal	total_accumulated		NOT NULL, DEFAULT 0
decimal	total_used		NOT NULL, DEFAULT 0
decimal	total_expired		NOT NULL, DEFAULT 0
bigint	version		NOT NULL, DEFAULT 0
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

PointUsageDetail			
bigint	id	PK	AUTO_INCREMENT
bigint	point_usage_id	FK	NOT NULL
bigint	point_accumulation_id	FK	NOT NULL
decimal	amount		NOT NULL, CHECK(amount > 0)
decimal	cancelled_amount		NOT NULL, DEFAULT 0
timestamp	created_at		NOT NULL
timestamp	updated_at		NOT NULL

PointConfigHistory			
bigint	id	PK	AUTO_INCREMENT
varchar	config_key	FK	NOT NULL
varchar	old_value		
varchar	new_value		NOT NULL
varchar	changed_by		
timestamp	changed_at		NOT NULL