Chuks Kitchen - System Process Flow
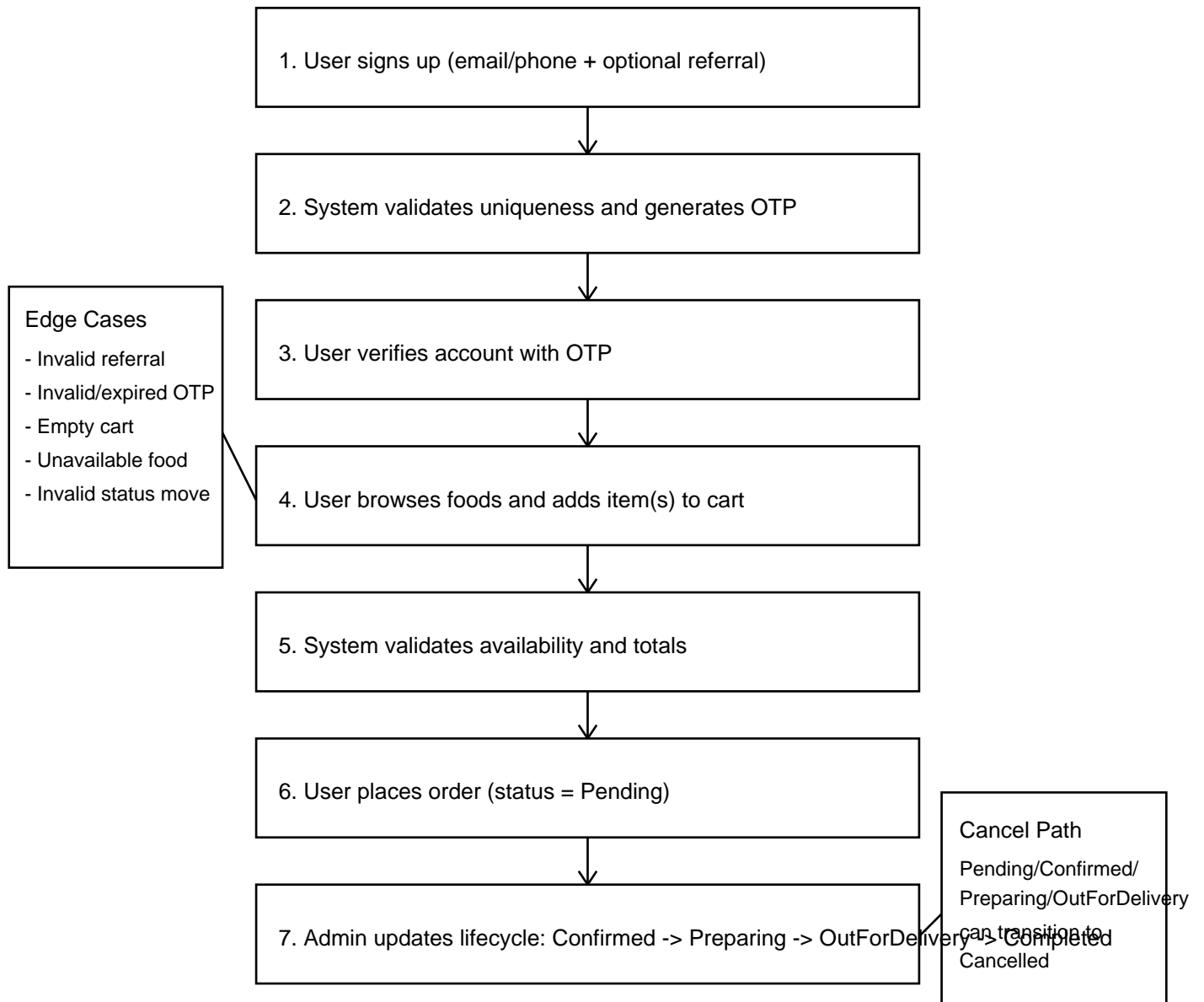
(User registration, menu browsing, cart, order creation, and status lifecycle)

```
┌──────────────────────────────────────────────┐
│ 1. User signs up (email/phone + optional      │
│    referral)                                   │
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 2. System validates uniqueness and generates  │
│    OTP                                         │
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 3. User verifies account with OTP             │
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 4. User browses foods and adds item(s) to cart│
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 5. System validates availability and totals   │
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 6. User places order (status = Pending)       │
└──────────────────────────────────────────────┘
                      │
                      ▼
┌──────────────────────────────────────────────┐
│ 7. Admin updates lifecycle: Confirmed ->      │
│    Preparing -> OutForDelivery -> Completed    │
└──────────────────────────────────────────────┘
```

Edge Cases
- Invalid referral
- Invalid/expired OTP
- Empty cart
- Unavailable food
- Invalid status move

Cancel Path

Pending/Confirmed/
Preparing/OutForDelivery
can transition to
Cancelled

Chuks Kitchen - Data Model (ERD)

Primary entities and relationships for backend implementation

Users

PK Id : uuid
Email : text (unique)
PhoneNumber : text (unique)
ReferralCode : text?
IsVerified : bool
CreatedAtUtc : timestamp

OtpVerifications

PK/FK UserId : uuid
Code : text
ExpiresAtUtc : timestamp

1:1

Foods

PK Id : uuid
Name : text
Price : decimal(18,2)
IsAvailable : bool

1:M

1:M

1:M

CartItems

PK/FK UserId : uuid
PK/FK FoodId : uuid
Quantity : int

Orders

PK Id : uuid
FK UserId : uuid
TotalAmount : decimal(18,2)
CreatedAtUtc : timestamp
Status : int/enum

1:M

1:M

OrderItems

PK Id : int
FK OrderId : uuid
FK FoodId : uuid
Quantity : int
UnitPrice : decimal(18,2)