Class Diagram

Blood Type

#id: int
+blood_type: string

+add()

Donor

#id: int
+name: string
+status: string
+blood_type: string
+donor_card: int

+add()

Recepients

+request: string

+verify()

Processing

Request

#id: int
+name: string
+details: string
+date: string

+add()

Donor Card

#id: int
+owner_name: string
+donation_date: string
+details: string

+add()
+verify()

Blood Bank

#id: int
+name: string
+details: string
+address: string
+contact_number: string

+process_request()
+validate()

1...*

Blood Bank Management System

System Software

- login Module
- System Dashboard
- Bloodletting information
- Donor's information
- Recipient's information
- Ganerate transcation

System Server

- Database
- Host
- Software

Users Device

- Application or web

Level 0
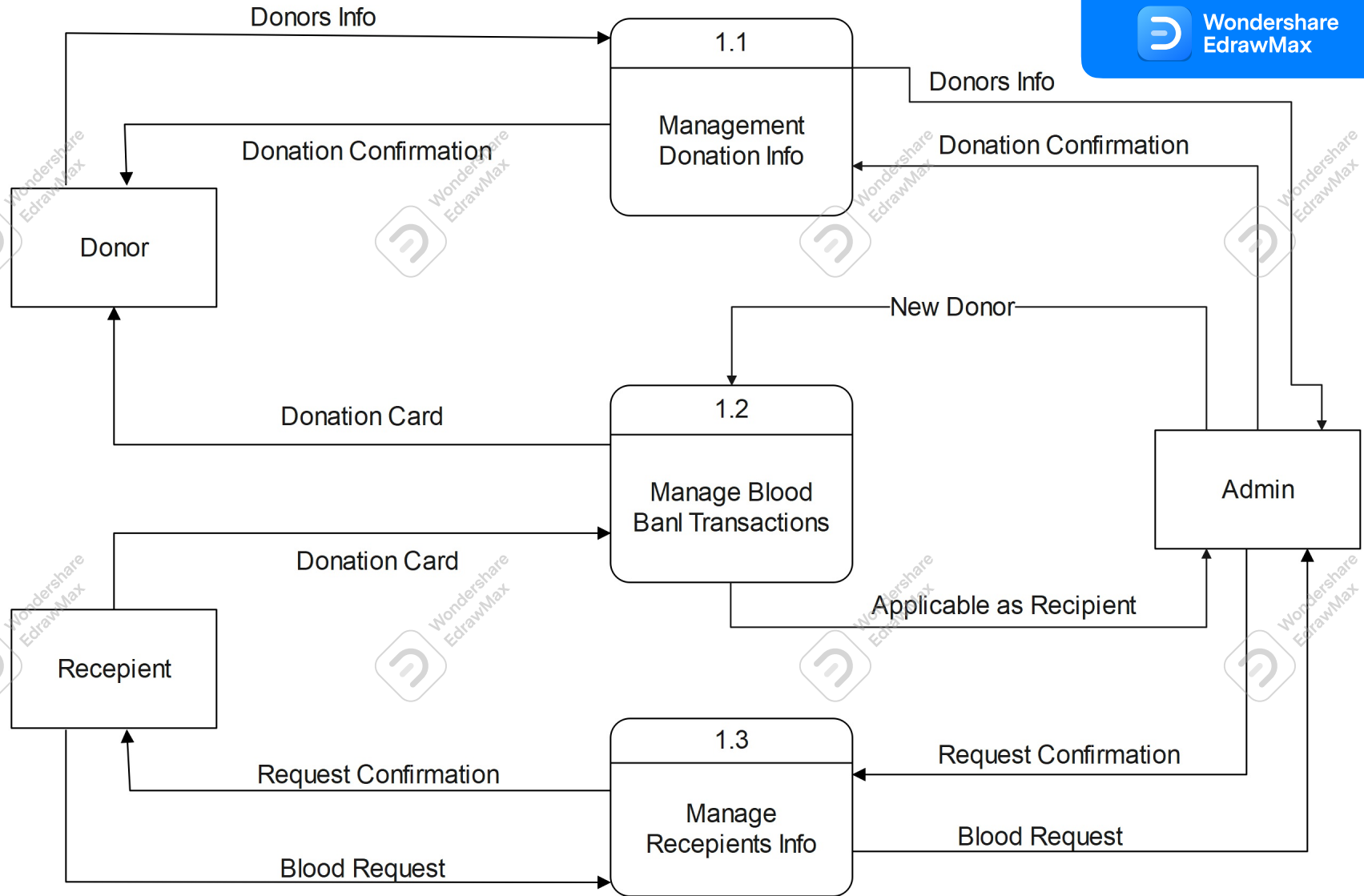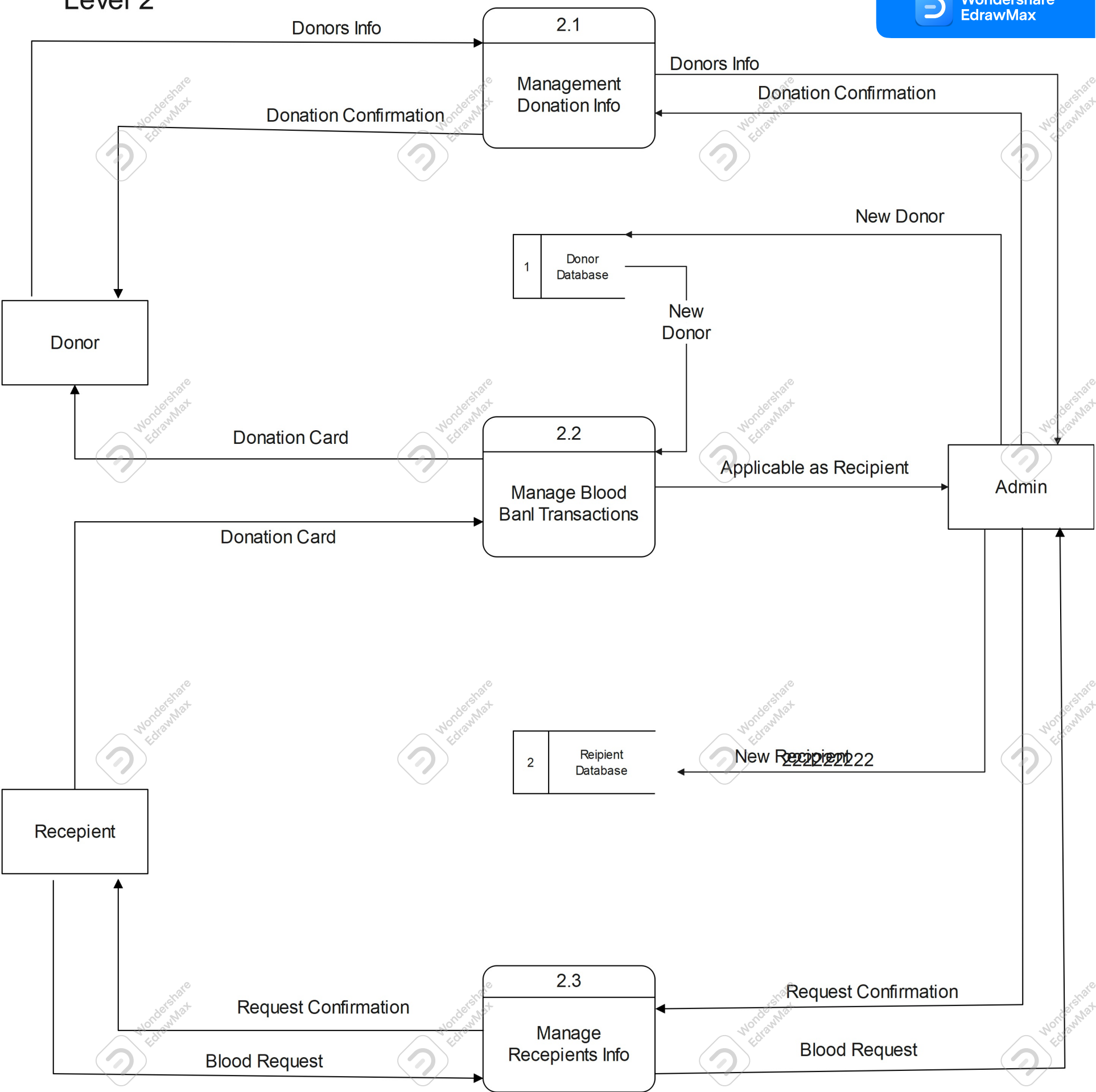
Blood Bank Management System

Level 1

Blood Bank Management System

Level 2

Blood Bank Management System

Sequence Diagram

Admin | Blood Bank System | Server | Recipient Database | Blood Database

Login →

Verify →

Alternative

[If account is valid]

Validate ←

← Browse for item

[If not]

invalid account ←

← Account is invalid

check for blood recipient →

process transaction →

check for blood type →

processing →

recipient type ←

process blood transfer →

processing →

transfer done ←
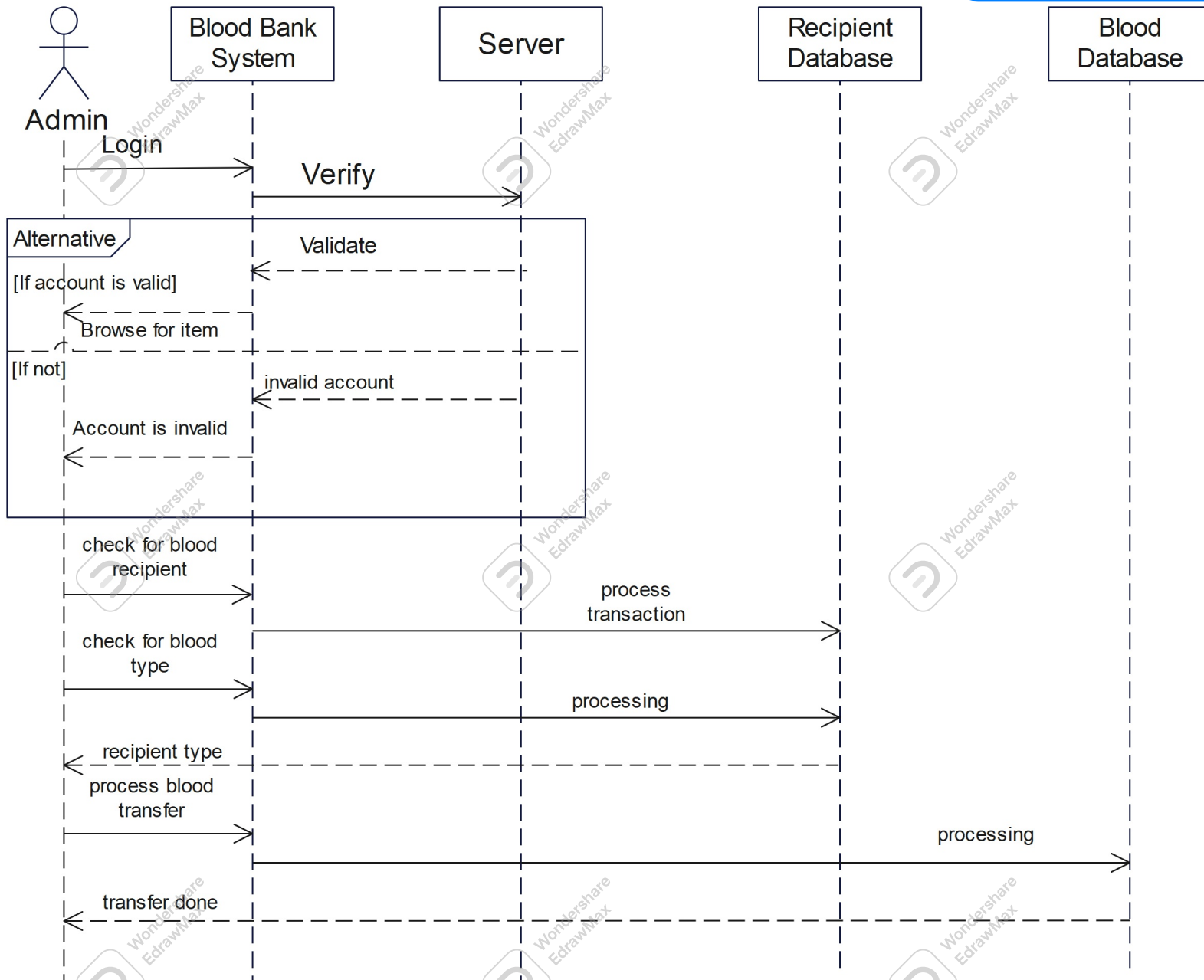
Blood Bank Management System

State Diagram

```
                              ○
                              │
                              ▼
                    ┌──────────────────┐
   if not eligible  │  New Donar Info  │
  ┌─────────────────┤                  │
  │                 └──────────────────┘
  │                          │
  │                          ▼
  │                 ┌──────────────────┐
  └────────────────▶│  Donor Confirm   │
                    └──────────────────┘
                              │
                         if eligible
                              │
                              ▼
                  ┌──────────────────────────┐
                  │ Take blood and update     │
                  │ database                  │
                  └──────────────────────────┘
                              │
                              ▼
                  ┌──────────────────┐   if not    ┌──────────────┐
                  │ Recepient request│────────────▶│ display not  │
                  │ for blood        │             │ available    │
                  └──────────────────┘             └──────────────┘
                              │
                      if request confirm
                              │
                              ▼
                  ┌──────────────────────────┐
  if not correct  │ Take the blood card from  │
  ┌───────────────│ database                  │
  │               └──────────────────────────┘
  │                          │
  │                          ▼
  │               ┌──────────────────┐
  └──────────────▶│  verify the info │
                  └──────────────────┘
                              │
                          if verify
                              │
                              ▼
                  ┌──────────────────┐
                  │  Blood Claim     │
                  │  Confirmation    │
                  └──────────────────┘
                              │
                              ▼
                              ●
```

Blood Bank Management System
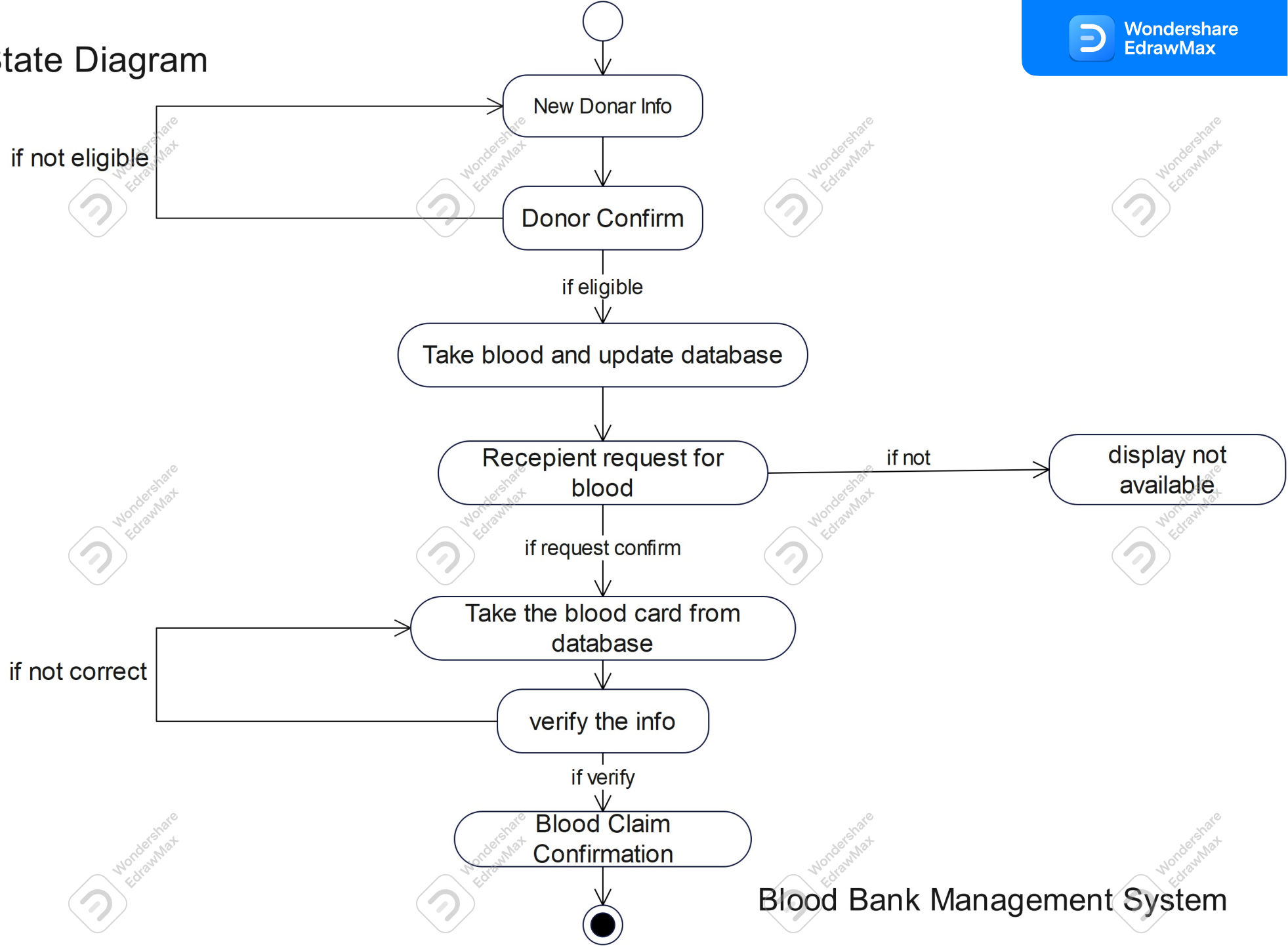
Use Case Diagram

Blood Bank Management System