

# User Workflows - Kilometros de Vida

## Overview

This document outlines the key user workflows in the Kilometros de Vida application.

## 1. New User Registration & First Donation

flowchart TD

```
A[User visits site] --> B{Wants to donate?}
B -->|Yes| C[Click 'Dona Alimentos']
B -->|No| D[Browse site]
```

```
C --> E{Logged in?}
E -->|No| F[See login prompt]
E -->|Yes| G[Fill donation form]
```

```
F --> H[Click 'Sign in with Google']
H --> I[Google OAuth popup]
I --> J[Select Google account]
J --> K[User created in DB]
K --> G
```

```
G --> L[Enter org name]
L --> M[Enter contact info]
M --> N[Enter food type]
N --> O[Enter pickup time]
O --> P[Enter address]
P --> Q[Submit form]
```

```
Q --> R{Validation}
R -->|Failed| S[Show error message]
S --> G
R -->|Success| T[Donation saved to DB]
T --> U[Show success message]
U --> V[Address geocoded]
V --> W[Pin appears on map]
```

## 2. Volunteer Registration Workflow

flowchart TD

```
A[User visits site] --> B[Click 'Únete como Voluntario']
B --> C[Fill volunteer form]
```

```
C --> D[Enter full name]
```

```

D --> E[Enter email]
E --> F[Enter phone]
F --> G[Select availability]
G --> H[Submit form]

H --> I{Validation}
I -->|Failed| J[Show error message]
J --> C
I -->|Success| K[Volunteer saved to DB]
K --> L[Show success message]
L --> M[Form reset]

```

### 3. Managing Donations (Profile Page)

flowchart TD

```

A[User clicks Profile] --> B{Authenticated?}
B -->|No| C[Redirect to Home]
B -->|Yes| D[Load user data]

D --> E[Fetch donations from DB]
E --> F[Display donations list]

F --> G{User action}
G -->|Edit| H[Click Edit button]
G -->|Delete| I[Click Delete button]
G -->|None| J[View only]

H --> K[Form fields become editable]
K --> L[Modify fields]
L --> M[Click Save]
M --> N[PUT /api/donations/:id]
N --> O[Update DB]
O --> P[Refresh list]

I --> Q[Confirm deletion]
Q -->|Cancel| F
Q -->|Confirm| R[DELETE /api/donations/:id]
R --> S[Remove from DB]
S --> P

```

### 4. Viewing Impact Map

flowchart TD

```

A[User scrolls to map section] --> B[DonationMap component loads]
B --> C[Fetch all donations]
C --> D{Donations exist?}

```

```

D -->|No| E[Show empty map]
D -->|Yes| F[For each donation]

F --> G{Address cached?}
G -->|Yes| H[Load from localStorage]
G -->|No| I[Call Nominatim API]

I --> J[Wait 1.1s rate limit]
J --> K[Get lat/lng]
K --> L[Cache in localStorage]

H --> M[Add marker to map]
L --> M

M --> N{More donations?}
N -->|Yes| F
N -->|No| O[Display complete map]

O --> P[User clicks marker]
P --> Q[Show popup with details]

```

## 5. Error Handling Workflow

flowchart TD

```

A[User action] --> B{Network error?}
B -->|Yes| C[Show 'Connection failed' message]
B -->|No| D{Validation error?}

D -->|Yes| E[Show field-specific errors]
D -->|No| F{Server error?}

F -->|Yes| G[Show 'Server error' message]
F -->|No| H{Success}

H --> I[Show success message]
I --> J[Update UI]

C --> K[Retry option]
E --> L[User corrects input]
G --> K

```

## User Journey Map

### Donor Journey

1. **Discovery:** User learns about food waste problem
2. **Awareness:** Sees impact statistics on homepage
3. **Interest:** Clicks “Dona Alimentos”
4. **Action:** Fills out donation form
5. **Confirmation:** Sees success message
6. **Engagement:** Sees their location on map
7. **Retention:** Returns to profile to manage donations

### Volunteer Journey

1. **Motivation:** Wants to help community
2. **Exploration:** Reads “Cómo Funciona” section
3. **Decision:** Clicks “Únete como Voluntario”
4. **Registration:** Fills availability form
5. **Confirmation:** Receives success message
6. **Future:** (Could add) Receives notifications for nearby pickups