

Component Overview

Component Overview (C4 Level 3)

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Status: Draft **Scope:** Frontend component architecture for web and mobile applications

1. Purpose

This document provides a C4 Level 3 component view of the Drop frontend, covering both the Next.js web application and the Expo mobile application. It maps the component tree, shared component library, page composition patterns, and design system integration.

2. Web Application Component Architecture

The web application is built with Next.js 15 (App Router) and React 19, using Tailwind CSS v4 for styling and shadcn/ui (Radix UI primitives) for the component library.

2.1 Component Diagram — Web App Structure

```
graph TD
  subgraph "Next.js 15 App Router"
    RootLayout["RootLayout<br/>(app/layout.tsx)"]
    RootLayout --> CookieConsent["CookieConsent"]
    RootLayout --> PWARegister["PWARegister"]
  end

  subgraph "Public Pages (No Auth)"
```

```
Landing["/ Landing<br/>(Server Component)"]
LoginPage["/login LoginPage"]
RegisterPage["/register RegisterPage"]
TermsPage["/terms TermsPage"]
PrivacyPage["/privacy PrivacyPage"]
FeesPage["/fees FeesPage"]
WithdrawalPage["/withdrawal WithdrawalPage"]
end

subgraph "Authenticated Pages (useAuth)"
  Dashboard["/dashboard Dashboard"]
  SendMoney["/send SendMoney"]
  ScanQR["/scan ScanQR"]
  Accounts["/accounts BankAccounts"]
  Transactions["/transactions TransactionHistory"]
  Profile["/profile ProfileHub"]
  Notifications["/notifications NotificationCenter"]
  Complaints["/complaints ComplaintForm"]
end

subgraph "Profile Sub-Pages"
  ProfilePersonal["/profile/personal"]
  ProfileSecurity["/profile/security"]
  ProfileNotifications["/profile/notifications"]
  ProfileLanguage["/profile/language"]
end

subgraph "Feature-Flagged Pages"
  Cards["/cards CardManagement<br/>(FUTURE)"]
end

Profile --> ProfilePersonal
Profile --> ProfileSecurity
Profile --> ProfileNotifications
Profile --> ProfileLanguage
end

subgraph "Shared Components"
  BottomNav["BottomNav<br/>(5 tabs)"]
```

```

    DropLogo["DropLogo / DropWordmark /<br/>DropLogoFull / DropAppIcon"]
    PrePaymentDisclosure["PrePaymentDisclosure<br/>(PSD2 modal)"]
end

subgraph "shadcn/ui Primitives"
  Button["Button"]
  Card["Card"]
  Dialog["Dialog"]
  Tabs["Tabs"]
  ScrollArea["ScrollArea"]
  Input["Input"]
  Select["Select"]
  Badge["Badge"]
  Skeleton["Skeleton"]
  Sheet["Sheet"]
  Separator["Separator"]
  Avatar["Avatar"]
  Alert["Alert"]
  Sonner["Sonner (Toast)"]
end

Dashboard --> BottomNav
Dashboard --> DropLogo
Dashboard --> ScrollArea
Transactions --> BottomNav
Transactions --> Tabs
ScanQR --> BottomNav
Accounts --> BottomNav
Accounts --> Card
Profile --> BottomNav
Notifications --> BottomNav
SendMoney --> PrePaymentDisclosure
Landing --> DropLogoFull["DropLogoFull"]

```

2.2 Page Composition Pattern

Every authenticated page follows a consistent composition:

```

+-----+
| Header (back nav + title) |

```

```

+-----+
|                                     |
| Page Content                       |
| (scrollable area)                 |
|                                     |
|                                     |
+-----+
| BottomNav (fixed, 5 tabs)         |
+-----+

```

BottomNav Tabs (Web):

Tab	Label	Route	Icon
1	Hjem	<code>/dashboard</code>	Home (Lucide)
2	Aktivitet	<code>/history</code>	Clock (Lucide)
3	Skann	<code>/scan</code>	IconQrScan (custom)
4	Kontoer	<code>/accounts</code>	Landmark (Lucide)
5	Profil	<code>/profile</code>	User (Lucide)

3. Mobile Application Component Architecture

The mobile application is built with React Native (Expo SDK) using Expo Router for file-based navigation.

3.1 Component Diagram — Mobile App Structure

```

graph TD
  subgraph "Expo Router (React Native)"
    RootStack["Root Stack Layout<br/>(app/_layout.js)"]
  end

  subgraph "Auth Screens (No Auth)"
    Welcome["index.js<br/>Welcome Screen"]
    MobileLogin["login.js<br/>Login Screen"]
  end

```

```

    MobileRegister["register.js<br/>Registration (BankID)"]
end

subgraph "Tab Navigator (4 tabs)"
  TabLayout["(tabs)/_layout.js"]
  MobileDashboard["(tabs)/index.js<br/>Dashboard / Home"]
  MobileSend["(tabs)/send.js<br/>Send Money"]
  MobileScan["(tabs)/scan.js<br/>QR Scanner"]
  MobileProfile["(tabs)/profile.js<br/>Profile & Settings"]
end

subgraph "Modal Screens"
  MobileHistory["history.js<br/>Transaction History"]
end

RootStack --> Welcome
RootStack --> MobileLogin
RootStack --> MobileRegister
RootStack --> TabLayout
RootStack --> MobileHistory
TabLayout --> MobileDashboard
TabLayout --> MobileSend
TabLayout --> MobileScan
TabLayout --> MobileProfile
end

subgraph "Shared Libraries"
  APIClient["lib/api.js<br/>Fetch wrapper + Bearer auth"]
  Theme["lib/theme.js<br/>Colors, fonts, spacing"]
end

MobileDashboard --> APIClient
MobileSend --> APIClient
MobileScan --> APIClient
MobileProfile --> APIClient
MobileHistory --> APIClient

```

Tab Bar (Mobile):

Tab	Label	Icon	Screen
-----	-------	------	--------

1	Hjem	House (Unicode)	Dashboard
2	Send	Arrow (Unicode)	Send money
3	QR	QR (Unicode)	QR scanner
4	Profil	Person (Unicode)	Profile

4. Shared Component Library

4.1 Custom Drop Components

Component	File (Web)	Mobile Equivalent	Purpose
BottomNav	<code>components/bottom-nav.tsx</code>	<code>(tabs)/_layout.js</code> Tab Bar	Primary navigation
DropLogo	<code>components/drop-logo.tsx</code>	Inline SVG in Welcome	Brand mark (green "d" + gold arrow)
DropWordmark	<code>components/drop-logo.tsx</code>	Fraunces <code><Text></code>	"drop" text in Fraunces font
DropLogoFull	<code>components/drop-logo.tsx</code>	N/A	Mark + wordmark combined
DropAppIcon	<code>components/drop-logo.tsx</code>	N/A	App launcher icon
CookieConsent	<code>components/cookie-consent.tsx</code>	N/A (not applicable)	GDPR consent banner
PrePaymentDisclosure	<code>components/pre-payment-disclosure.tsx</code>	N/A (inline)	PSD2 fee disclosure modal
PWARegister	<code>components/pwa-register.tsx</code>	N/A	Service Worker registration

4.2 Custom Icons (`drop-icons.tsx`)

Icon	Usage	Shared Props
IconSendMoney	Send money action button	<code>{ size?: number; className?: string }</code>
IconQrScan	QR scan action / BottomNav tab	Same
IconVirtualCard	Card feature (FUTURE)	Same
IconShield	Trust/security sections	Same
IconFastTransfer	Marketing feature highlight	Same
IconCorridors	Corridor/globe feature	Same

4.3 shadcn/ui Components (Web Only)

All shadcn/ui components live in `components/ui/` and are built on Radix UI primitives with Tailwind styling via CSS variables in `globals.css`.

Component	Radix Primitive	Used By
Button	<code>@radix-ui/react-slot</code>	All pages
Card	div-based	Accounts, Dashboard
Dialog	<code>@radix-ui/react-dialog</code>	CookieConsent, Cards
Tabs	<code>@radix-ui/react-tabs</code>	Transactions
ScrollArea	<code>@radix-ui/react-scroll-area</code>	Dashboard
Input	native input	Login, Register, Send
Select	<code>@radix-ui/react-select</code>	Complaints, Settings
Badge	cva variants	Accounts, Profile
Skeleton	div + pulse animation	Loading states
Sheet	<code>@radix-ui/react-dialog</code>	Side panels
Separator	<code>@radix-ui/react-separator</code>	Profile sections
Avatar	<code>@radix-ui/react-avatar</code>	Profile, Dashboard
Alert	div-based	Accounts (PSD2 banner)
Sonner	sonner library	Toast notifications

5. Design System Integration

5.1 Design Token Reference

Colors

Token	Hex	Usage
Primary Green	<code>#0B6E35</code>	Buttons, active states, BottomNav active
Primary Green Dark	<code>#095C2C</code>	Hover/pressed states
Primary Green Light	<code>#E8F5E9</code>	Light backgrounds
Gold Accent	<code>#D4A017</code>	Logo accent, QR scanner brackets, pending status

Token	Hex	Usage
Text Primary	#1A1A1A (web) / #1E293B	Headings, body text
Text Secondary	#6B7280 (mobile) / #64748B (web)	Descriptions, labels
Text Muted	#9CA3AF (mobile) / #94A3B8 (web)	Timestamps, hints
Background	#FAFCF8 (mobile) / #F8FAFC (web)	Page backgrounds
Card	#FFFFFF	Card surfaces
Border	#E5E7EB (mobile) / #E2E8F0 (web)	Dividers, input borders
Error	#EF4444	Error states
Success	#10B981	Success indicators

Typography

Role	Web	Mobile
Display / Headings	Fraunces (via CSS)	Fraunces_700Bold / Fraunces_600SemiBold
Body	System / Inter	DMSans_400Regular
Body Medium	System / Inter Medium	DMSans_500Medium
Body Bold	System / Inter Bold	DMSans_700Bold

Spacing (Mobile)

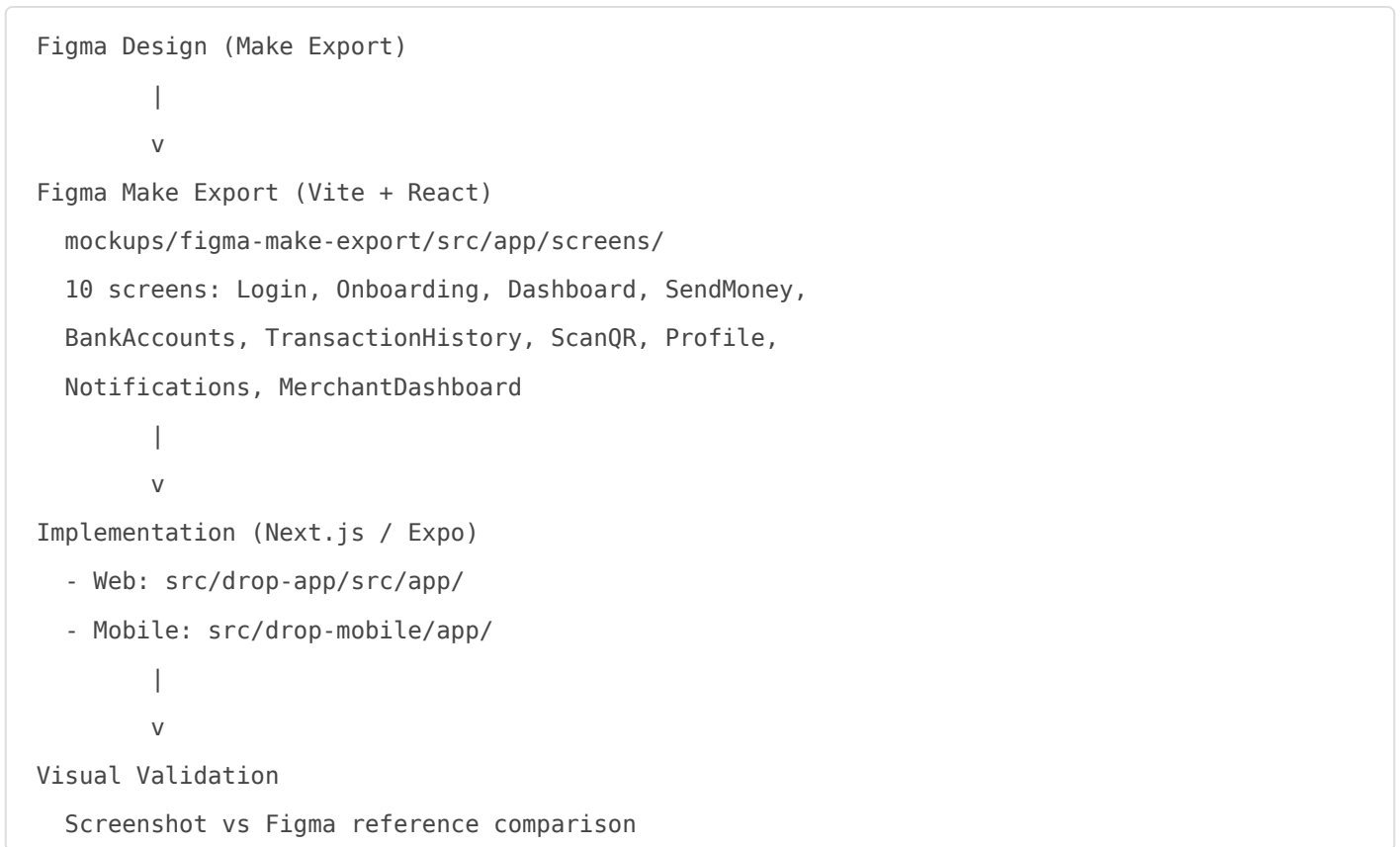
Token	Value
xs	4px
sm	8px
md	16px
lg	24px
xl	32px
xxl	48px

Border Radius

Token	Value
sm	8px
md	12px
lg	16px
xl	24px (rounded-2xl)

Token	Value
full	9999px (circular)

5.2 Figma-to-Code Pipeline



Source of truth: `mockups/figma-make-export/src/components/` contains the canonical UI for all 10 core screens. Before any UI change, the corresponding Make component must be read first.

6. Web vs Mobile Feature Matrix

Feature	Web (Next.js)	Mobile (Expo)
Auth storage	httpOnly cookie (<code>drop_token</code>)	Bearer token (in-memory + AsyncStorage)
Navigation	App Router (file-based)	Expo Router (Stack + Tabs)
Send money flow	4 steps (recipient, amount, review, success)	2 steps (recipient+currency, amount+confirm)
Registration	BankID-only (auto-creation on first login; POST /register returns 410)	BankID-only (auto-creation on first login)
QR scanner	Simulated camera viewfinder	Simulated camera placeholder

Feature	Web (Next.js)	Mobile (Expo)
Bottom nav	5 tabs (Hjem, Aktivitet, Skann, Kontoer, Profil)	4 tabs (Hjem, Send, QR, Profil)
Cards page	Yes (feature-flagged, default off)	No
Merchant dashboard	Yes (role-gated)	No
Bank accounts	Dedicated <code>/accounts</code> page	Balance shown on dashboard
Notifications	Dedicated <code>/notifications</code> page	Not implemented
Profile sub-pages	4 (personal, security, notifications, language)	Inline settings
Feature flags	Environment variables	Not implemented
Legal pages	Terms, Privacy, Fees, Withdrawal, Complaints	Not implemented (links only)
Offline support	PWA Service Worker registration	No offline support
Deep linking	N/A	Not configured
Push notifications	N/A	Not implemented
Biometric auth	N/A	Not implemented
UI framework	shadcn/ui (Radix) + Tailwind v4	React Native StyleSheet
State management	useState + useAuth hook	useState + api module

7. Accessibility Considerations (WCAG 2.1 AA)

Area	Web Implementation	Mobile Implementation
Color contrast	Primary green (#0B6E35) on white meets 4.5:1	Same color tokens, system font rendering
Focus management	Radix UI provides built-in focus trapping for Dialog, Sheet	Expo Router handles screen focus
Screen reader	Semantic HTML via shadcn/ui, lucide icons with aria-hidden	React Native accessibility props needed
Touch targets	Buttons min 44px height (py-3 = 48px)	Tab bar height 60px, buttons styled per platform
Motion	Tailwind <code>transition-colors</code> only, no complex animation	Minimal animation (SplashScreen)
Language	<code>lang="nb"</code> on html element (Norwegian)	Not configured

Area	Web Implementation	Mobile Implementation
Keyboard nav	Radix handles arrow keys, Escape, Tab	N/A (touch-first)

8. Cross-References

- **API endpoints consumed by frontend:** See [API Reference](#)
 - **Database schema behind API responses:** See [Database Schema](#)
 - **Authentication flow (BankID OIDC):** See [Authentication](#)
 - **Page specifications:** See [PAGES.md](#)
 - **Figma exports (UI source of truth):** `mockups/figma-make-export/src/app/screens/`
 - **Login authentication flow:** See [flow-login-authentication.md](#)
 - **QR payment flow:** See [flow-qr-payment.md](#)
 - **Transaction history flow:** See [flow-transaction-history.md](#)
 - **Notification flow:** See [flow-notifications.md](#)
 - **Merchant onboarding flow:** See [flow-merchant-onboarding.md](#)
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