# DebtDev — DTI & Offer Calculator Specification

Front-end demo with clear upgrade path to server-side validation and CRM persistence.

## 1) Objectives

**Primary:** Estimate Debt-to-Income (DTI) and suggest program eligibility.
**Secondary:** Compare current card payoff vs. program plan; generate a sharable summary and lead.

## 2) Inputs

Required fields (front-end):

- Monthly Gross Income (USD, number, $\geq 0$)

- Monthly Debt Payments (USD: cards/loans minimums, number, $\geq 0$)

- Total Credit Card Balance (USD, $\geq 0$)

- Average APR on Cards (%: 0–99)

- Household Size (1,2,3,4,5+)

- State/Jurisdiction (for disclosures; dropdown)

- Contact (Name, Email, Phone) — collected on save/share only

- Consent Checkbox (TCPA/DNC language) — required to save/share

## 3) Calculations

- **DTI %** = (Monthly Debt Payments / Monthly Gross Income) × 100

- Eligibility thresholds (tunable): Eligible < 36%; Review 36–45%; Not Eligible > 45%

- **Minimum Payment Trajectory** (approx): assume min % of balance (e.g., 2.5%) with floor $25; interest accrued using APR/12

- **Program Plan**: fixed payment based on target term (e.g., 36–48 months) and assumed negotiated rate/fee; show total paid & est. months

- **Savings**: (Total Paid on Min Payments) – (Total Paid on Program) with caveats

- All numbers are *estimates* for illustration only; include disclaimer.

## 4) UI & UX

- Two-step flow: (Step 1) DTI quick check → (Step 2) Offer comparison (revealed if user opts to continue)

- Clear badges: Eligible / Review / Not Eligible with color coding (success/warn/danger)

- CTA: "Email me this plan" opens contact form prefilled with calculator values

- Accessibility: labels, aria-live for result, keyboard navigable; WCAG AA contrast

- Mobile first: stacked fields, sticky CTA on small screens

## 5) Validation

Client-side (HTML5 + jQuery): numeric ranges, required fields, phone mask, email pattern. Server-side (future): repeat all validations; reject negative/implausible values; rate-limit requests.

## 6) Integration Hooks

- Front-end: emits a JSON payload on submit `{income, payments, balance, apr, household, state, dti, tier}`

- Webhook endpoint (to be provided) receives payload + consent metadata (timestamp, IP, UA, page)

- CRM create/update: attach calculator snapshot to lead/contact record

- Optional: send summary email/SMS to user with opt-out language

## 7) Disclaimers & Compliance

Include a prominent disclaimer: "This is an educational estimate, not a credit decision or legal/financial advice." Provide TCPA/DNC consent text and links to Privacy/T&Cs.; Store versioned text for audits.

## 8) Sample Test Cases

- TC-01: Income 6000, Payments 1500 → DTI 25.0% → Eligible

- TC-02: Income 5000, Payments 2000 → DTI 40.0% → Review

- TC-03: Income 3500, Payments 2000 → DTI 57.1% → Not Eligible

- TC-04: Edge: Income 0 → block submit with validation error

- TC-05: APR 24%, Balance 15000 → show min-pay payoff > 10 yrs; program 48 mo shows savings

## 9) Data Model (future server-side)

`calculator_runs`: id, created_at, page, income, payments, balance, apr, household, state, dti, tier, user_email, user_phone, consent_text_version, ip, ua.

## 10) Security & Privacy

HTTPS only; no PAN/SSN in calculator; rate-limit endpoints; redact PII in logs; data retention policy documented.