

# Agentic Finance Summary

Next.js app that:

- Uploads a bank transactions CSV
- Produces financial analysis + insights + action recommendations
- Provides a streaming chatbot UI powered by Anthropic Claude (context is the uploaded CSV's computed results)

## Prerequisites

- macOS / Linux / Windows
- Node.js: **20.x** (required)
- npm: comes with Node
- (Recommended) `nvm` to manage Node versions
- Git (to clone the repository)
- Anthropic API Key
  - Set as `ANTHROPIC_API_KEY` in `.env.local`

## Setup

1. Clone the repository

```
git clone https://github.com/RaghavKarmarkar/fin-analytics.git
cd fin-analytics
```

2. Use Node.js 20

If you use `nvm` :

```
nvm install 20
nvm use 20
node -v
```

3. Install dependencies

```
npm install
```

4. Configure environment variables

Create a file named `.env.local` in the project root:

```
ANTHROPIC_API_KEY=your_anthropic_api_key_here
ANTHROPIC_MODEL=claude-3-5-sonnet-20241022
```

Do not commit `.env.local` .

## Run (development)

```
npm run dev
```

Open:

- <http://localhost:3000>

Then:

1. Upload a CSV with the expected schema (see below).
2. Click **Analyze**.
3. Optionally use **Chat about this upload** to ask questions (the response streams).

## Build (production)

```
npm run build
npm run start
```

## Using the app

1. Open the home page.
2. Upload a CSV with the expected schema.
3. Click **Analyze**.
4. Use **Chat about this upload** to ask questions about the results (streaming response).

## CSV schema (required header row)

The CSV must include these columns (in any order):

```
Bank Details,Account Number,Post
Date,Check,Description,Debit,Credit,Status,Balance,Classification,Event,Event
Details
```

Notes:

- `Debit` and `Credit` are parsed as absolute values.
- `Classification` is mapped into the internal `category` field for category-based reporting.

## API routes

- `POST /api/analyze`
  - Accepts a CSV upload and returns `{ analysis, insights, actions }`.
- `POST /api/chat`
  - Accepts `{ message, context }` and streams a text response from Claude.
  - Requires `ANTHROPIC_API_KEY`.

## Troubleshooting

- Chat says "Missing ANTHROPIC\_API\_KEY"
  - Ensure `.env.local` exists at the project root and contains `ANTHROPIC_API_KEY=...`.

- Restart `npm run dev` after editing `.env.local`.
- **Chat fails with a model error (404 model not found)**
  - Set `ANTHROPIC_MODEL` in `.env.local` to a model that your Anthropic account has access to.
  - Restart `npm run dev` after changing the model.
- **Port 3000 already in use**
  - Stop the process using port 3000, or start Next.js on a different port.
- **Node version issues**
  - Make sure you are using Node 20.x.

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