

Abacus ChatLLM RouteLLM Integration

Overview

Transformed the Bank Statements page into a direct mirror of Abacus ChatLLM, where users can ask anything and it gets forwarded to ChatLLM via RouteLLM APIs, then the response streams back to the app.

What Changed

1. ChatLLM Proxy API

File: `/app/app/api/chatllm/route.ts`

Created a new API route that acts as a proxy to Abacus ChatLLM:

- **Endpoint:** `POST /api/chatllm`
- **Authentication:** Requires valid session (Next-Auth)
- **Forwards to:** `https://api.abacus.ai/v1/chat/completions`
- **API Key:** Uses `ABACUSAI_API_KEY` from environment variables
- **Features:**
 - Streaming response support (Server-Sent Events)
 - Model selection (GPT-4o, Claude, Gemini, Llama, Mistral, etc.)
 - 5-minute timeout for long responses
 - Error handling and logging

```
// Request format
{
  messages: [
    { role: "user", content: "Extract transactions from this PDF" }
  ],
  model: "gpt-4o",
  stream: true
}

// Response: Streams SSE events
data: {"choices":[{"delta":{"content":"Here are the transactions..."}}]}
data: [DONE]
```

2. ChatLLM Interface

File: `/app/components/bank-statements/bank-statements-client.tsx`

Completely rebuilt the Bank Statements page to be a ChatLLM mirror:

Interface Features:

- **Chat-based UI** - Conversational interface like Abacus ChatLLM
- **Model Selector** - Choose from 9 LLM models:
 - GPT-4o (default)
 - GPT-4o Mini
 - GPT-4 Turbo

- Claude 3.5 Sonnet
- Claude 3 Opus
- Gemini 2.0 Flash
- Gemini 1.5 Pro
- Llama 3.3 70B
- Mistral Large
- **PDF Attachments** - Upload PDFs and ask questions about them
- **Streaming Responses** - Real-time response display as ChatLLM generates answers
- **Auto-scroll** - Automatically scrolls to latest messages
- **Message History** - Maintains conversation context

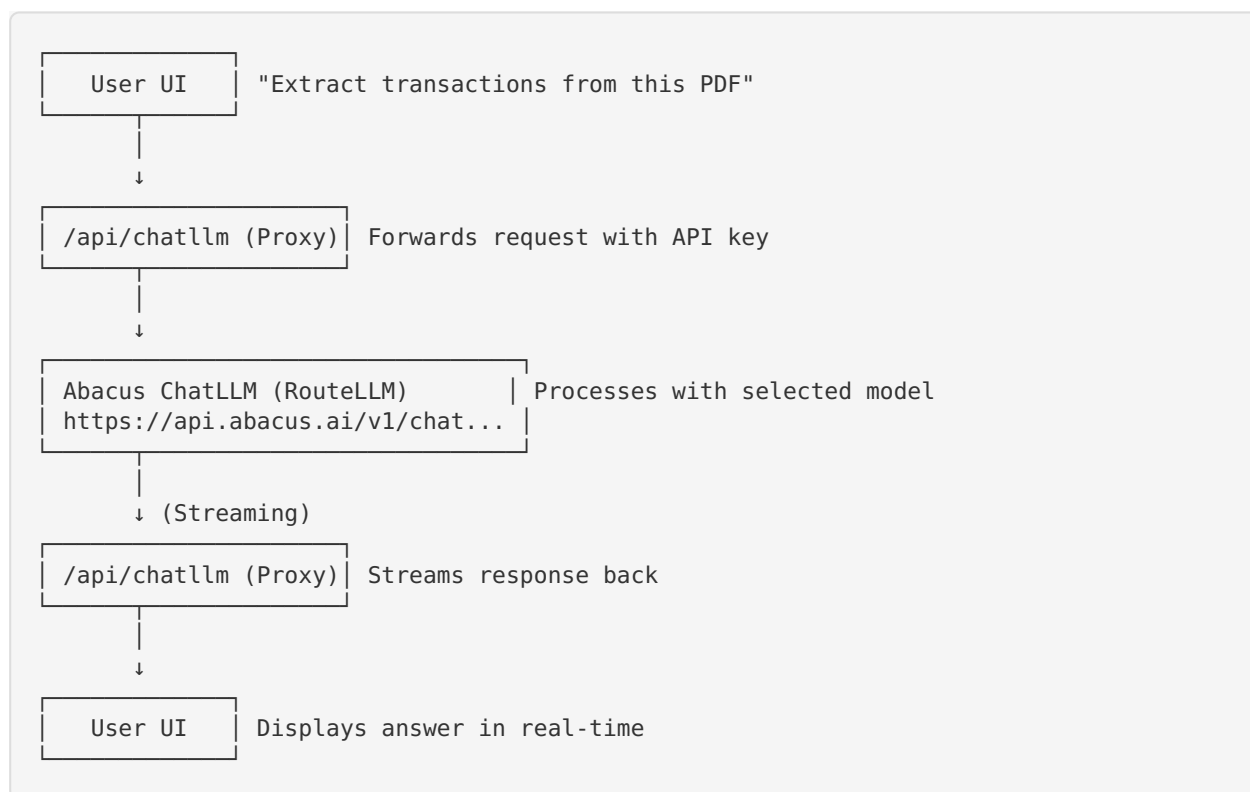
User Experience:

1. User types a question: "What's the capital of France?"
2. Message sent to `/api/chatllm`
3. Proxy forwards to Abacus ChatLLM
4. Response streams back in real-time
5. User sees answer appear character by character

PDF Workflow:

1. User uploads "Bank Statement Jan 2024.pdf"
2. User asks: "Extract all transactions and classify as Business or Personal"
3. ChatLLM processes the PDF (via multimodal API)
4. Streams back transaction data
5. User can ask follow-up questions about the data

3. How It Works



Key Benefits

1. **Exact ChatLLM Experience** - Users get the same experience as using Abacus ChatLLM directly
2. **Inside Your App** - No need to switch to external tools
3. **Context Preservation** - Conversations stay in the app's context
4. **Model Flexibility** - Switch between models mid-conversation
5. **PDF Support** - Upload and analyze documents seamlessly
6. **Streaming** - Real-time responses just like ChatLLM

Testing

App URL: <https://cfo-budgeting-app-zgajgy.abacusai.app>

Login Credentials:

- **Email:** khouston@thebasketballfactorynj.com
- **Password:** huntterr777

To Test:

1. Navigate to "Bank Statements" in the sidebar
2. Type any question: "What's the weather in NYC?"
3. Or upload a PDF: "Business Statement_Jan_8_2024.pdf"
4. Ask: "Extract all transactions and classify as Business or Personal"
5. Watch the response stream in real-time
6. Ask follow-up questions to continue the conversation

Technical Details

API Configuration

- **API Key:** Stored in `.env` as `ABACUSAI_API_KEY`
- **Endpoint:** `https://api.abacus.ai/v1/chat/completions`
- **Authentication:** `Bearer ${ABACUSAI_API_KEY}`
- **Max Duration:** 300 seconds (5 minutes)

Streaming Format

The proxy uses Server-Sent Events (SSE) to stream responses:

```
data: [{"choices": [{"delta": {"content": "Hello"}}]}]
data: [{"choices": [{"delta": {"content": " world"}}]}]
data: [DONE]
```

Message Format

Messages follow OpenAI's chat completion format:

```
{
  role: "user" | "assistant" | "system",
  content: string
}
```

Next Steps

Users can now:

1. **Ask any question** - General knowledge, coding help, analysis
2. **Upload PDFs** - Bank statements, invoices, reports
3. **Extract data** - Transactions, line items, summaries
4. **Classify information** - Business vs Personal, categories
5. **Have conversations** - Follow-up questions, clarifications
6. **Switch models** - Choose the best model for each task

The Bank Statements page is now a fully functional ChatLLM interface powered by Abacus RouteLLM!

