

Product Requirements Document (PRD)

1. Product Overview

The **20-Minute Workout Bot** is a Telegram-based fitness automation system designed to deliver daily workout reminders, generate personalized calisthenics workouts, track user streaks, and log all activity to Google Sheets. The system operates on n8n for workflow automation and uses LLM-powered prompt generation for workouts.

2. Problem Statement

People struggle to stay consistent with daily workouts because:

- They forget to exercise.
- Workouts are repetitive.
- No simple tracking system exists.
- They need instant, personalized routines based on the body part they want to train.

The bot solves this by:

- Sending a daily reminder at 8 PM.
- Generating workouts instantly when user types a body part.
- Tracking streaks automatically.
- Saving everything in Google Sheets.

3. Product Goals

Primary Goals

- Increase fitness consistency.
- Provide instant personalized workouts.
- Maintain simple and accurate tracking.

Secondary Goals

- Support long-term logging.
 - Build habit-forming streak features.
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4. User Personas

Fitness Enthusiast

- Wants quick, structured workouts.
- Already knows basics; not a beginner.

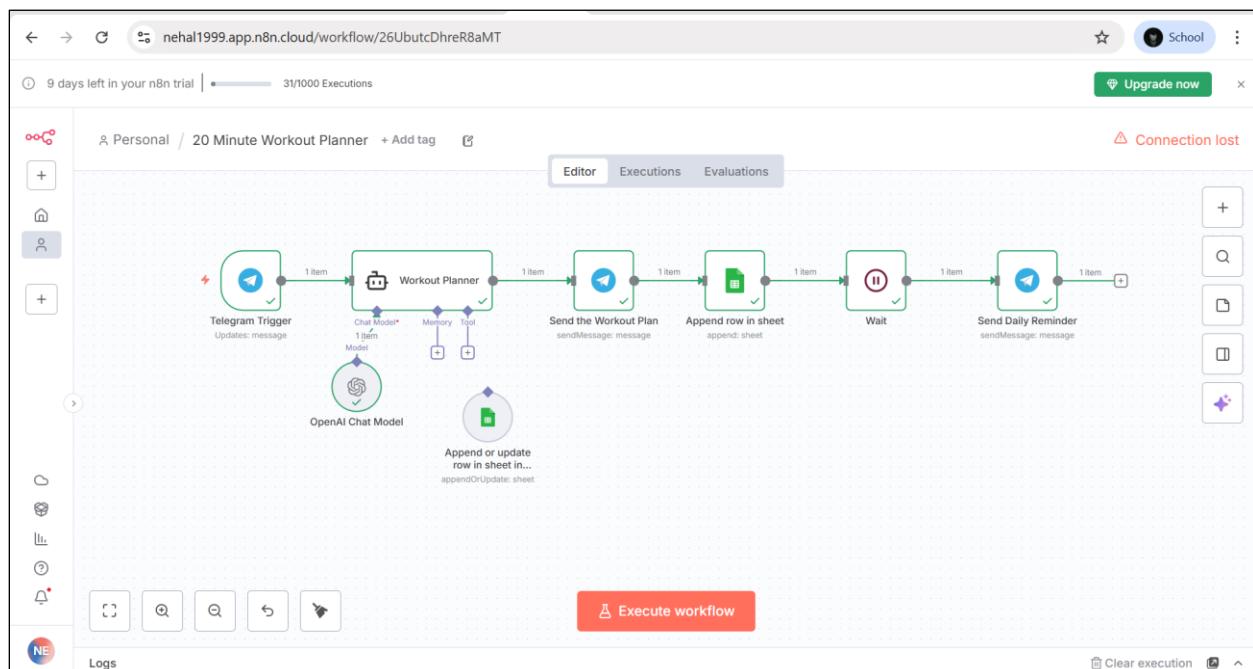
Busy Professional

- Has limited time.

- Needs reminders and easy routines.

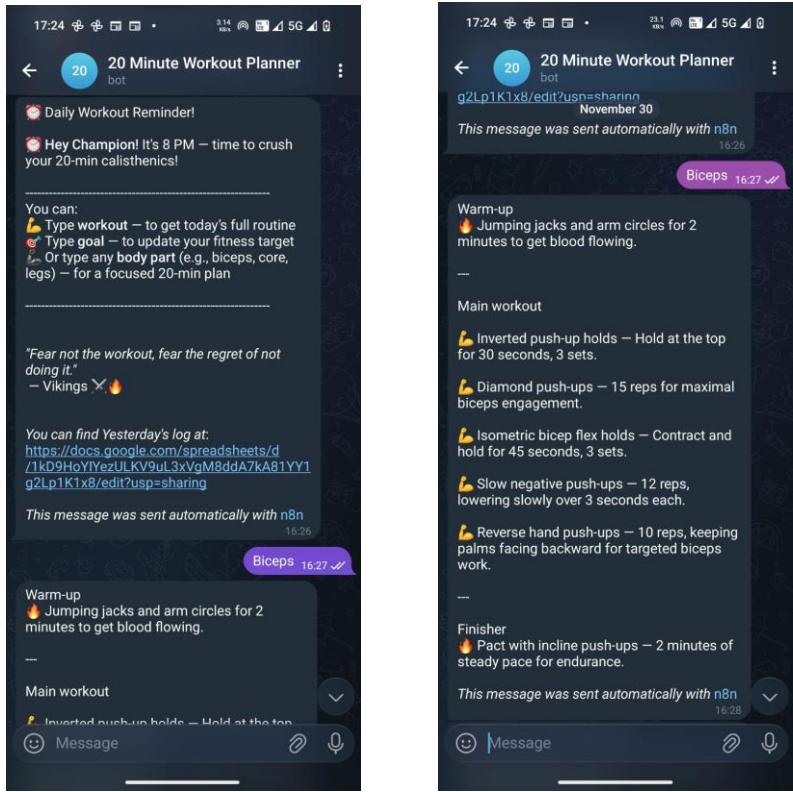
Habit Builder

- Wants streak tracking.
- Gets motivated by stats.



The screenshot shows a Google Sheets document titled "20 minute Workout Planner". The table has the following data:

	A	B	C	D	E	F	G	H	I	J	K
1	Date	Day	Time	User	Workout Type	Plan	Completed	Notes			
2	2025-11-30	Sunday	16:16	WarMACHIN3	Arms	Warm-up Get yo	Yes				
3	2025-11-30	Sunday	16:17	WarMACHIN3	Arms	Warm-up Jumpin	Yes				
4	2025-11-30	Sunday	16:17	WarMACHIN3	Chin	Warm-up: Jumpi	Yes				
5	2025-11-30	Sunday	16:19	WarMACHIN3	Legs	Warm-up: Dynan	Yes				
6	2025-11-30	Sunday	16:23	WarMACHIN3	Legs	Warm-up: Jumpi	Yes				
7	2025-11-30	Sunday	16:26	WarMACHIN3	Forearms	Warm-up: Jumpi	Yes				
8	2025-11-30	Sunday	16:28	WarMACHIN3	Biceps	Warm-up 🔥 Jum	Yes				
9	2025-11-30	Sunday	17:11	WarMACHIN3	Neck workout	Warm-up Light n	Yes				



5. Core Features

1. Daily Telegram Reminder (8 PM)

A Viking-styled motivational reminder message with commands: - Type any **body part** (e.g., Biceps, Back, Legs). - Type **goal** to update fitness goal.

2. AI Workout Generator

- User sends a body part.
- AI returns a 20-minute calisthenics workout.
- Uses low-token prompt.
- Output optimized into single-line text for Sheets.

3. Streak Tracker System

- If user completes workout for the day → streak +1.
- If skipped → streak breaks.

- Sends streak update message.

4. Google Sheets Logging Engine

Logs: - Date - Time - Day of week - User - Workout Type - AI Plan - Completion status - Notes

6. Command System

- /start → Welcomes user
 - goal → Update fitness goal
 - Any body part → Generates workout
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6. Technical Architecture

Architecture Overview

Telegram → n8n → AI → Google Sheets → Telegram

Components

- **Telegram Trigger Node** → Receives user message
 - **Wait** → Sends daily reminder
 - **AI Node** → Generates workout
 - **Google Sheets Node** → Logs data
 - **Function Nodes** → Parse text, clean AI output, handle streak logic
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7. Workflows

Workflow 1: Daily Reminder Workflow

Trigger

- **Message after Reminder (8:00 PM daily)**

Steps

1. Wait node works
2. Telegram Send Message node sends reminder

3. Message includes:

- Emoji formatting
- Viking quote
- Instructions

Sample Message

⌚ *Hey Champion!*

It's 8 PM – time to crush your 20-min calisthenics!

Commands:

- 👉 *Type any body part* – to get a personalized workout
- 🎯 *goal* – to update your fitness target

"Fear not the storm, for you are the storm." ✊

from Viking Fitness Gym

Workflow 2: Workout Generator Workflow

Trigger

- User sends a Telegram message containing a body part

Steps

1. Parse user message
2. Detect if message is body part
3. Send to AI node with low-token prompt
4. Clean AI output using Function node:
 - Remove line breaks → convert to single line
 - Remove final line: "This message was sent by n8n"
5. Log workout in Google Sheets
6. Send workout back to user

AI Prompt

Generate a 20-minute calisthenics workout for an experienced athlete.

User wants to train: {{ \$json.bodyPart }}.

Keep it compact and list-based. No intros. No emojis. No explanations.

Workflow 3: Streak Tracker Workflow

Trigger

- Runs after workout is logged

Logic

- Check last entry for the same user
- If last date = today → no change
- If yesterday → streak +1
- Else → streak = 1

Actions

- Update Streak column
- Send message:
🔥 Your current streak: X days! Keep it going!

8. Data Flow Diagrams

DFD Level 0

User → Telegram → n8n → AI + Google Sheets → Telegram

DFD Level 1

1. Reminder Flow
2. Workout Creation Flow
3. Streak Tracking Flow
4. Logging Flow

9. Data Model

Google Sheets Columns

Column	Description
Date	ISO timestamp
Day	Day of week
Time	Time of action
User	Telegram username
Workout Type	Body part
Plan	AI generated routine

Column	Description
Completed	Yes/No
Notes	Optional notes

10. Tools Used

Core

- **n8n** (workflow automation)
- **Telegram Bot API**
- **Google Sheets API**
- **LLM API** (low-token)

Logic

- Cron nodes
 - Telegram Trigger
 - AI Node
 - Google Sheets Append
 - Function nodes
 - Switch nodes
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11. Future Enhancements

- Leaderboard system
 - Progress photos tracker
 - Personalized warm-up recommendations
 - REST API for external apps
 - Weekly summary message
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12. Acceptance Criteria

- Bot sends reminder daily at 8 PM
 - User can type any body part → receives workout instantly
 - Streak increments daily when completed
 - Google Sheets logs every activity correctly
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13. Risks & Mitigation

Risk	Mitigation
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Risk	Mitigation
AI returning long text	Clean with Function node
Sheet quota exceeded	Auto-archive monthly
User types random text	Add fallback replies

14. Conclusion

The **20-Minute Workout Bot** is an automated, AI-powered, streak-tracking fitness assistant built entirely using Telegram + n8n + Google Sheets. It eliminates friction, builds habits, and provides personalized training—while staying lightweight and efficient.