

Telegram Bot Requirements

Excel & Google Sheets Expert

Project Overview

This document defines the technical and functional requirements for developing a Telegram bot specialized in Microsoft Excel and Google Sheets using AI (Groq API).

Main Objective

To build a smart assistant that answers only Excel and Google Sheets related questions and politely declines unrelated topics.

Language Selection

On first interaction (/start), the bot must allow users to select Arabic or English. The selected language must be saved per user.

Topic Detection System

All user messages must be analyzed before sending to AI. Only Excel and Sheets related questions are allowed.

AI Prompt System

The system must use a fixed system prompt enforcing Excel and Google Sheets specialization.

Multilingual Support

All bot messages, including errors and responses, must support Arabic and English.

User Session Management

Each user session must store language preference, chat history, and last interaction.

Core Commands

/start - Start bot and select language
/help - Usage guide

/examples - Sample questions
/lang - Change language

Security & Performance

Secure API keys using environment variables, apply rate limiting, spam protection, and logging.

Technical Stack

Backend: Node.js or Python
AI: Groq API
Database: SQLite / JSON / Redis
Hosting: VPS / Cloud

Implementation Phases

Phase 1: Bot setup and language selection
Phase 2: AI integration and topic filtering
Phase 3: Testing and deployment

Final Deliverables

Clean source code, README documentation, deployment guide, .env.example file, and maintenance support.

Prepared for Development Purposes

This document is intended for professional software development and implementation.