

# Workshop: Artificial Intelligence in FileMaker

Comprehensive Intensive 1 Day **Starting** Training Program

by



## WORKSHOP DESCRIPTION

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## WORKSHOP DESCRIPTION

This intensive workshop is designed for experienced FileMaker developers who want to master the new artificial intelligence capabilities integrated into the platform. This introductory session focuses on infrastructure setup, embeddings, and text generation models, providing participants with the essential knowledge to begin implementing AI solutions in FileMaker.

What will you learn?

- Specific configuration of AI servers for FileMaker.
- Deep fundamentals of text and image embedding models.
- Architecture and operation of text generation models.
- Integration with external services and AI APIs (Hugging Face, OpenAI, etc.).
- Advanced scripting for process automation with AI.

Methodology:

The training follows a constructivist approach where each theoretical concept is immediately consolidated with practical exercises. In the morning we will build the technical and conceptual foundations; in the afternoon, each participant will develop real implementations that can be taken directly to their projects.

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## LEARNING OBJECTIVES

Upon completion of this workshop, participants will be able to:

1. **Configure** a FileMaker AI server with external connections
2. **Understand** in depth the operation of different types of AI models
3. **Implement** advanced semantic searches using embeddings
4. **Develop** applications with automatic content generation
5. **Integrate** external AI services into FileMaker solutions

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## PARTICIPANT PROFILE

Prerequisites:

- Medium-high level experience with FileMaker Pro.
- Advanced scripting proficiency in FileMaker.
- Solid knowledge of relational databases.
- Experience in FileMaker Server configuration.
- Familiarity with API concepts and web services.

Ideal for:

- Senior FileMaker developers looking to innovate in their solutions.
- CTOs and technical architects evaluating AI capabilities.
- Specialized consultants needing to expand their service offerings.
- Technical leaders wanting to modernize existing FileMaker systems.

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## PROGRAM STRUCTURE

### **SCHEDULE**

<b>Time</b>	<b>Type</b>	<b>Activity</b>	<b>Duration</b>
09:00 - 09:15		Introduction	15min
09:15 - 10:00	Practical	Infrastructure	45min
09:30 - 10:00	Theoretical	AI Models Fundamentals I	30min
11:00 - 11:30		Coffee Break	30min
11:30 - 12:30	Theoretical	AI Models Fundamentals I	1h
12:30 - 13:30	Theoretical	AI Models Fundamentals II	1h
13:30 - 14:30		Lunch	1h
14:30 - 15:30	Practical	Text Embeddings	1h
15:30 - 16:30	Practical	Image Embeddings	1h
16:30 - 17:00		Coffee Break	30min
17:00 - 18:45	Practical	Text Generation	1h45min
18:45 - 19:00		Closing	5min

Total: 8 effective training hours - 4 theoretical hours and 4 practical hours.

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## DETAILED PROGRAM

### **MORNING SESSION: INFRASTRUCTURE, AI FUNDAMENTALS**

Objective: Establish the technical and conceptual foundation for working with AI in FileMaker

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#### **1. Introduction (9:00 - 9:30)**

##### 1.1. Welcome and Introduction (9:00 - 9:10)

- Presentation of program and objectives.
- Group introduction dynamics.
- Participants expectations and use cases.

##### 1.2. AI in FileMaker: Overview (9:10 - 9:30)

- Evolution of FileMaker towards AI capabilities.
- Architecture of AI solutions: components and flows.
- Differences between local processing and external services.
- Overview of AI capabilities related to this workshop: Embeddings, Generation.

#### **2. AI Server (09:30 - 10:30)**

##### 2.1. FileMaker AI Server Configuration

- AI Component Installation.
- External Service Connection.

#### **3. AI Model Fundamentals - Part 1 - (10:30 - 12:30)**

##### 3.1. Text Embeddings: Theory and Architecture (10:30 - 11:45)

- Mathematical and conceptual foundations:
- Technical characteristics and selection:

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#### **COFFEE BREAK (11:00 - 11:30)**

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### 3.2. Image Embeddings: Computer Vision (11:45 - 12:00)

- Visual embedding fundamentals.
- Download and installation process.

## **4. AI Model Fundamentals - Part 2 - (12:30 - 13:30)**

### 4.1. Text Generation: LLMs in Depth

- Generative model architecture.
- Generation parameters.

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LUNCH (13:30 - 14:30)

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## **AFTERNOON SESSION: PRACTICAL IMPLEMENTATIONS**

Objective: Develop functional applications with each type of model.

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## **5. Embeddings in Action (14:30 - 16:30):**

### 5.1. Text Embeddings: Advanced Semantic Search (14:30 - 15:30)

Project: Intelligent Document Search System.

- Environment setup.
- Step-by-step development.

### 5.2. Image Embeddings: Intelligent Visual Catalog (15:30 - 16:30)

Project: Visual Similarity Search System.

- Configuration.
- Practical implementation.

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COFFEE BREAK (16:30 - 17:00)

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**6. Generation (17:00 - 18:45):**6.1. Text Generation: Intelligent Assistants

Project: Automatic Enterprise Content Generator.

- Generative model configuration.
- Practical applications.
- Advanced scripting for automated workflows.
- Error handling and retries.
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**7. Closing and Q&A (18:45 - 19:00):**

- Review of key concepts.
- Additional resources and documentation.
- FileMaker AI roadmap.
- Next steps for deepening knowledge.
- Workshop evaluation.

## DETAILED SCRIPT FUNCTIONS

During the workshop, these key functions will be covered:

Function	Purpose
Configure AI Account	Sets up an AI account to use by name, given a model provider (or endpoint) and an API key.
Configure Prompt Template	Sets up a prompt template to use by name in other AI script steps, given a model provider and predefined prompts you can customize.
Generate Response from Model	Gets a text response from an AI model given a user prompt.
Insert Embedding	Sends input data to an embedding model and inserts the returned vector representation into a field or variable.
Insert Embedding in Found Set	For every record in the found set, sends data from a source field to an embedding model and inserts the returned vector representation into a target field.
Perform Find by Natural Language	Sends a natural language prompt and a list of fields on the current layout to a model, which returns a FileMaker find request, and performs a find.
Perform Semantic Find	Performs a semantic find in a target field for the specified text, image, or embedding vectors.
Perform SQL Query by Natural Language	Sends a natural language prompt and database schema to a model, which sends back an SQL query to get a result from the database to use in its response.
Set AI Call Logging	Controls whether details of AI calls are saved to a log file.

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## INCLUDED MATERIALS

Each participant will receive:

1. Sample FileMaker database with all developed projects.
2. Technical documentation in PDF with theoretical foundations.
3. Reusable scripts and custom functions.
4. Recommended model guide by use case with benchmarks.
5. Implementation checklist for real projects.
6. External API comparison (costs, limits, features).
7. Additional resources (links, communities, academic papers).
8. Certificate of participation.

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## TECHNICAL REQUIREMENTS

Each participant must bring:

- Laptop with FileMaker Pro (version with AI support).
- Minimum 16GB RAM (32GB recommended for local models).
- 100GB free disk space (for models).
- Stable and fast Internet connection.
- Administrator permissions to install software.
- Compatible GPU (optional but recommended for large models).

Provided by the organization:

- FileMaker Server with pre-configured AI component.
- AI server with pre-downloaded models.
- Access to model repositories (Hugging Face).
- API keys for external services (OpenAI, etc.).
- Sample data and use cases.
- High-speed local network.
- Technical reference documentation.

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## PEDAGOGICAL METHODOLOGY

Deep Learning:

- 35% grounded theory with emphasis on conceptual understanding
- 65% hands-on practice with real projects
- Progression from simple concepts to complex architectures

Immediate Application:

- All examples based on business cases.
- Ready-to-adapt code and solutions.
- Focus on ROI and business value.
- Technical comparisons for decision-making.

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## EVALUATION AND FOLLOW-UP

- During workshop: Progressive practical exercises.
- Post-workshop: Slack channel for technical queries (15 days).
- Resources: Access to code repository (15 days).
- Certification: Issued upon completion of all modules.

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## EXPECTED RESULTS

Upon completion, each participant will have:

- Knowledge to install a functional FileMaker Server environment with AI.
- Understanding of AI model architectures.
- Knowledge to evaluate and select models according to requirements.
- Ability to design enterprise AI architectures.
- Functional RAG system.
- Portfolio of reusable code and scripts.
- Technical criteria for decision-making in AI projects.

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## ADDITIONAL INFORMATION

Available modalities:

- In-person.

Continuous support:

- Post-workshop technical consulting (optional).

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This workshop represents a strategic investment in your organization's AI capabilities, providing not only technical skills but deep understanding of the fundamentals that will enable participants to remain at the forefront of intelligent application development with FileMaker.

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