

# INTRODUCTION TO THE FILEMAKER PLATFORM

2017 [locations/dates to be confirmed]

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## **SESSION FORMAT:**

The class will take place over three days and will comprise six substantive and wide-ranging topics.

The focus of the class is on understanding the “why” as well as the “how” – so each day will commence with discussion of the concepts and background, leading into a hands-on exploration of practical methods and techniques. There will be plenty of time for questions and discussion, and practical exercises will take a workshop format to explore and apply key ideas that are the focus of the course.

Examples and demo files will be available to participants, and participants will also create and keep their own initial example files during the classes, illustrating the techniques learned.

Interaction between participants is encouraged as part of a mutual learning and exploration process.

## **Summary/Overview of Topics:**

### **Day 1:**

#### **1. Introduction**

- Introduction of presenter and participants
- Overview of the schedule
- Logistics and orientation
- Framework, purposes and objectives of the class

#### **2. Getting a Perspective on Databases and FileMaker**

- Considering databases in the contemporary world
- A background to databases and the comparison to spreadsheets
- Understanding basic relational data design principles
- Ways of connecting sets (tables) of data
- System layers: data, logic and interface
- The integrated FileMaker design principle
- Deployment options and the scope of the FileMaker platform
- Where things are in FileMaker and what they are called
- Getting started: Creating your first FileMaker database

#### **3. Hands-on and essential familiarity with FileMaker Pro**

- Opening the application, creating/opening files and file navigation
- Practical hierarchical principles: Files, tables, records and fields
- Anatomy of FileMaker Pro screen elements and controls
- FileMaker’s “Modes” and their uses
- Data navigation, viewing and editing
- FileMaker’s search capabilities explained
- Creation of compound and complex Find requests
- Understanding the Found Set and Find/Omit operations
- Techniques for Sorting data and practical examples
- The basics of Layout Mode – FileMaker’s screen builder
- Saving, committing and related FileMaker preference settings

### **Day 2:**

#### **4. The FileMaker Platform as a toolset and an environment**

- Overview of the FileMaker platform: desktop, mobile and web
- Basics of linking FileMaker to other systems
- Viewing web data and web content within FileMaker apps
- The basics of importing and exporting data
- Online and offline systems and implications
- Elementals of synchronising data sets
- FileMaker systems and external data
- Using FileMaker to tap into live SQL data
- The concept of APIs and FileMaker as “middleware”
- Survey of third party tools, plug-ins and solutions

**5. Cutting your teeth as a FileMaker Developer**

- What it really means to be a developer and to create apps
- First principles of data design and where to start
- Creating data structure in FileMaker systems
- Setting up and using relationships between tables
- Understanding data types and data storage mechanisms
- The concept and uses of Global fields
- Configuring fields for auto-entry and validation
- Setting up basic calculations
- Data aggregation with calculation and summary fields
- Capturing elemental metadata for each record
- Data presentation and the basics of layout design
- Overview of layout objects and their capabilities
- Drilling down into some layout design techniques
- Understanding the operation of layout parts

**Day 3:****6. Automation: Using FileMaker to Manage Processes**

- The concept of scripting and the FileMaker process model
- Introducing the FileMaker Script Workspace
- Practical and hands-on scripting exercises
- Using conditional statements and branching in FileMaker scripts
- Using script parameters to pass data to a script
- Scripts that act repetitively using loops
- Script ‘runtime errors’ and what to do about them
- Calling scripts from menu/s and buttons
- Calling script from keystrokes/hotkeys
- Introduction to script triggering and basic practical examples
- Understanding context and its importance for scripts
- Scripting and the use of layouts
- Scripting and the use of relationships
- Data output options: printing, pdf, export, upload

**7. Preparing your App for Use in the Real World**

- Setting up user access security for your database
- Defining and applying privilege sets
- The principle of record level access and how to use it
- Scripts that interact with security
- Creating and defining a “first run” script
- Dealing with record locking and record commit procedures
- Working with multiple windows
- Designing FileMaker apps for use on mobile devices
- FileMaker WebDirect – design and deployment considerations
- Multi-user systems and FileMaker Server
- What comes next and how to get help when you need it

**8. Conclusion**

- Review, Q&A, Discussion
- Feedback, Evaluations and Follow-Up
- Closure