

PouchDB Playbook: Simplify Offline Web Application Storage

GETTING STARTED WITH POUCHDB



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Course Goals



Learn to use PouchDB

Work with documents

Perform bulk operations

Index and query data

Create design documents

Use map and reduce queries





I assume you...

- Know how to build web applications
- Know HTML and CSS
- Are familiar with JavaScript and jQuery

You want to...

- Work with data offline
- Simplify IndexedDB
- Use promises for offline storage



Related Pluralsight Course

**Creating
Offline-first
Mobile Apps
with HTML5**

**Getting Started
with Progressive
Web Apps**

**HTML5
Web Storage,
IndexedDB and
File System**



Modules in This Course



Modules



Getting Started with PouchDB

- PouchDB overview
- Create PouchDB database
- Add, update and delete documents

Bulk Operations with PouchDB

- Modify several documents at once
- Count and query documents

Modules



Using Mango Queries in PouchDB

- Create indexes
- Use find() plug-in

Use Map Queries in PouchDB

- Use query() to retrieve documents
- Create design documents

Modules



Use Reduce Queries to Gather Statistics

- Built-in reduce queries
- Count, sum, min, max and average

PouchDB Overview



PouchDB

**Open-source
JavaScript database**

NoSQL database

Similar to CouchDB

Runs completely in browser



PouchDB

**Uses IndexedDB
or WebSQL**

**Promises are
easier to use than
callbacks**

**Synchronize with
CouchDB**



PouchDB Terms

**Unstructured
documents**

A collection of JSON
objects stored in
PouchDB

_id

The field name for
each document's
primary key

_rev

The field name for
each document's
unique revision id



PouchDB Terms

Mango queries

A find() API that uses secondary indexes to query documents

Design document

A document which describes the map function to assist with querying



PouchDB Terms

SQL	NoSQL
Table	No equivalent
Row	Document
Column	Field
Primary Key	Primary key(_id)
Index	View



Demo



Getting started with PouchDB

Open/Create a database



Demo



Add a document



Demo



Get a document



Demo



Update a document



Demo



Delete a document



Demo



Compact database



Demo



Destroy database



Summary



PouchDB is a NoSQL database

Great for creating offline web apps

Easy to work with

Basic CRUD samples





Coming up in the next module...

Bulk insert, update and delete
Retrieve multiple documents

