

- Clients that communicate with a MySQL Server using X Protocol can use X DevAPI to develop applications. X DevAPI offers a modern programming interface with a simple yet powerful design which provides support for established industry standard concepts. This chapter explains how to get started using either the JavaScript or Python implementation of X DevAPI in MySQL Shell as a client. See [X DevAPI User Guide](#) for in-depth tutorials on using X DevAPI.

## 20.1 Interfaces to a MySQL Document Store

To work with MySQL as a document store, you use dedicated components and a choice of clients that support communicating with the MySQL server to develop document based applications.

- The following MySQL products support X Protocol and enable you to use X DevAPI in your chosen language to develop applications that communicate with a MySQL Server functioning as a document store:
  - MySQL Shell (which provides implementations of X DevAPI in JavaScript and Python)
  - Connector/C++
  - Connector/J
  - Connector/Node.js
  - Connector/NET
  - Connector/Python
- MySQL Shell is an interactive interface to MySQL supporting JavaScript, Python, or SQL modes. You can use MySQL Shell to prototype applications, execute queries and update data. [Installing MySQL Shell](#) has instructions to download and install MySQL Shell.
- The quick-start guides (tutorials) in this chapter help you to get started using MySQL Shell with MySQL as a document store.

The quick-start guide for JavaScript is here: [Section 20.3, “JavaScript Quick-Start Guide: MySQL Shell for Document Store”](#).

The quick-start guide for Python is here: [Section 20.4, “Python Quick-Start Guide: MySQL Shell for Document Store”](#).

- The *MySQL Shell User Guide* at [MySQL Shell 8.0](#) provides detailed information about configuring and using MySQL Shell.

## 20.2 Document Store Concepts

This section explains the concepts introduced as part of using MySQL as a document store.

- [JSON Document](#)
- [Collection](#)
- [CRUD Operations](#)

### JSON Document

A JSON document is a data structure composed of key-value pairs and is the fundamental structure for using MySQL as document store. For example, the `world_x` schema (installed later in this chapter) contains this document: