

كلية العلوم
السملاية - مراكش
FACULTÉ DES SCIENCES
SEMLALIA - MARRAKECH



CONVERTER

XML XSD XSL DDL DML

Application Web de Transformation des
Documents XML

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Réalisé et présenté par:
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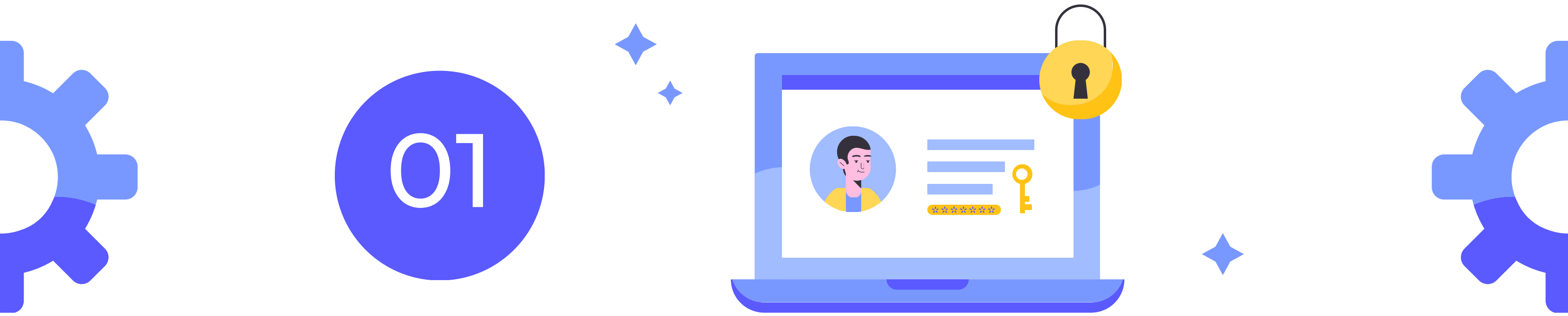
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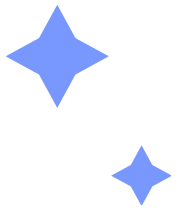


Introduction

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✦ Introduction

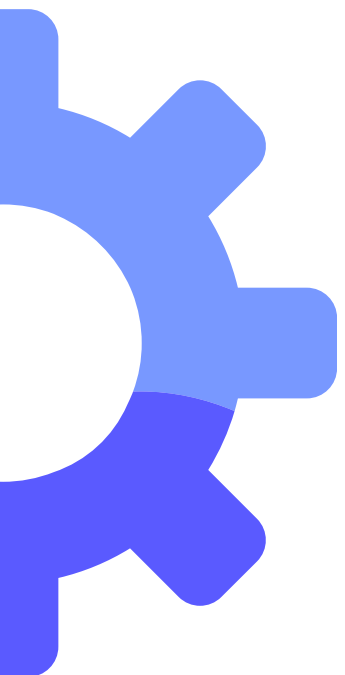


DDL

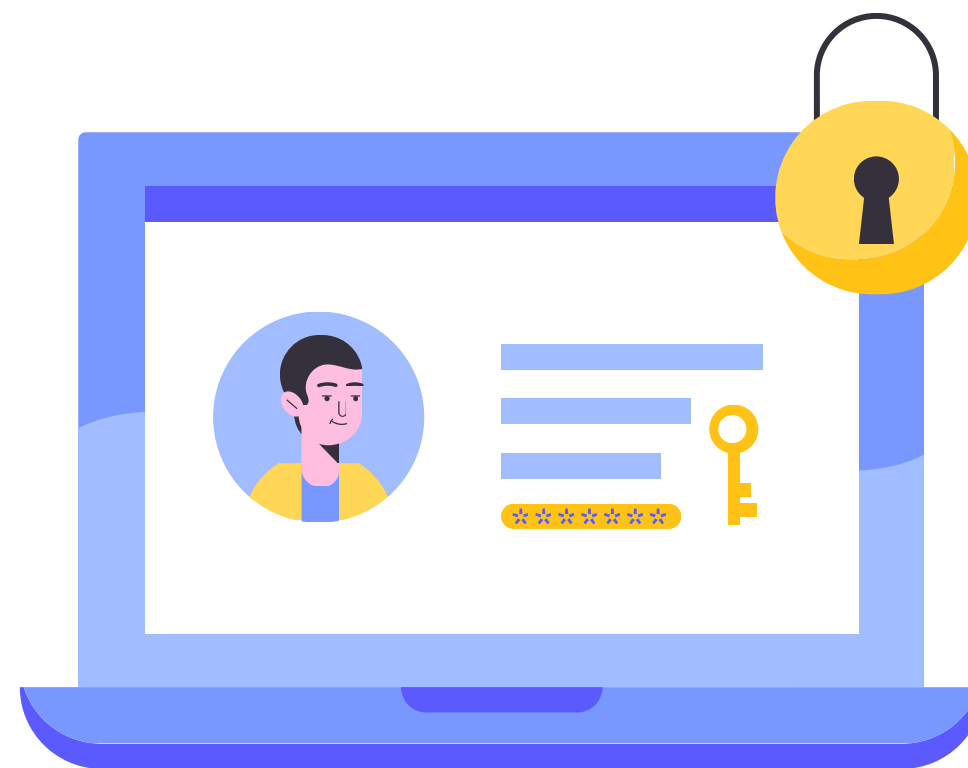
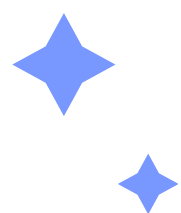
- Data Definition Language
- Un sous-ensemble du langage SQL pour manipuler les structures des tables d'une base de données, et non les données elles-mêmes (create, alter, drop, rename).

DML

- Data Manipulation Language
- Une parties du langage SQL qui s'intéresse à la manipulation des données: insertion, modification ou suppression.



02

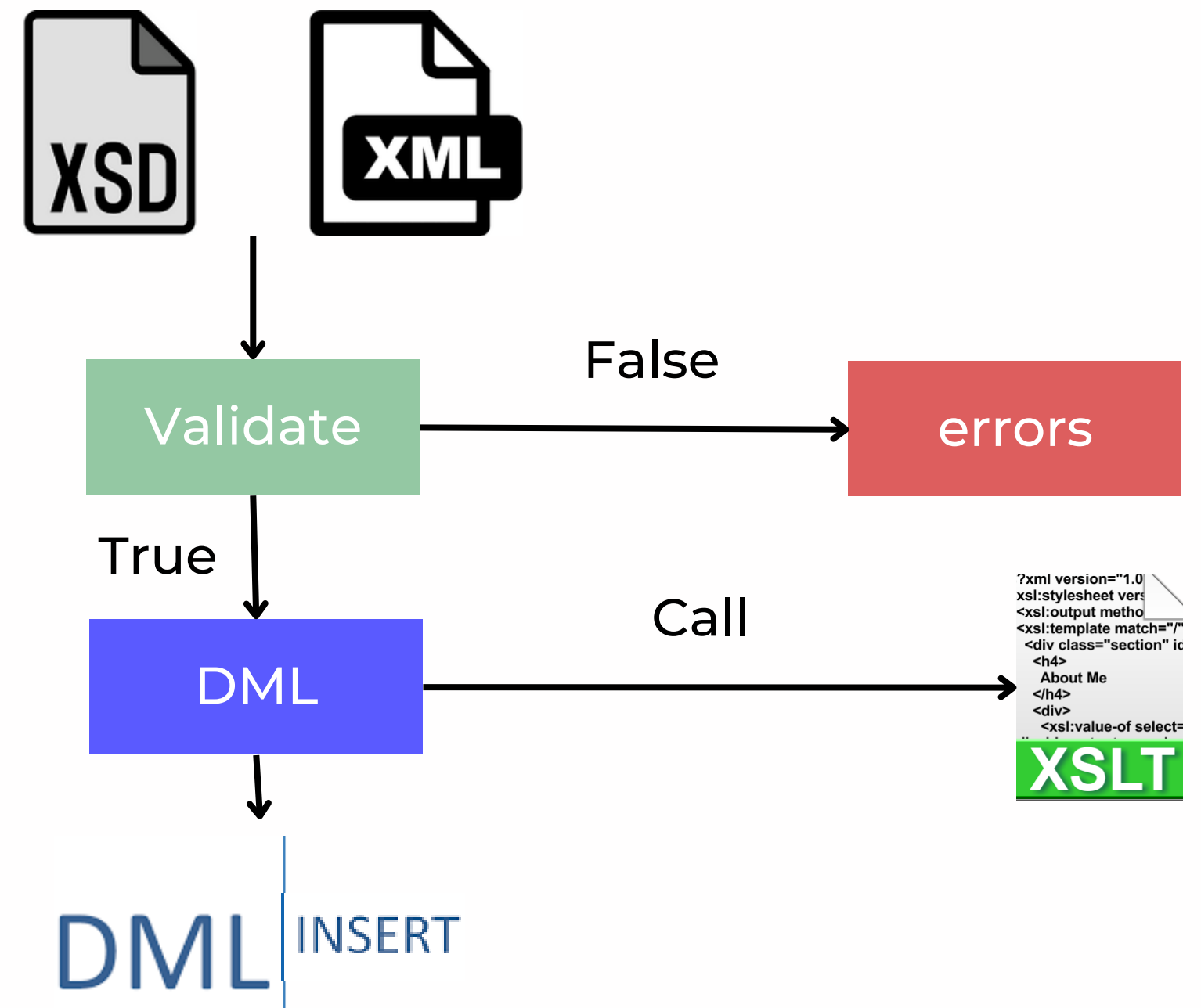
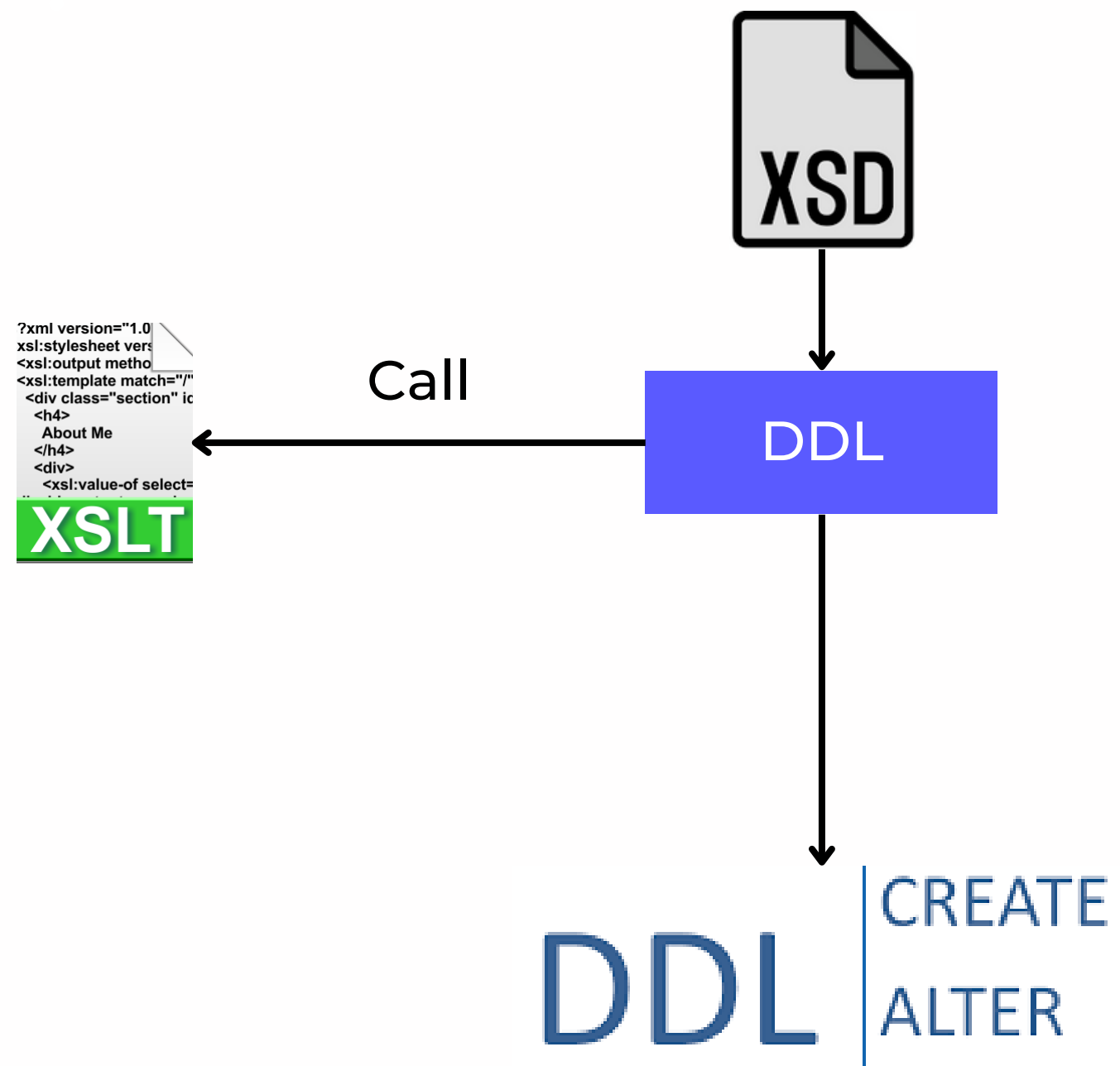


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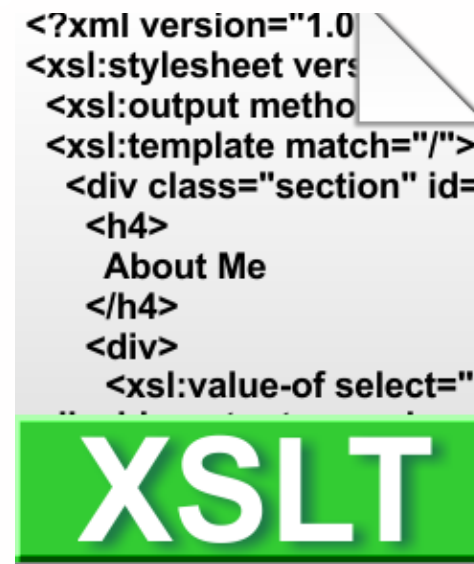
Réalisation

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Fonctionnalités



Outils & Langages

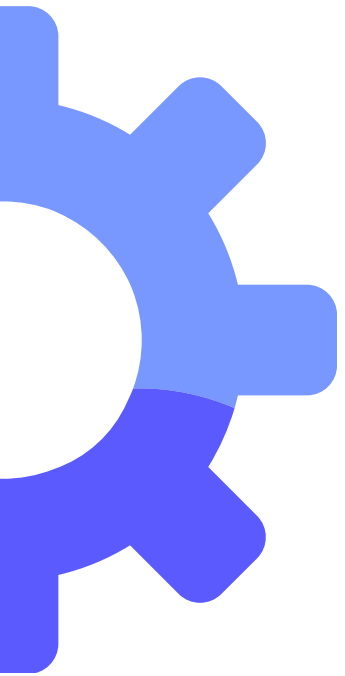


CSS

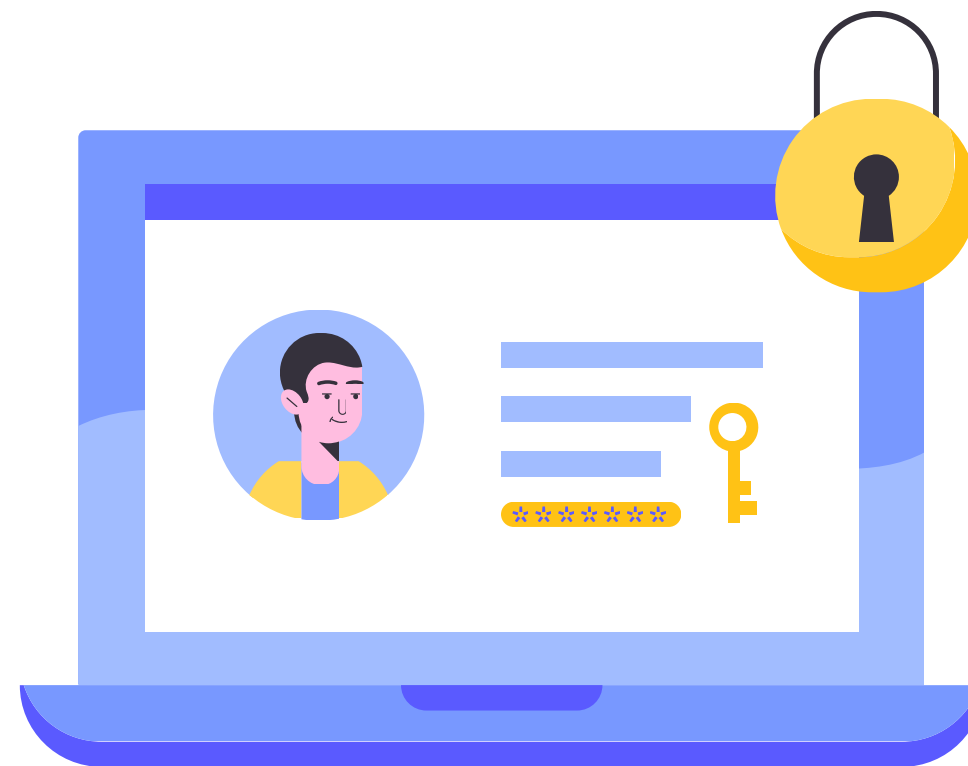
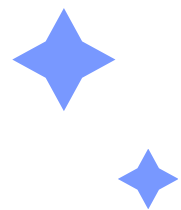


HTML





03



Contraintes & Problèmes

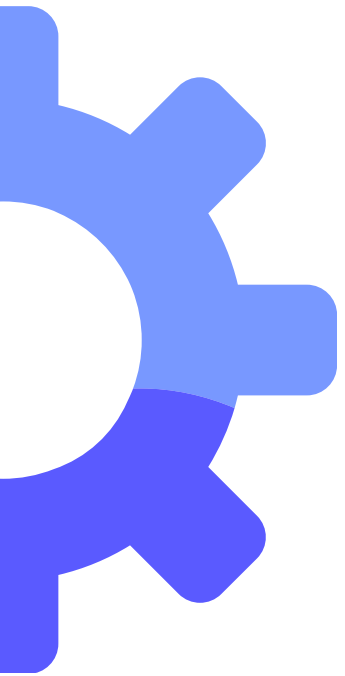
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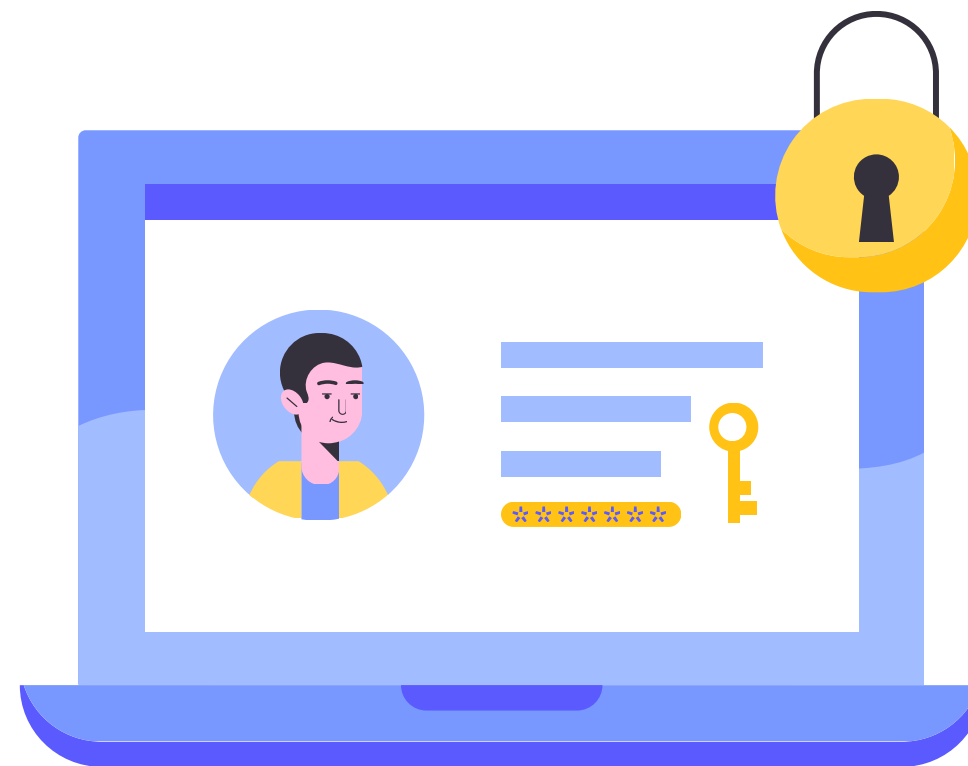
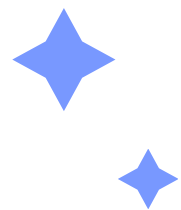
Contraintes & Problèmes

- Pas assez de ressources pour passer de XML à DDL et DML.
- Une complexité dans la généralisation du XSLT.
- Problème au niveau de l'affichage des requêtes SQL.
- Pour avoir des requêtes valides, chaque élément XML doit posséder un attribut.





04



Démonstration

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XML Converter

Validate & Transform an XML file to DML.

```
<?xml version="1.0" encoding="UTF-8" ?>
<shiporder orderid="889923"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="shiporder.xsd">
  <orderperson>John Smith</orderperson>
  <shipto>
    <name>Ola Nordmann</name>
    <address>Langgt 23</address>
    <city>4000 Stavanger</city>
    <country>Norway</country>
  </shipto>
  <item>
    <name>Empire Burlesque</name>
    <note>Special Edition</note>
    <quantity>1</quantity>
    <price>10.90</price>
  </item>
</shiporder>
```

```
<?xml version="1.0" encoding="UTF-8" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" >
  <xs:element name="shiporder">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="orderperson" type="xs:string"/>
        <xs:element name="shipto">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="name" type="xs:string"/>
              <xs:element name="address" type="xs:string"/>
              <xs:element name="city" type="xs:string"/>
              <xs:element name="country" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="item">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="name" type="xs:string"/>
              <xs:element name="note" type="xs:string"/>
              <xs:element name="quantity" type="xs:integer"/>
              <xs:element name="price" type="xs:float"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

Generated DML

```
INSERT INTO shiporder_valeus (orderid, shiporder_xsd_orderperson, shiporder_xsd_shipto_name, shiporder_xsd_shipto_address, shiporder_xsd_shipto_city, shiporder_xsd_shipto_country, shiporder_xsd_item_name, shiporder_xsd_item_note, shiporder_xsd_item_quantity, shiporder_xsd_item_price) VALUES (889923, 'John Smith', 'Ola Nordmann', 'Langgt 23', '4000 Stavanger', 'Norway', 'Empire Burlesque', 'Special Edition', 1, 10.90);
INSERT INTO shiporder_valeus (orderid, shiporder_xsd_orderperson, shiporder_xsd_shipto_name, shiporder_xsd_shipto_address, shiporder_xsd_shipto_city, shiporder_xsd_shipto_country, shiporder_xsd_item_name, shiporder_xsd_item_note, shiporder_xsd_item_quantity, shiporder_xsd_item_price) VALUES (889923, 'John Smith', 'Ola Nordmann', 'Langgt 23', '4000 Stavanger', 'Norway', 'Empire Burlesque', 'Special Edition', 1, 10.90);
INSERT INTO shiporder_valeus (orderid, shiporder_xsd_orderperson, shiporder_xsd_shipto_name, shiporder_xsd_shipto_address, shiporder_xsd_shipto_city, shiporder_xsd_shipto_country, shiporder_xsd_item_name, shiporder_xsd_item_note, shiporder_xsd_item_quantity, shiporder_xsd_item_price) VALUES (889923, 'John Smith', 'Ola Nordmann', 'Langgt 23', '4000 Stavanger', 'Norway', 'Empire Burlesque', 'Special Edition', 1, 10.90);
INSERT INTO shiporder_valeus (orderid, shiporder_xsd_orderperson, shiporder_xsd_shipto_name, shiporder_xsd_shipto_address, shiporder_xsd_shipto_city, shiporder_xsd_shipto_country, shiporder_xsd_item_name, shiporder_xsd_item_note, shiporder_xsd_item_quantity, shiporder_xsd_item_price) VALUES (889923, 'John Smith', 'Ola Nordmann', 'Langgt 23', '4000 Stavanger', 'Norway', 'Empire Burlesque', 'Special Edition', 1, 10.90);
```



XSD Converter

Transform an XSD file to DDL.

```
<?xml version="1.0" encoding="UTF-8" ?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" >
  <xs:element name="shiporder">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="orderperson" type="xs:string"/>
        <xs:element name="shipto">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="name" type="xs:string"/>
              <xs:element name="address" type="xs:string"/>
              <xs:element name="city" type="xs:string"/>
              <xs:element name="country" type="xs:string"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="item">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="name" type="xs:string"/>
              <xs:element name="note" type="xs:string"/>
              <xs:element name="quantity" type="xs:integer"/>
              <xs:element name="price" type="xs:float"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

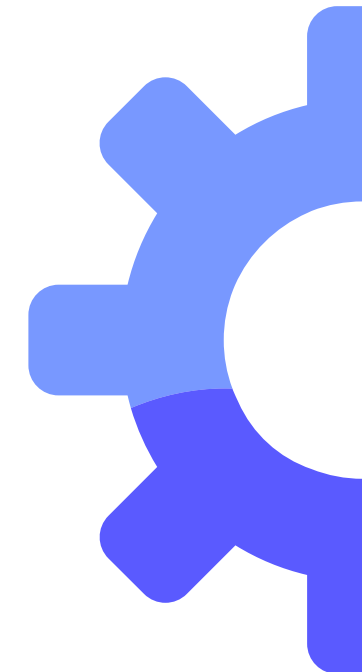
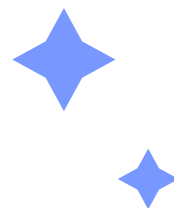
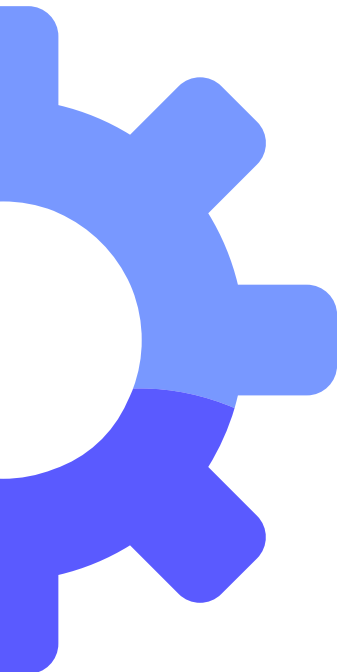
Generated DDL

```
CREATE TABLE shiporder (shiporder_id intger NOT NULL ,orderperson varchar(255),shipto,item,orderid varchar(255) PRIMARY KEY ( shiporder_id ) ); CREATE TABLE shipto (shipto_id intger NOT NULL ,name varchar(255),address varchar(255),city varchar(255),country varchar(255) PRIMARY KEY ( shipto_id ) ); CREATE TABLE item (item_id intger NOT NULL ,name varchar(255),note varchar(255) NULL,quantity intger NOT NULL ,price float(255),PRIMARY KEY ( item_id ) ); CREATE TABLE orderperson (orderperson_id intger NOT NULL ,name varchar(255),PRIMARY KEY ( orderperson_id ) );
```

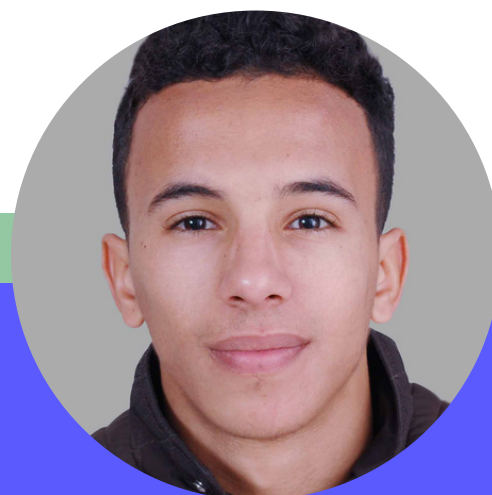


This Converter let's you transform an XML Schema document or an XML document using an XSL (EXtensible Stylesheet Language) file.

Features



NOUR EL FALAH
SAAD



KHALIDI
WALID



ACH-CHATIBI
AHMED

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Merci