XML Document

Cannot represent the semantics of

- Key (unique), Keyref (ref validity),
- Sequence of sub elements,
- Complex type
- Occurrences (min, max)

XML Schema (similar to DTD and represents all the above features)

is the XML definition for a database.

XML Schema can be used to validate an XML document of the database.

XSD: XML Schema Definition.

e.g. Company DB (Tree structure)

```
Company
  - department...
  - employee...
  - Project...
```

If there is a cycle in the database schema, duplicate an element in the cycle and remove the cycle.

e.g. University Schema in Ch12.