What's mongoose?

Mongoose is an **Object Data Modeling** (ODM) library for MongoDB and Node.JS. It is responsible for:

- Managing data relationships.
- Providing schema validation.
- Implementing the translation between code objects and the representation of those objects in MongoDB.

Mongodb vs SQL

You know by now that MongoDB is a **schema-less NoSQL document database**. It means you can store JSON documents on it. The structure of these documents can vary as it is **not enforced** like SQL databases. This is one of the advantages of using NoSQL as it speeds up application development and reduces the complexity of deployments.
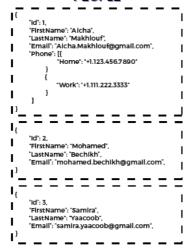
The example below is a reminder of how data is stored in Mongo vs. SQL Database:

MONGO

SQL

PEOPLE

```
{
    "Id": 1,
    "FirstName": "Aicha",
    "LastName": "Makhlouf",
    "Email": "Aicha.Makhlouf@gmail.com",
    "Phone": [{
            "Home": "+1.123.456.7890"
        }
        {
            "Work": "+1.111.222.3333"
        }
    ]
}
```

```
{
    "Id": 2,
    "FirstName": "Mohamed",
    "LastName": "Bechikh",
    "Email": "mohamed.bechikh@gmail.com",
}
```

```
{
    "Id": 3,
    "FirstName": "Samira",
    "LastName": "Yaacoob",
    "Email": "samira.yaacoob@gmail.com",
}
```

PERSON

id	FirstName	LastName	Email
1	Aicha	Makhlouf	Aicha.Makhlouf@gmail.com
2	Mohamed	Bechikh	mohamed.bechikh@gmail.com
3	Samira	Yaacoob	samira.yaacoob@gmail.com

PHONE_NUMBER

PersonId	PhoneId	Phone Number	Type
1	1	+1.123.456.7890	Home
1	2	+1.111.222.3333	Work