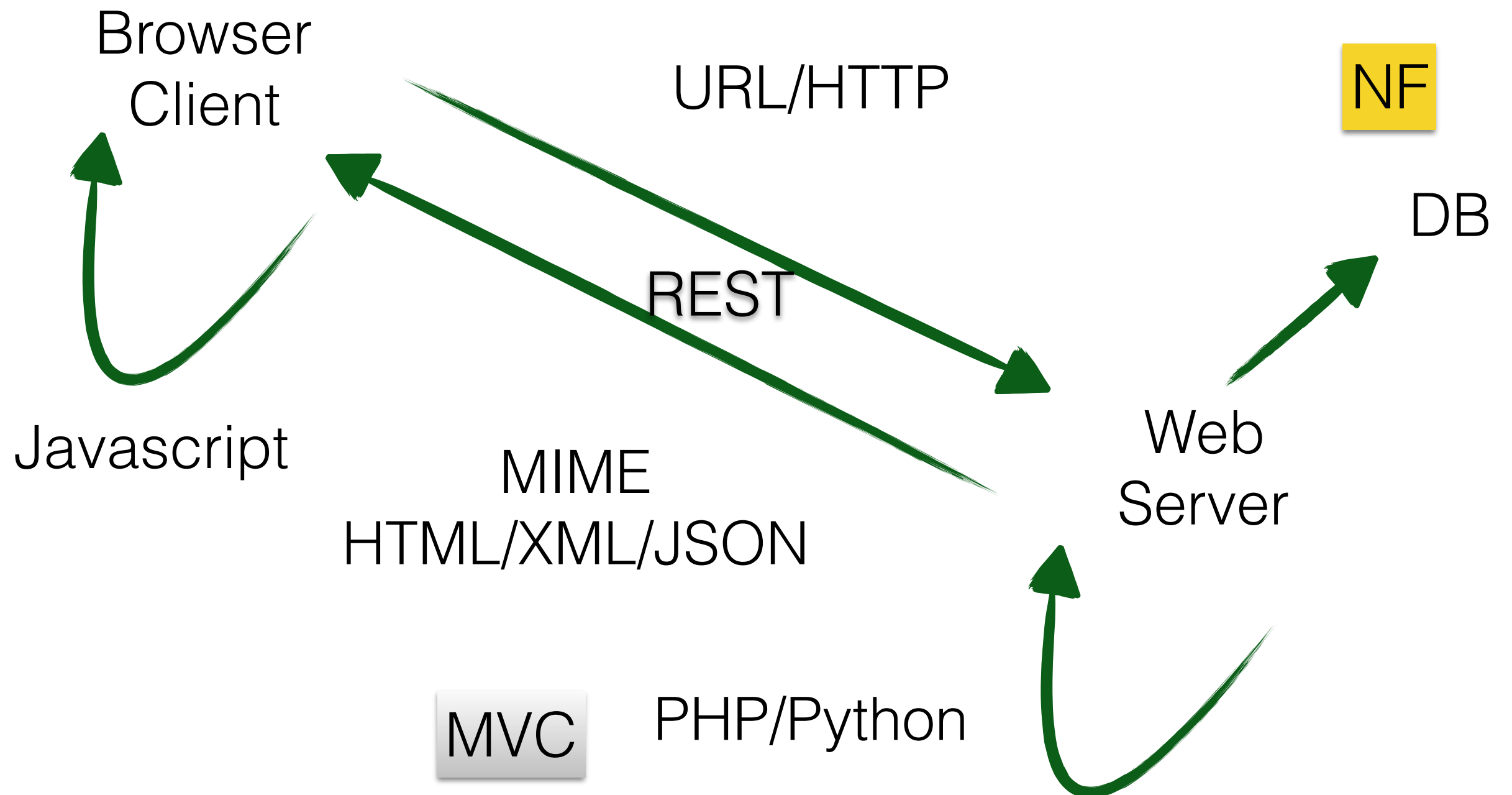


Web dynamic Normal Forms

Frédéric Le Mouëll

The Big Picture



Normalization?

- Database normalization: process of structuring tables - including attributes - of a relational database to minimize data redundancy

CustomerID	CustomerName	ContactName	Address	City	PostalCode	Country
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12209	Germany
2	Ana Trujillo Emparedados y helados	Ana Trujillo	Avda. de la Constitución 2222	México D.F.	5023	Mexico
3	Antonio Moreno Taquería	Antonio Moreno	Mataderos 2312	México D.F.	5023	Mexico
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden

Redundancy!

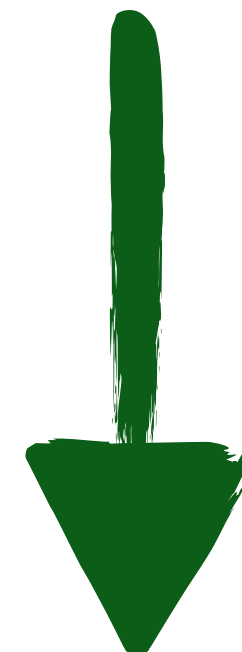
List of Normal Forms

- 1FN - First Normal Form
- 2FN - Second Normal Form
- 3FN - Third Normal Form
- BCNF - Boyce-Codd Normal Form
- 4FN - Fourth Normal Form
- 5FN - Fifth Normal Form
- 6FN - Sixth Normal Form



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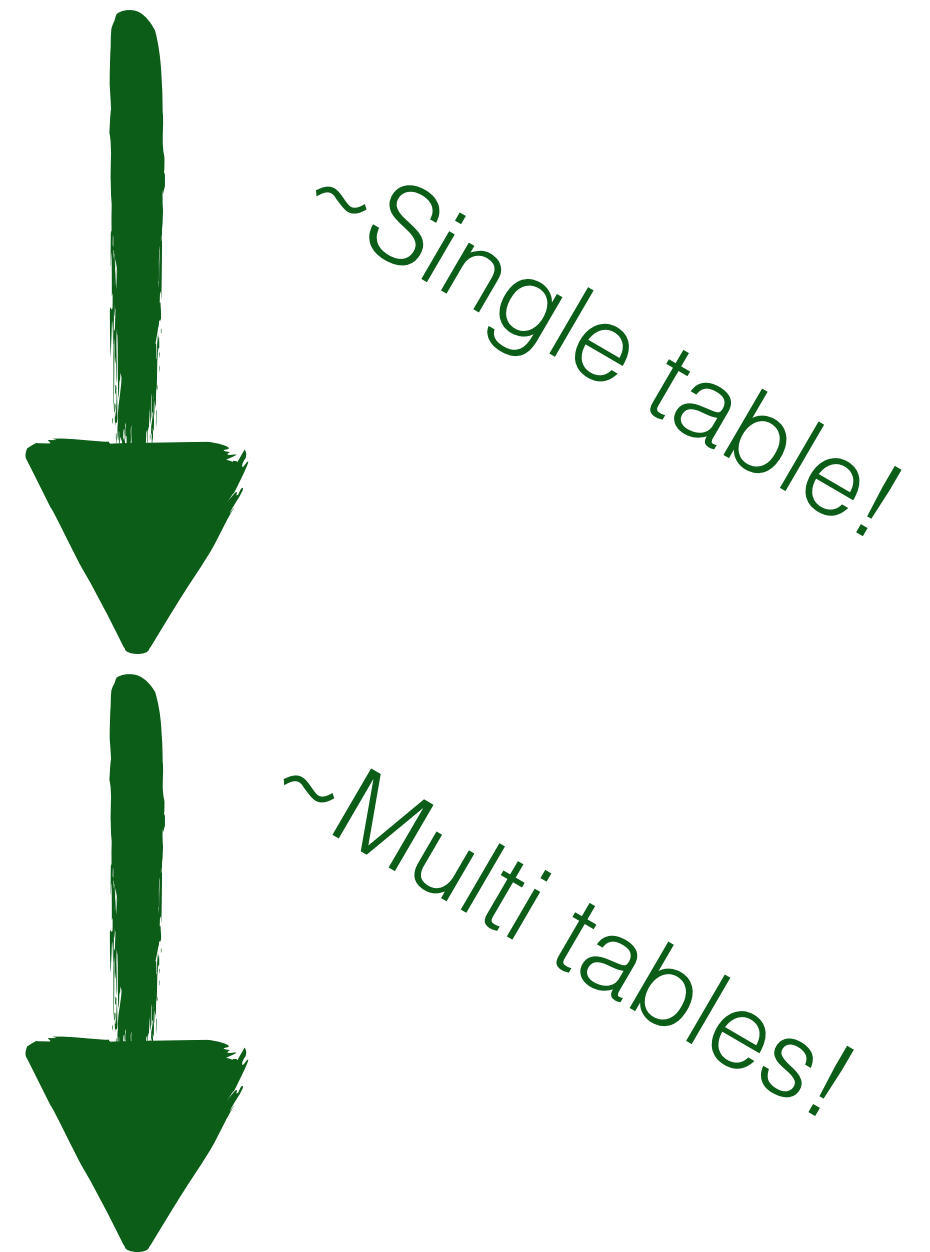
Functional dependencies



Multi-values, join, hierarchical dependencies

List of Normal Forms

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Dependency?

- Functional Dependency...