How good is our
Relational Schema?

Informal Guidelines
• Making sure the semantics of the attributes is clear in the schema.
• Reducuing the redundant information in tuples
• Reducing the NULL values in tuples
• Disallowing the generation of *spurious tuples*

Update Anomoly / Anomolies

Guideline 1:
(Good)

EMP_DEPT

EMPLOYEE

EName	Ssn	Bdate	Address		Dname	Dnumber	Dmgr_ssn

EName	Ssn	Bdate	Address	Dnumber

Insertion Anomoly

DEPARTMENT

Dname	Dnumber	Dmgr_ssn

| Addison | 123 | 04-25-1996 | blah | blah | 1 | 123 |
| Weslee | 234 | 04-30-2000 | blah | blahfatfinger | 1 | null |

EMP_DEPT

EName	Ssn	Bdate	Address	Dname	Dnumber	Dmgr_ssn

```
+----------------+   -HTTP(S)->   +----------------+  -JDBC (SQL)->  +----------------+
| POSTMAN        |                | Application    |                 | SQL Server     |
| (Mobile        |                | Sever (API)    |                 | (Autumn2024)   |
| Phone)         |                |                |                 |                |
+----------------+                +----------------+                 +----------------+
```

VERB = GET, POST,
PUT, DELETE