Relational Mapping Notation

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Reference legend + course style guide for writing relational schemas — introduced across 2026-03-09-the-relational-model-and-integrity-constraints[1] and 2026-03-16-er-to-relational-mapping[2]. These notations are specific to INFS1200/7900 and may differ from textbooks and online resources, so they are what to follow in an assignment or exam. The guide covers *naming and layout only*: it recommends nothing about which relations to produce. The mapping steps themselves are in er-to-relational-mapping[3].

Schema notation

- `Relation [attr1, attr2, ...]` — a relation schema; the (primary) key attribute(s) are underlined.
- A composite primary key gets a single continuous underline spanning all of its attributes, e.g. `Enrolment [studentId, courseCode, sem, year]`.
- `Relation.fk references OtherRelation.pk` — a foreign key constraint, listed directly under the relation it belongs to.
- `Relation.{fk1, fk2} references OtherRelation.{pk1, pk2}` — a composite foreign key referencing a composite primary key.

[1] courses/infs1200/2026-03-09-the-relational-model-and-integrity-constraints.pdf
[2] courses/infs1200/2026-03-16-er-to-relational-mapping.pdf
[3] courses/infs1200/er-to-relational-mapping.pdf

Naming convention (INFS1200/7900 style guide)

- **Table names**: UpperCamelCase (first letter of each word capitalised, no spaces) — e.g. `Flight`, not `FLIGHT`.
- **Attribute names**: lowerCamelCase (first letter of each word from the *second* word onwards capitalised) — e.g. `departureTime`, not `Departure Time`. Acronym attribute names stay entirely lowercase (e.g. `eta`, not `ETA`).
- A space separates the table name from the opening bracket: `Flight [planeNumber, ...]`, not `Flight[planeNumber, ...]`.

The guide's compliant and non-compliant pair puts every rule in one line each:

```
Flight [planeNumber, departureTime, duration, eta]

FLIGHT[planeNumber, departure time, Duration, ETA]
```

The second breaks five rules at once — shouted table name, no space before the bracket, a space inside an attribute name, a capitalised attribute, and an upper-case acronym.

Layout convention

A table's foreign key constraint lines go directly underneath that table's own definition, with a blank line before the next table starts — not all grouped together under a separate "Foreign Keys:" heading at the end:

```
Employee [ssn, firstName, lastName, dob, manager]
Employee.manager references Employee.ssn

Dependant [ssn, name, dob]
Dependant.ssn references Employee.ssn

DependantPhoneNumber [ssn, name, phoneNumber]
DependantPhoneNumber.{ssn, name} references Dependant.{ssn, name}
```