# A01\_G06 Normalisation

## **UNF**

### Staffing report form

CLASS\_STAFFING(centre\_id, centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode, class\_no, class\_duration, facility\_room\_no, class\_datetime, class\_no\_sessions, (staff\_id, staff\_first\_name, staff\_last\_name, staff\_isfirstaid))

#### Attendance report form

CLASS\_MEMBER\_ATTENDANCE(centre\_id, centre\_name, class\_no, class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no\_sessions, (member\_no, mem\_class\_paydate, (class\_datetime, mem\_class\_attend\_isattend), mem\_class\_ttlattend))

## 1NF

#### Staffing report form

CLASS(<u>centre\_id</u>, centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode, <u>class\_no</u>, class\_duration, facility\_room\_no, class\_datetime, class\_no\_sessions, staff\_id)

CKs: (centre\_id, class\_no), (centre\_id, facility\_room\_no, class\_datetime)

Partial dependencies:

centre\_id -> centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode

CLASS\_STAFFING(<u>centre\_id</u>, <u>class\_no</u>, <u>staff\_id</u>, staff\_first\_name, staff\_last\_name, staff\_isfirstaid)

CKs: (centre\_id, class\_no, staff\_id)

Partial dependencies:

staff\_id -> staff\_first\_name, staff\_last\_name, staff\_isfirstaid

#### Attendance report form

CLASS(<u>centre\_id</u>, centre\_name, <u>class\_no</u>, class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no\_sessions)

CKs: (centre id, class no), (centre id, facility room no, class datetime)

Partial dependencies:

centre\_id -> centre\_name

MEMBER\_CLASS\_SIGNUP(centre\_id, class\_no, member\_no, mem\_class\_paydate,

mem class ttlattend)

CKs: (centre\_id, class\_no, member\_no)

Partial dependencies:

None

MEMBER\_CLASS\_ATTENDANCE(<u>centre\_id</u>, <u>class\_no</u>, <u>member\_no</u>, mem\_class\_attend\_isattend)

CKs: (centre id, class no, member no)

Partial dependencies:

None

## 2NF

#### Staffing report form

CENTRE(<u>centre\_id</u>, centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode)

Transitive dependencies:

None

CLASS(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, facility\_room\_no, class\_datetime, class\_no\_sessions, staff\_id)

Transitive dependencies:

None

CLASS\_STAFFING(centre\_id, class\_no, staff\_id)

Transitive dependencies:

None

STAFF(<u>staff\_id</u>, staff\_first\_name, staff\_last\_name, staff\_isfirstaid)

Transitive dependencies:

None

### Attendance report form

CLASS(<u>centre\_id</u>, <u>class\_no</u>, class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no\_sessions)

Transitive dependencies:

None

CENTRE(<u>centre\_id</u>, centre\_name)

Transitive dependencies:

None

MEMBER\_CLASS\_SIGNUP(centre\_id, class\_no, member\_no, mem\_class\_paydate,

mem\_class\_ttlattend)

Transitive dependencies:

None

MEMBER\_CLASS\_ATTENDANCE(<u>centre\_id</u>, <u>class\_no</u>, <u>member\_no</u>, mem\_class\_attend\_isattend) Transitive dependencies:

None

## 3NF

#### Staffing report form

CENTRE(<u>centre\_id</u>, centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode)

Full dependencies:

centre\_id -> centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode

CLASS(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, facility\_room\_no, class\_datetime, class\_no\_sessions, staff\_id)

Full dependencies:

centre\_id, class\_no -> class\_duration, facility\_room\_no, class\_datetime, class\_no\_sessions, staff\_id

CLASS STAFFING(centre id, class no, staff id)

Full dependencies:

STAFF(staff id, staff first name, staff last name, staff isfirstaid)

Full dependencies:

staff\_id -> staff\_first\_name, staff\_last\_name, staff\_isfirstaid

#### Attendance report form

CLASS(<u>centre\_id</u>, <u>class\_no</u>, class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no\_sessions)

Full dependencies:

centre\_id, class\_no -> class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no\_sessions

CENTRE(<u>centre\_id</u>, centre\_name)
Full dependencies:
centre\_id -> centre\_name

MEMBER\_CLASS\_SIGNUP(<u>centre\_id</u>, <u>class\_no</u>, <u>member\_no</u>, mem\_class\_paydate, mem\_class\_ttlattend)

Full dependencies:

centre\_id, class\_no, member\_no -> mem\_class\_paydate, mem\_class\_ttlattend

MEMBER\_CLASS\_ATTENDANCE(<u>centre\_id</u>, <u>class\_no</u>, <u>member\_no</u>, mem\_class\_attend\_isattend) Full dependencies:

centre\_id, class\_no, member\_no -> mem\_class\_attend\_isattend

# **Attribute synthesis**

Combined CLASS and CENTRE relations

## Final 3NF relations

CENTRE(<u>centre\_id</u>, centre\_name, centre\_address\_street\_no, centre\_address\_street, centre\_address\_town, centre\_address\_postcode)

CLASS(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, class\_type, class\_description, facility\_room\_no, class\_datetime, class\_no sessions, staff\_id)

STAFF(staff\_id, staff\_first\_name, staff\_last\_name, staff\_isfirstaid)

CLASS\_STAFFING(centre id, class no, staff id)

MEMBER\_CLASS\_SIGNUP(<u>centre\_id</u>, <u>class\_no</u>, <u>member\_no</u>, mem\_class\_paydate, mem\_class\_ttlattend)

MEMBER CLASS ATTENDANCE(centre id, class no, member no, mem class attend isattend)