

FIT3171 Assignment 1B

**Normalisation for Monash Movement Class Staffing Report**

**UNF :**

CLASS (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess, (stf\_id, stf\_name, cls\_lead, first\_aidcert))

**1NF :**

CLASS (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess)

CLASS\_STAFFING (ctr\_id, cls\_num, stf\_id, stf\_name, cls\_lead, first\_aidcert)

Partial Dependencies :

ctr\_id → ctr\_name, ctr\_street, ctr\_town, ctr\_postcode

stf\_id → stf\_name

**2NF :**

CLASS (ctr\_id, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess)

CLASS\_STAFFING (ctr\_id, cls\_num, stf\_id, cls\_lead, first\_aidcert)

STAFF (stf\_id, stf\_name)

CENTRE (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode)

Transitive Dependencies :

No Transitive Dependency presents

**3NF :**

CLASS (ctr\_id, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess)

CLASS\_STAFFING (ctr\_id, cls\_num, stf\_id, cls\_lead, first\_aidcert)

STAFF (stf\_id, stf\_name)

CENTRE (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode)

Full Dependencies :

ctr\_id, cls\_num → cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess

ctr\_id, stf\_id, cls\_num → cls\_lead, first\_aidcert

stf\_id → stf\_name

ctr\_id → ctr\_name, ctr\_street, ctr\_town, ctr\_postcode

### **Normalisation for Class Attendance Report (Sample 1)**

#### **UNF :**

CLASS (ctr\_id, ctr\_name, cls\_num, cls\_type, cls\_desc, fac\_roomno, cls\_sdatetime, cls\_numsess, (mem\_no, pay\_date, session\_date, total\_attendance))

#### **1NF :**

CLASS (ctr\_id, ctr\_name, cls\_num, cls\_type, cls\_desc, fac\_roomno, cls\_sdatetime, cls\_numsess)

ATTENDANCE (ctr\_id, cls\_num, mem\_no, pay\_date, session\_date, total\_attendance)

Partial Dependencies :

ctr\_id → ctr\_name

#### **2NF :**

CLASS (ctr\_id, cls\_num, cls\_type, cls\_desc, fac\_roomno, cls\_sdatetime, cls\_numsess)

ATTENDANCE (ctr\_id, cls\_num, mem\_no, pay\_date, session\_date, total\_attendance)

CENTRE (ctr\_id, ctr\_name)

Transitive Dependencies :

cls\_type → cls\_desc

#### **3NF :**

CLASS (ctr\_id, cls\_num, cls\_type, fac\_roomno, cls\_sdatetime, cls\_numsess)

ATTENDANCE (ctr\_id, cls\_num, mem\_no, pay\_date, session\_date, total\_attendance)

CENTRE (ctr\_id, ctr\_name)

CLASSTYPE (cls\_type, cls\_desc)

Full Dependencies :

ctr\_id, cls\_num → cls\_type, fac\_roomno, cls\_sdatetime, cls\_numsess

ctr\_id, cls\_num, mem\_no → pay\_date, session\_date, total attendance

ctr\_id → ctr\_name

cls\_type → cls\_desc

**Collected 3NF Relations :**

1. CLASS (ctr\_id, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess)
2. CLASS\_STAFFING (ctr\_id, cls\_num, stf\_id, cls\_lead, first\_aidcert)
3. STAFF (stf\_id, stf\_name)
4. CENTRE (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode)
5. CLASS (ctr\_id, cls\_num, cls\_type, fac\_roomno, cls\_sdatetime, cls\_numsess)
6. ATTENDANCE (ctr\_id, cls\_num, mem\_no, pay\_date, session\_date, total\_attendance)
7. CENTRE (ctr\_id, ctr\_name)
8. CLASSTYPE (cls\_type, cls\_desc)

**Attribute Synthesis**

1. & 5.

CLASS (ctr\_id, cls\_num, cls\_duration, fac\_roomno, cls\_sdatetime, cls\_numsess, cls\_type)

2.

CLASS\_STAFFING (ctr\_id, cls\_num, stf\_id, cls\_lead, first\_aidcert)

3.

STAFF (stf\_id, stf\_name)

4. & 7.

CENTRE (ctr\_id, ctr\_name, ctr\_street, ctr\_town, ctr\_postcode)

6.

ATTENDANCE (ctr\_id, cls\_num, mem\_no, pay\_date, session\_date, total\_attendance)

8.

CLASSTYPE (cls\_type, cls\_desc)