1. Class Staffing Report

Monash Movement Class Staffing Report

Centre Id	10
Centre Name	Clayton ARC Centre
Centre Address	

	Street	123 Wild Rd
	Town	Clayton
	Postcode	3168

Class Number	123
Class Duration (mins)	45
Facility Room No	5
Start Date/Time	23 Aug 2021 18:00
No of Sessions	4

Staff ID	Staff Name	Class Leader	First Aid Certified
321	Avery Xue	Yes	No
421	Haven Perry	No	Yes

UNF
CLASS_STAFFING(centre_id, centre_name, centre_street, centre_town, centre_postcode, class_number, class_duration, facility_room_no, class_start_datetime, class_no_sess, (staff_id, staff_name, class_staff_leader, staff_first_aid_certified))
1NF

CLASS_STAFFING(<u>centre_id</u>, <u>class_number</u>, centre_name, centre_street, centre_town, centre_postcode, class_duration, class_start_datetime, class_no_sess, facility_room_no)

STAFF(<u>staff_id</u>, staff_name, class_staff_leader, staff_first_aid_certified)

Partial Dependencies

centre_id -> centre_name, centre_street, centre_town, centre_postcode

staff_id -> staff_name, staff_first_aid_certified

2NF

CENTRE_CLASS(<u>class_number</u>, <u>centre_id</u> , class_duration, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (<u>centre_id</u>, centre_name, centre_street, centre_town, centre_postcode)

CLASS_STAFFING(<u>staff_id</u>, <u>class_number</u>, <u>centre_id,</u> class_staff_leader)

STAFF(<u>staff_id</u>. staff_name, staff_first_aid_certified)

Transitive dependencies

No transitive dependencies present

3NF

CENTRE_CLASS(class_number, centre_id , class_duration, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (centre_id, centre_name, centre_street, centre_town, centre_postcode)

CLASS_STAFFING(staff_id, class_number, centre_id, class_staff_leader)

STAFF(staff_id. staff_name, staff_first_aid_certified)

Full Dependencies

class_number -> class_duration, class_start_datetime, class_no_sess

centre_id -> centre_name, centre_addr_street, centre_addr_town, centre_addr_postcode

staff_id -> staff_name, staff_first_aid_certified

staff_id, class_number, centre_id -> class_leader

2. Class Attendance Report

Sample 1:

Monash Movement Member Class Attendance Report

Centre ID	10
Centre Name	Clayton ARC Centre

Class Number	123
Class Type	Spin
Class Description	Beginners Spin Training
Facility Room No	5
Start Date/Time	23 Aug 2021 18:00
No of Sessions	4

Member No	Payment Date	Session Date				Total Attendance
		23 August	30 August	6 September	13 September	
12	20 August	Attended	Attended	Attended	Attended	4
31	10 August	Attended	Attended	Attended	Attended	4
54	22 August	Attended	Absent	Absent	Absent	1
123	10 August	Attended	Attended	Attended	Attended	3
256	21 August	Attended	Attended	Absent	Absent	2
453	10 August	Attended	Attended	Attended	Attended	4

Sample 2:

Monash Movement Member Class Attendance Report

Centre ID	10
Centre Name	Clayton ARC Centre

Class Number	127
Class Type	HIT
Class Description	HIT Early AM Power Zone
Facility Room No	4
Start Date/Time	25 Aug 2021 06:00
No of Sessions	1

Member No	Payment Date	Session Date	Total Attendance
		25 August	
45	18 August	Attended	1
54	6 August	Absent	0
62	6 August	Absent	0
78	7 August	Attended	1
123	21 August	Attended	1
325	10 August	Absent	0

UNF

SESSION(centre_id, centre_name, class_number, class_type, class_desc, facility_room_no, class_start_datetime, class_no_sess, (member_no, payment_date, (session_date, session_attendance), payment_total_addend))

1NF

CENTRE_CLASS(centre_id, centre_name, class_number, class_type, class_desc, facility_room_no, class_start_datetime, class_no_sess)

PAYMENT(member_no, centre_id, class_number, payment_date, payment_total_addend)

SESSION(member_no, centre_id, class_number, session_date, session_attendance)

Partial Dependencies

centre_id -> centre_name

2NF

CENTRE_CLASS(class_number, centre_id, class_type, class_desc, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (centre_id, centre_name)

PAYMENT(member_no, centre_id, class_number, payment_date, payment_total_addend)

SESSION(member_no, centre_id, class_number, session_date, session_attendance)

Transitive dependencies

No transitive dependencies present

3NF

CENTRE_CLASS(class_number, centre_id, class_type, class_desc, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (centre_id, centre_name)

PAYMENT(<u>member_no</u>, <u>centre_id,</u> <u>class_number</u>, payment_date, payment_total_addend)

SESSION(<u>member_no</u>, <u>centre_id</u>, <u>class_number</u>, <u>session_date</u>, session_attendance)

Full Dependencies

class_number , centre_id -> class_type, class_desc, class_start_datetime,

class_sess_no, facility_room_no

3. Attribute synthesis

ALL ENTITIES

Class staffing report entities

CENTRE_CLASS(<u>class_number</u>, <u>centre_id</u> , class_duration, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (<u>centre_id</u>, centre_name, centre_street, centre_town, centre_postcode)

CLASS_STAFFING(<u>staff_id</u>, <u>class_number</u>, <u>centre_id,</u> staff_class_leader)

STAFF(<u>staff_id</u>. staff_name, staff_first_aid_certified)

Class attendance report entities

CENTRE_CLASS(<u>class_number</u>, <u>centre_id</u>, class_type, class_desc, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (<u>centre_id</u>, centre_name)

PAYMENT(<u>member_no</u>, <u>centre_id</u>, <u>class_number</u>, payment_date, payment_total_addend)

SESSION(<u>member_no</u>, <u>centre_id</u>, <u>class_number</u>, <u>session_date</u>, session_attendance)

Attribute Synthesis

1. CLASS entities from both of the normalized forms can be merged since their primary key is identical.

2. CENTRE entities can be merged as they have the same primary key

CENTRE_CLASS(<u>class_number</u>, <u>centre_id</u>, class_type, class_desc, class_duration, class_start_datetime, class_no_sess, facility_room_no)

CENTRE (<u>centre_id</u>, centre_name, centre_street, centre_town, centre_postcode)