Name: Farayha Zaheer Alam

**Student ID: 31164943** 

#### 1. Class Staffing Report

#### Monash Movement Class Staffing Report

Centre Id
Centre Name
Centre Address

Clayton ARC Centre

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\_REPORT(centre\_id, centre\_name, centre\_street, centre\_town, centre\_post\_code, class\_no, class\_duration, facility\_room\_no, start\_date\_time, num\_of\_sessions, (staff\_id, staff\_name, class\_leader, first\_aid\_certification))

#### 1NF:

CLASS\_REPORT(<u>centre\_id</u>, centre\_name, centre\_street, centre\_town, centre\_post\_code, <u>class\_no</u>, class\_duration, facility\_room\_no, start\_date\_time, num\_of\_sessions)
CLASS\_STAFF(centre\_id, <u>class\_no</u>, <u>staff\_id</u>, staff\_name, class\_leader, first\_aid\_certification)

## **Partial Dependencies:**

staff\_id\_-> staff\_name, first\_aid\_certification
centre\_id\_-> centre\_name, centre\_street, centre\_town, centre\_post\_code

### 2NF:

CLASS\_REPORT(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, facility\_room\_no, start\_date\_time, num\_of\_sessions)

CLASS STAFF(centre id ,class no, staff id, class leader)

STAFF ENTITY(staff id, staff name, first aid certification)

CENTRE\_DETAILS(<u>centre\_id</u>, centre\_name, centre\_street, centre\_town, centre\_post\_code)

## **Transitive Dependencies:**

No

#### 3NF:

CLASS\_REPORT(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, facility\_room\_no, start\_date\_time, num\_of\_sessions)

CLASS\_STAFF( centre\_id ,class\_no, staff\_id, class\_leader)

STAFF\_ENTITY(<u>staff\_id</u>, staff\_name, first\_aid\_certification)
CENTRE\_DETAILS(<u>centre\_id</u>, centre\_name, centre\_street, centre\_town, centre\_post\_code)

# **Full Dependencies:**

centre\_id, class\_no -> class\_duration, facility\_room\_no, start\_date\_time, num\_of\_sessions class\_no, staff\_id -> class\_leader, centre\_id staff\_id -> staff\_name, first\_aid\_certification centre\_id -> centre\_name, centre\_street, centre\_town, centre\_post\_code

2. Class Atten	dance Report					
Sample 1:						
	Mo	nash Movement N	lember Class Atte	ndance Report		
Centre ID	10					
Centre Name	Clayton ARC Centre					
Class Number	123					
Class Type	Spin					
Class Description	Class Description Beginners Spin Train					
Facility Room No	5					
Start Date/Time	23 Aug 2021 18:00					
No of Sessions	4					
Member No Payment Date			Session	Date		Total Attendand
		23 August	30 August	6 September	13 September	
12	20 August	Attended	Attended	Attended	Attended	
31	10 August	Attended	Attended	Attended	Attended	
54	22 August	Attended	Absent	Absent	Absent	
123	10 August	Attended	Attended	Attended	Attended	
256	21 August	Attended	Attended	Absent	Absent	
453	10 August	Attended	Attended	Attended	Attended	

### UNF:

CLASS\_ATTENDANCE\_REPORT(centre\_id, centre\_name, class\_number, class\_type, class\_descp, facility\_room\_no, start\_date, time\_start, num\_of\_session, (member\_no, date\_paid, (session\_date, ind\_attendance), total\_attendance))

### 1NF:

CLASS\_ATTENDANCE\_REPORT(<u>centre\_id</u>, centre\_name, <u>class\_number</u>, class\_type, class\_descp, facility\_room\_no, start\_date, time\_start, num\_of\_session)

FULL\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, date\_paid, total\_attendance)

IND\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, <u>session\_date</u>, ind\_attendance)

### **Partial Dependencies:**

centre id -> centre name

### 2NF:

CLASS\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, class\_type, class\_descp, facility room no, start date, time start, num of session)

FULL\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, date\_paid, total\_attendance)

IND\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, <u>session\_date</u>, ind attendance)

CENTRE(<u>centre id</u>, centre name)

## **Transitive Dependencies:**

No

#### 3NF:

CLASS\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, class\_type, class\_descp, facility\_room\_no, start\_date, time\_start, num\_of\_session)

FULL\_ATTENDANCE\_REPORT(centre\_id\_class\_number\_member\_no\_date\_paid

FULL\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, date\_paid, total\_attendance)

IND\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, <u>session\_date</u>, ind\_attendance)

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

### **Total Dependencies:**

centre\_id, class\_number -> class\_type, class\_descp, facility\_room\_no, start\_date, time\_start, num\_of\_session centre\_id, class\_number, member\_no -> date\_paid, total\_attendance centre\_id, class\_number, member\_no, session\_date -> ind\_attendance centre\_id -> centre\_name

## Attribute Synthesis based on Sample 1 and Sample 2:

### **Collected 3NF Relations:**

- 1. CLASS\_REPORT(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, facility\_room\_no, start\_date, time start, num of sessions)
- 2. CLASS\_STAFF( centre\_id , class\_no, staff\_id, class\_leader)
- 3. STAFF ENTITY(staff id, staff name, first aid certification)
- CENTRE\_DETAILS(<u>centre\_id</u>, centre\_name, centre\_street, centre\_town, centre\_post\_code)
- 5. CLASS\_ATTENDANCE\_REPORT(<u>centre id</u>, <u>class number</u>, class\_type, class\_descp, facility\_room\_no, time\_date, time\_start, num\_of\_session)
- 6. FULL\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, date\_paid, total\_attendance)
- 7. IND\_ATTENDANCE\_REPORT(centre id, class number, member no, session date, ind attendance)
- 8. CENTRE(centre id, centre name)

# **Synthesis Part:**

## 1&5:

CLASS\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_no</u>, class\_duration, class\_type, class\_descp, facility\_room\_no, start\_date, time\_start, num\_of\_sessions)

CLASS\_STAFF( centre\_id ,<u>class\_no</u>, <u>staff\_id</u>, class\_leader)

# 3:

STAFF\_ENTITY(<u>staff\_id</u>, staff\_name, first\_aid\_certification)

## 4 & 8:

CENTRE\_DETAILS(<u>centre\_id</u>, centre\_name, centre\_street, centre\_town, centre\_post\_code)

## 6:

FULL\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, date\_paid, total\_attendance)

## 7:

IND\_ATTENDANCE\_REPORT(<u>centre\_id</u>, <u>class\_number</u>, <u>member\_no</u>, <u>session\_date</u>, ind\_attendance)