Option 1

Library Detail

```
-- To shorten the context, use * to select all columns
SELECT * from library t where library_id = 1;
```

Filter by Facility List

Accessible Toilets

Accessible Toilets

Application Forms

Audio Books

Books In Other Languages

C-Pen

Car Parking

CDs

Community Garden

Computers

SELECT t.facility_id, t.facility_name
FROM facility t
ORDER BY facility_name

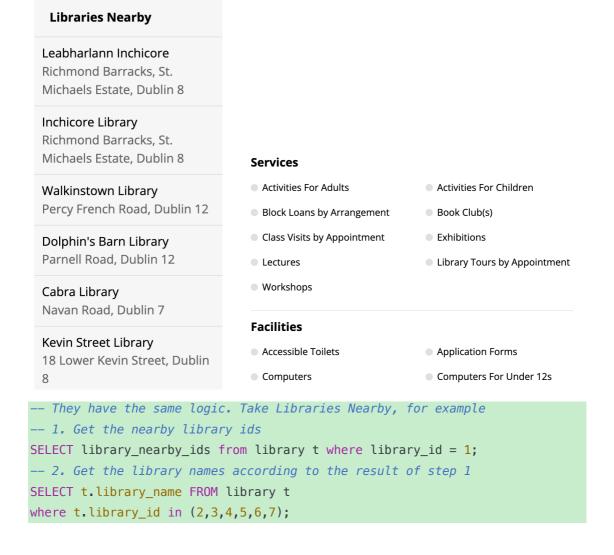
facility_id	facility_name
1	F1
10	F10
2	F2
3	F3
4	F4
5	F5
6	F6
7	F7
8	F8
9	F9

Library List

Ballyfermot Library Ballymun Library Cabra library Ballyfermot Road, Dublin 10 Ballymun Road, Dublin 11 Navan Road, Dublin 7 Open Today 10:00 – 20:00 Open Today 10:00 – 20:00 Open Today 10:00 – 20:00 **Central Library Charleville Mall Library Coolock Library** Barryscourt Road, Dublin 17 Ilac Centre, Dublin 1 North Strand, Dublin 1 Open Today 10:00 – 20:00 Open Today 10:00 - 17:00 Open Today 10:00 – 20:00 -- Library list is filtered by Facility, for example, facility_id = 1 -- In this Option, we can not use SQL to do it -- It should be done by the backend, check every Library's facility ids is included 1 or not -- As We mentioned in deliverable C part, it is not a good option, just to

Nearby libraries, facilities, and services on the detail page

show the idea, which some people may use it



Opening Hours

Opening Hours Monday Closed 10:00 - 17:00 Tuesday **Today** Wednesday 10:00 - 20:00 Thursday Thursday 10:00 - 20:00 Friday 10:00 - 17:00 10:00 - 20:00 Saturday 10:00 - 17:00 Sunday Closed

```
-- For today's open time

SELECT open_time from open_hour

WHERE library_id = 1 and day=DAYOFWEEK(NOW())-1;

-- For list

SELECT open_time from open_hour

WHERE library_id = 1;
```

	open_time
	10:00 – 20:00
	10:00 – 20:00
	10:00 – 20:00
open_time	10:00 – 20:00
	10:00 – 20:00
10:00 - 20:00	10:00 – 20:00
	Closed

Option 2

Just show different implementations of SQLs from Option 1. Others are the same as Option 1, like Library Detail, etc.

Library List

Ballyfermot Library Ballymun Library		Cabra library
Ballyfermot Road, Dublin 10	Ballymun Road, Dublin 11	Navan Road, Dublin 7
Open Today 10:00 – 20:00	Open Today 10:00 – 20:00	Open Today 10:00 – 20:00

```
-- Library list is filtered by Facility. For example, facility_id = 2
select c.library_id, c.library_name, c.short_address, d.open_time from
    (select a.library_id,a.library_name,a.short_address from library a
    LEFT JOIN library_facility b
    ON a.library_id = b.library_id
    WHERE b.facility_id = 2) c LEFT JOIN open_hour d
ON c.library_id = d.library_id
where day = DAYOFWEEK(NOW())-1;
```

library_id	library_name	short_address	open_time
1	library1	short_address_1	10:00 - 20:00
2	library2	short_address_2	10:00 - 20:00

Nearby libraries, facilities, and services in the detail page

```
-- facilities, services, nearby libraries

SELECT t.facility_name from facility t

WHERE facility_id IN

(SELECT facility_id from library a
    left JOIN library_facility b
    on a.library_id = b.library_id
    where a.library_id = 1);
```

Upcoming events

```
SELECT * from Event where library_id = 1
and event_time > NOW()
order by event_time DESC
LIMIT 3;
```

Option 3

Just show different implementations of SQLs from Option 1. Others are the same as Option 2.

Library list

```
-- Library list is filtered by Facility. For example, facility_id = 1
SELECT c.library_id, c.library_name, c.short_address, b.open_time FROM
    (select library_id from bridge
    WHERE type = 1 and related_id = 1) a
LEFT JOIN open_hour b
    ON a.library_id = b.library_id and b.day=DAYOFWEEK(NOW())-1
LEFT JOIN library c
on a.library_id = c.library_id
```

Nearby libraries, facilities, and services in the detail page

```
-- nearby libraries
SELECT related_id, related_name from bridge
where library_id = 1 and type = 0

-- facilities
SELECT related_id, related_name from bridge
where library_id = 1 and type = 1

-- services
SELECT related_id, related_name from bridge
where library_id = 1 and type = 2
```