CR Review
Data Design Document

Submitted to:

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Document Purpose:

This document aims to conceptualize and elaborate on the database design for the CR Review application.
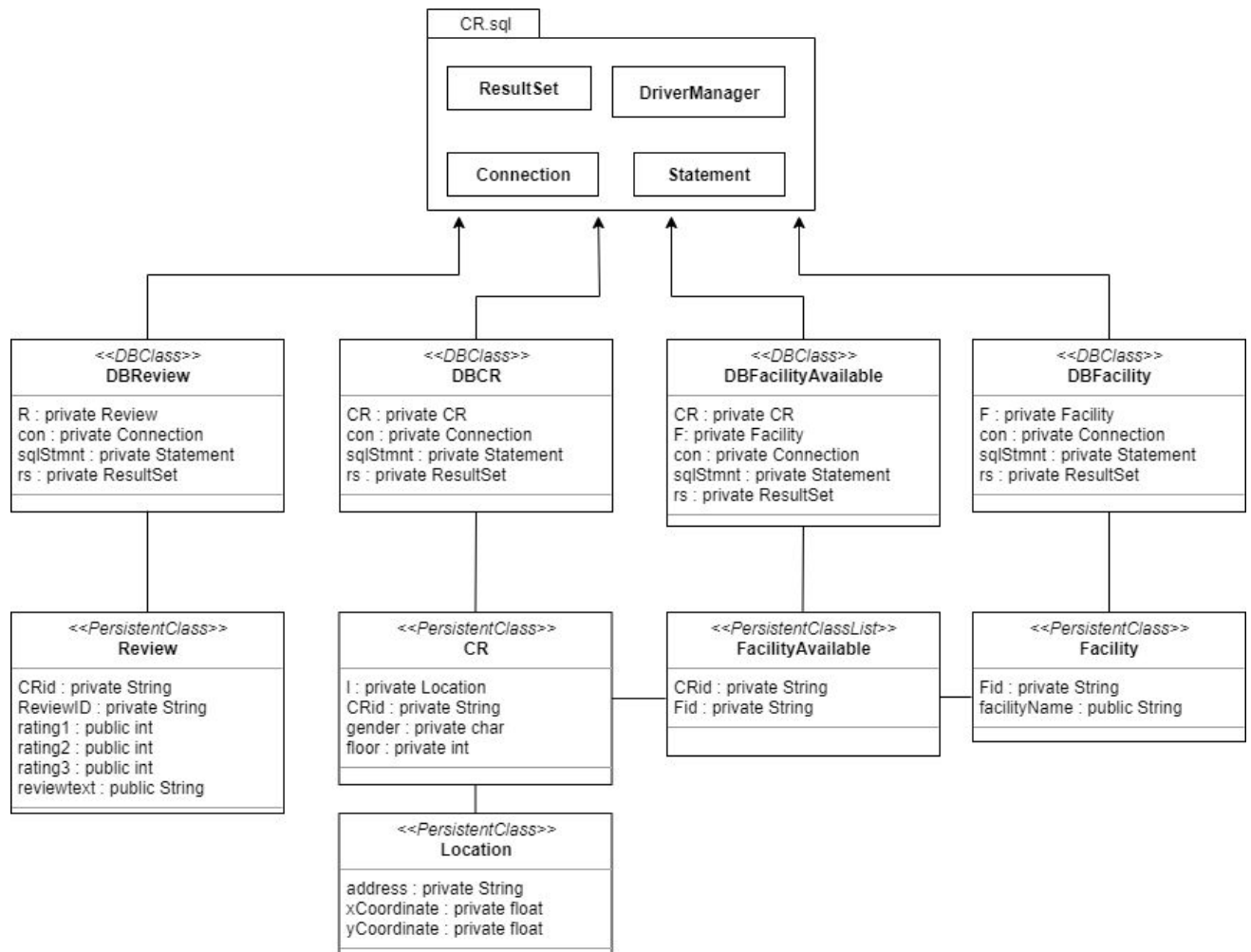
Target Audience:

UP Diliman Students;

Prof. Ma. Rowena C. Solamo

Revision Control

History Revision:

Revision Date	Person Responsible	Version Number	Contribution/Modification
10/19/19	JV Afable	1.0	Initial Document; Document Purpose; Target Audience
10/22/19	JP Chanchico	2.0	Added Initial DAO Static View; Added Class Name and Description; Added Sample Source File;
10/22/19	JP Chanchico	3.0	Added Initial DB Static View, Added DBClasses, PersistentClasses and their corresponding descriptions.
10/23/19	Lance Lim	4.0	Added Database Name, descriptions, and initial table designs
10/24/19	JV Afable	5.0	Finalized DB Static View, added FacilityAvailable descriptions, and formatting

Data Design:

```
┌─ CR.sql ──────────────────────────────────────┐
│                                                │
│   ┌─────────────┐      ┌──────────────────┐    │
│   │  ResultSet  │      │  DriverManager   │    │
│   └─────────────┘      └──────────────────┘    │
│                                                │
│   ┌─────────────┐      ┌──────────────────┐    │
│   │ Connection  │      │    Statement     │    │
│   └─────────────┘      └──────────────────┘    │
└────────────────────────────────────────────────┘
```

<<DBClass>> DBReview	<<DBClass>> DBCR	<<DBClass>> DBFacilityAvailable	<<DBClass>> DBFacility
R : private Review con : private Connection sqlStmnt : private Statement rs : private ResultSet	CR : private CR con : private Connection sqlStmnt : private Statement rs : private ResultSet	CR : private CR F: private Facility con : private Connection sqlStmnt : private Statement rs : private ResultSet	F : private Facility con : private Connection sqlStmnt : private Statement rs : private ResultSet

<<PersistentClass>> Review	<<PersistentClass>> CR	<<PersistentClassList>> FacilityAvailable	<<PersistentClass>> Facility
CRid : private String ReviewID : private String rating1 : public int rating2 : public int rating3 : public int reviewtext : public String	l : private Location CRid : private String gender : private char floor : private int	CRid : private String Fid : private String	Fid : private String facilityName : public String

<<PersistentClass>> Location
address : private String xCoordinate : private float yCoordinate : private float

DBClasses:

Class Name	Description
DBCR	This DBClass is responsible for getting CR data from the database.
DBReview	This DBClass is responsible for getting Review data from the database.
DBFacility	This DBClass is responsible for getting Facility data from the database.
DBFacilityAvailable	This DBClass is responsible for getting available Facilities of CRs from the database.

Persistent Classes:

Class Name	Description
CR	This persistent class is responsible for holding a single CR record
Location	This persistent class is responsible for holding a single location record.
Review	This persistent class is responsible for holding a single review record.
Facility	This persistent class is responsible for holding a single facility record.
FacilityAvailable	This persistent class list is responsible for holding CR/Facility availability records.

List of Data Source:
Database Name: CR Review Database
Description: This is the database that contains all the data required for the CR Review Application. The following are the list of tables:

Tables	Descriptions
CRs	It contains the record of all CRs that have been inputted by users.
Reviews	It contains the reviews of all the CRs.
Location	It contains the locations of all the CRs.
Facilities	It contains all the CR facilities.
FacilityAvailable	It is the relational table that contains the Facilities that are available in each CR.

Logical Database Design:

Location

LocationID	address	xCoordinate	yCoordinate
INT	VARCHAR(250)	NUMERIC(10,6)	NUMERIC(10,6)
99999	X(100)	100.000000	100.000000
PK, SA	NN	NN	NN
1	14 P Velasquez St.	123.123456	65.43210
2	Melchor Hall	121.323232	96.96969
3	Palma Hall	122.00001	52.12345

Facilities

Fid	facilityName
INT	VARCHAR(250)
99999	X(100)
PK, SA	NN
1	Bidet
2	Toilet Paper
3	Working Water

CRs

CRid	LocationID	floor	gender
INT	INT	varchar(10)	char(1)
99999	99999	X(10)	X
PK, SA	**NN, FK**	**NN**	
1	1	2st	M
2	2	Ground	N
3	3	3rd	F

Reviews

ReviewID	CRid	rating1	rating2	rating3	reviewText
INT	INT	SMALLINT	SMALLINT	SMALLINT	varchar(200)
99999	99999	9	9	9	X(100)
PK, SA	**NN, FK**	**NN**	**NN**	**NN**	
1	2	3	3	3	I thoroughly enjoyed partaking in this lavish restroom experience!
2	3	0	0	0	sa gubat na lang dapat ako tumae
3	1	2	3	2	Pretty solid hehe

FacilityAvailable

CRid	Fid
INT	INT
99999	99999
PK1, FK	**PK1, FK**
1	1
1	2
2	3