GetUP
Data Design Document

Submitted to:

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for the course
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Unique Reference:

The documents are stored in the GitHub repository: https://github.com/gab51299/GetUP.

Document Purpose:

This document aims to lay out and model the data of the application GetUP.
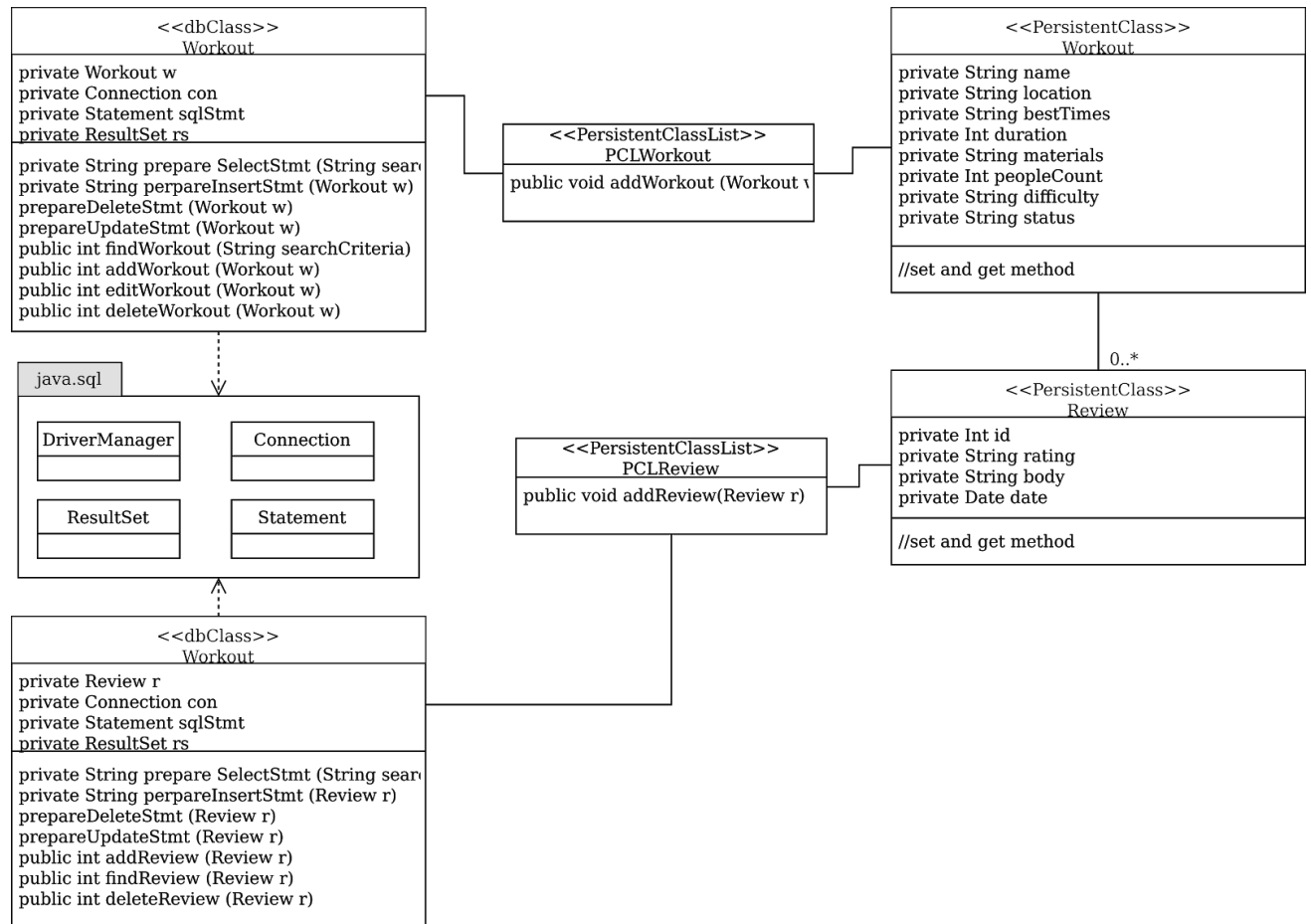
Target Audience:

The target audience are students and faculty of UP Diliman, particularly those that belong to the CS 191 Class of 1st Semester, 2019-2020.

Revision Control

History Revision:

Revision Date	Person Responsible	Version Number	Contribution/Modification
10/22/19	Gab Datiles	1.0	Initial Document
10/22/19	Jian Chan	2.0	Add Data Access Objects and Transfer Objects
10/22/19	Jian Chan	3.0	Add Initial Database Details and Logical Database Design
10/23/19	Gab Datiles	3.1	Added Static Diagram

Data Design:

```
                <<dbClass>>
                  Workout
-----------------------------------------
private Workout w
private Connection con
private Statement sqlStmt
private ResultSet rs
-----------------------------------------
private String prepare SelectStmt (String search
private String perpareInsertStmt (Workout w)
prepareDeleteStmt (Workout w)
prepareUpdateStmt (Workout w)
public int findWorkout (String searchCriteria)
public int addWorkout (Workout w)
public int editWorkout (Workout w)
public int deleteWorkout (Workout w)
```

```
          <<PersistentClassList>>
                PCLWorkout
-----------------------------------------
public void addWorkout (Workout w
```

```
               <<PersistentClass>>
                    Workout
-----------------------------------------
private String name
private String location
private String bestTimes
private Int duration
private String materials
private Int peopleCount
private String difficulty
private String status
-----------------------------------------
//set and get method
```

java.sql

```
DriverManager        Connection
[            ]        [          ]

ResultSet            Statement
[         ]          [         ]
```

0..*

```
               <<PersistentClass>>
                    Review
-----------------------------------------
private Int id
private String rating
private String body
private Date date
-----------------------------------------
//set and get method
```

```
          <<PersistentClassList>>
                PCLReview
-----------------------------------------
public void addReview(Review r)
```

```
                <<dbClass>>
                  Workout
-----------------------------------------
private Review r
private Connection con
private Statement sqlStmt
private ResultSet rs
-----------------------------------------
private String prepare SelectStmt (String search
private String perpareInsertStmt (Review r)
prepareDeleteStmt (Review r)
prepareUpdateStmt (Review r)
public int addReview (Review r)
public int findReview (Review r)
public int deleteReview (Review r)
```

Data Access Object (DAO) or DBClasses:

Class Name	Description
DBWorkout	This data access object is responsible for getting workout data from a database.
DBReview	This data access object is responsible for getting review data from a database.

TransferObject or Persistent Classes:

Class Name	Description
Workout	This transfer object or persistent class is responsible for holding a single workout record
WorkoutList	This transfer object or persistent class list is responsible for holding a list of workout records.
Review	This transfer object or persistent class is responsible for holding a single review record
ReviewList	This transfer object or persistent class list is responsible for holding a list of review records.

List of Data Source:

Database Name: GetUP
Description: This is the database that contains the workouts listed in the GetUP application, together with corresponding reviews and accounts. The following are the list of table:

Tables	Descriptions
Workout	It contains all workout records.
Review	It contains all reviews made by users for specific workouts.
Account*	It contains all account records.

* - Not part of elaborated Use Cases. Included only to describe attributes of FK, account, from Review table

Logical Database Design:

WORKOUT

name	location	bestTimes	duration	materials	peopleCount	difficulty	Status
VARCHAR(100)	VARCHAR(100)	VARCHAR(255)	SMALLINT	VARCHAR(255)	SMALLINT	VARCHAR(100)	VARCHAR(100)
X(100)	X(100)	X(255)	9999	X(255)	9999	X(100)	X(100)
PK, UA	**NN**	**NN**	**NN**		**NN**	**NN**	**NN**
Quick Jogging	UP Oval	7-8am, 4-6pm	30	NULL	1	Easy	Approved
Flash Racing	AS Hallway	1-2:30pm	5	NULL	2	Difficult	Pending
Batman Lifting	UP CHK Weightlifting Room	7-11am	45	Gloves, first aid	2	Moderate	Approved

REVIEW

id	rating	body	date	workout	account
SMALLINT	VARCHAR(100)	VARCHAR(255)	DATE	VARCHAR(100)	VARCHAR(255)
9999	X(100)	X(255)	Mon dd, yyyy	X(100)	X(255)
PK, SA	**NN**	**NN**	**NN**	**NN, FK**	**NN, FK**
1	4	It was fun, but too hot!	October 18, 2019	Quick Jogging	robin@gmail.com
2	5	The weather was perfect in the given time today!	October 22, 2019	Quick Jogging	robin@gmail.com
3	5	Exactly what I needed to bulk up!	October 20, 2019	Batman Lifting	robin@gmail.com

ACCOUNT (*Not part of elaborated Use Cases. Included only to describe attributes of FK, account, from Review table)

email	firstName	lastName	birthDate	isAdmin
VARCHAR(255)	VARCHAR(100)	VARCHAR(100)	DATE	BOOLEAN
X(255)	X(100)	X(100)	Mon dd, yyyy	X(100)
PK, UA	**NN**	**NN**	**NN**	**NN**
batman@gmail.com	Bruce	Wayne	May 27, 1939	True
robin@gmail.com	Dick	Grayson	March 20, 1975	False
flash@gmail.com	Barry	Allen	March 19, 1976	True