

GetUP

Software Architectural Design

Submitted to:

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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 revise the previous analysis model, and create a revised software architecture.

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.

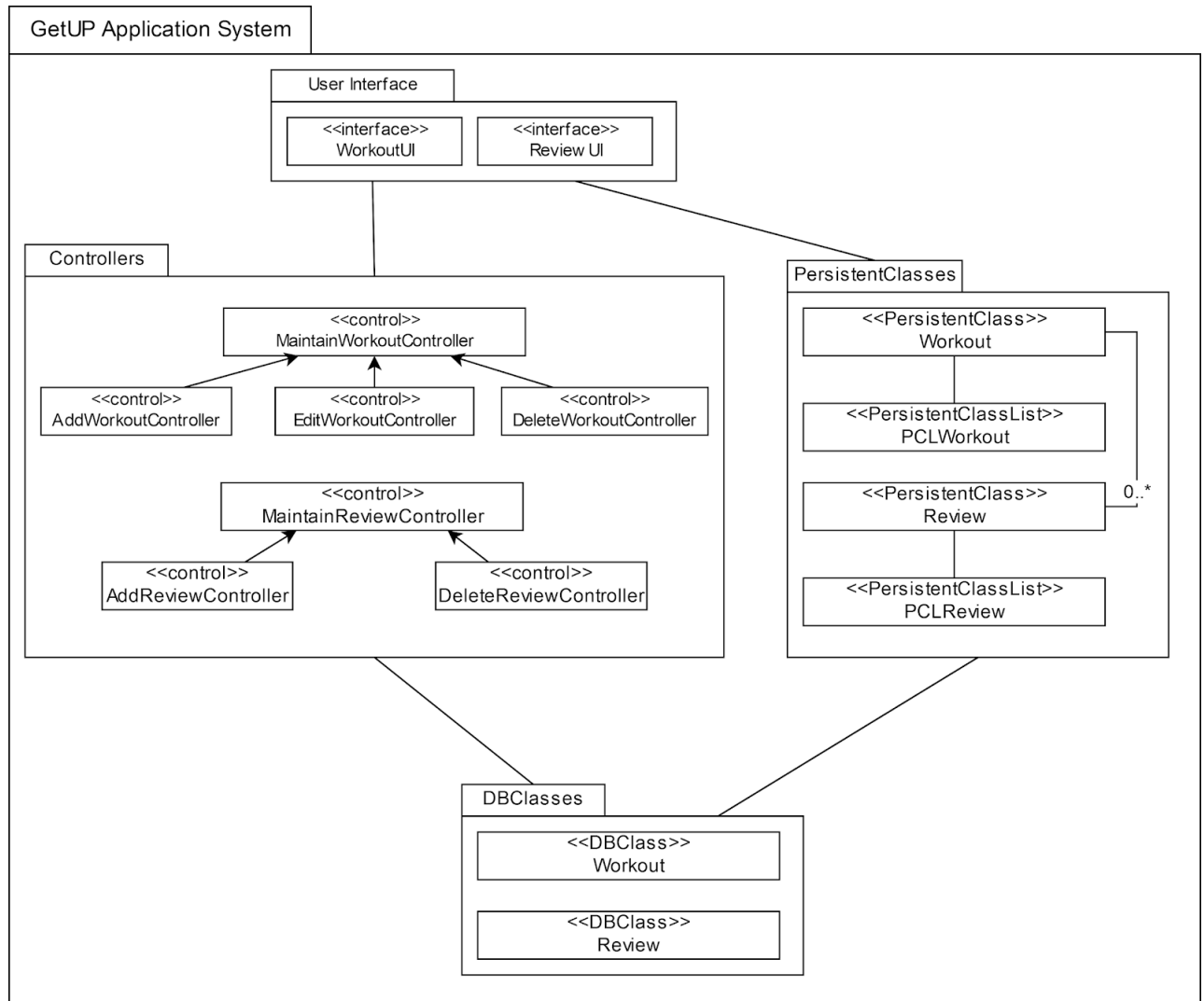
Revision Control:

<i>Revision Date</i>	<i>Person Responsible</i>	<i>Version Number</i>	<i>Contribution/Modification</i>
10/26/19	Gab Datiles	1.0	Initial Document
10/28/19	Gab Datiles	2.0	Added Revised Diagrams and Packages
10/30/19	Hans Santos	3.0	Revised, User Interface Packages, Controller Packages, Transfer Objects Packages
10/31/19	Jian Chan	4.0	Finalized Controllers, Data Access Objects, Transfer Objects. and Database Classes Packages
10/31/19	Gab Datiles	4.1	Modified Architecture Model
10/31/19	Jian Chan	5.0	Finalized User Interface Packages
11/01/19	Gab Datiles	5.1	Revised Packages to fit Database Structure

System Name: GetUP Application System

Description: The GetUP Application is created to provide users with workouts around the UP Diliman campus, with reviews suggestions for each workout. The system also allows users to create their own workouts, or review other workouts available. They may also edit and delete their workouts if necessary.

Revised Software Architecture Model:



User Interface Package:

Screen Name	Description
WorkoutUI	<p>This is the interface of workouts available to users and administrators whenever a user wishes to Add, Delete, or Edit Workouts</p> <p><u>Attributes:</u></p> <pre>private TextField nameTF; private Label nameLB; private TextField locationTF; private Label locationLB; private TextField bestTimesTF; private Label bestTimesLB; private NumberField durationNF; private Label durationLB; private TextField materialsTF; private Label materialsLB; private NumberField peopleCountNF; private Label peopleCountLB; private TextField difficultyTF ; private Label difficultyLB; private TextField statusTF; private Label statusLB;</pre> <p><u>Responsibilities:</u></p> <pre>public void submitWorkout (String name, String location, String bestTimes, Int duration, String materials, Int peopleCount, String difficulty, String status) public void removeWorkout (Workout w) public void editWorkout (Workout w, String name, String location, String bestTimes, Int duration, String materials, Int peopleCount, String difficulty, String status) public void submitSuggestion (String name, String location, String bestTimes, Int duration, String materials, Int peopleCount, String difficulty, String status="PENDING")</pre>
ReviewUI	<p>This is the interface of reviews available to users and administrators whenever one wishes to Add or Delete Reviews</p> <p><u>Attributes:</u></p> <pre>private NumberField idNF; private Label idLB; private NumberField ratingNF; private Label ratingLB; private TextField bodyTF; private Label bodyLB;</pre> <p><u>Responsibilities:</u></p>

	<pre>public void submitReview(Int rating, String body, Workout w) public void removeReview(Review r)</pre>
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Controllers Package:

Controller Name	Description
MaintainWorkout (abstract)	This is the control that maintain workouts. It is considered an abstract class. <i>Attributes:</i> private Workout theWorkout; private ReviewList theReviewList; private Workout theWorkoutList;
AddWorkout (extends MaintainWorkout)	This is the control that adds a workout to the system. It extends MaintainWorkout. <i>Attributes:</i> private Workout theWorkout; <i>Responsibilities:</i> public void AddWorkout(Workout w)
UpdateWorkout (extends MaintainWorkout)	This is the control that edits a workout from the system. It extends MaintainWorkout. <i>Attributes:</i> private Workout theWorkout; <i>Responsibilities:</i> public void UpdateWorkout(Workout w)
DeleteWorkout (extends MaintainWorkout)	This is the control that delete a workout from the system. It extends MaintainWorkout. <i>Attributes:</i> private Workout theWorkout; <i>Responsibilities:</i> public void DeleteWorkout(Workout w)
MaintainReview (abstract)	This is the control that maintain reviews. It is considered an abstract class.
AddReview (extends MaintainReview)	This is the control that adds a review to the system. It extends MaintainReview. <i>Attributes:</i> private Review theReview; <i>Responsibilities:</i> public void AddReview(Review r)
DeleteReview (extends MaintainReview)	This is the control that delete a review from the system. It extends MaintainReview. <i>Attributes:</i> private Review theReview; <i>Responsibilities:</i> public void DeleteReview(Review r)

Persistent Class Package:

	Description
PCLWorkout	<p>This is the entity class workout, which contains the data about the workout.</p> <p><u>Attributes:</u></p> <pre>private Workout theWorkout; private ReviewList theReviewList; private Workout theWorkoutList;</pre> <p><u>Methods:</u></p> <pre>private void connectWorkoutDatabase(String URL, String user, String password); private void insertWorkout(Workout theWorkout); private void updateWorkout(Workout theWorkout); private void deleteWorkout(Workout theWorkout);</pre>
PCLReview	<p>This is the entity class review, which contains the data about the review.</p> <p><u>Attributes:</u></p> <pre>private Review theReview; private Workout theWorkout; private ReviewList theReviewList;</pre> <p><u>Methods:</u></p> <pre>private void connectReviewDatabase(String URL, String user, String password); private void insertReview(Review theReview); private void updateReview(Review theReview); private void deleteReview(Review theReview);</pre>
Workout	<p>This transfer object or persistent class is responsible for holding a single workout record</p> <p><u>Attributes:</u></p> <pre>private String name private String location private String bestTimes private Int duration private String materials private Int peopleCount private String difficulty private String status // provides the status of the workout eg. APPROVED, PENDING</pre> <p><u>Methods:</u></p> <p><i>* setters and getters</i></p> <pre>private void setName(String theName); private void setLocation(String theLocation);</pre>

	<pre> private void setDuration(Int theDuration); ... private String getName(); private String getLocation(); private Int getDuration(); </pre>
Review	<p>This transfer object or persistent class is responsible for holding a single review record</p> <p><u>Attributes:</u></p> <pre> private Int id private Int rating private String body private Date date </pre> <p><u>Methods:</u></p> <p><i>* setters and getters</i></p> <pre> private void setId(Int theId); private void setRating(Int theRating); private void setBody(String theBody); ... private String getId(); private String getRating(); private Int getBody(); </pre>

Database Classes Package:

Database Name	Description
WorkoutDatabase	This is the data source of workout records found in a relational database system.
ReviewDatabase	This is the data source of review records found in a relational database system.