CalendarHub
Data Design Document

Submitted to:

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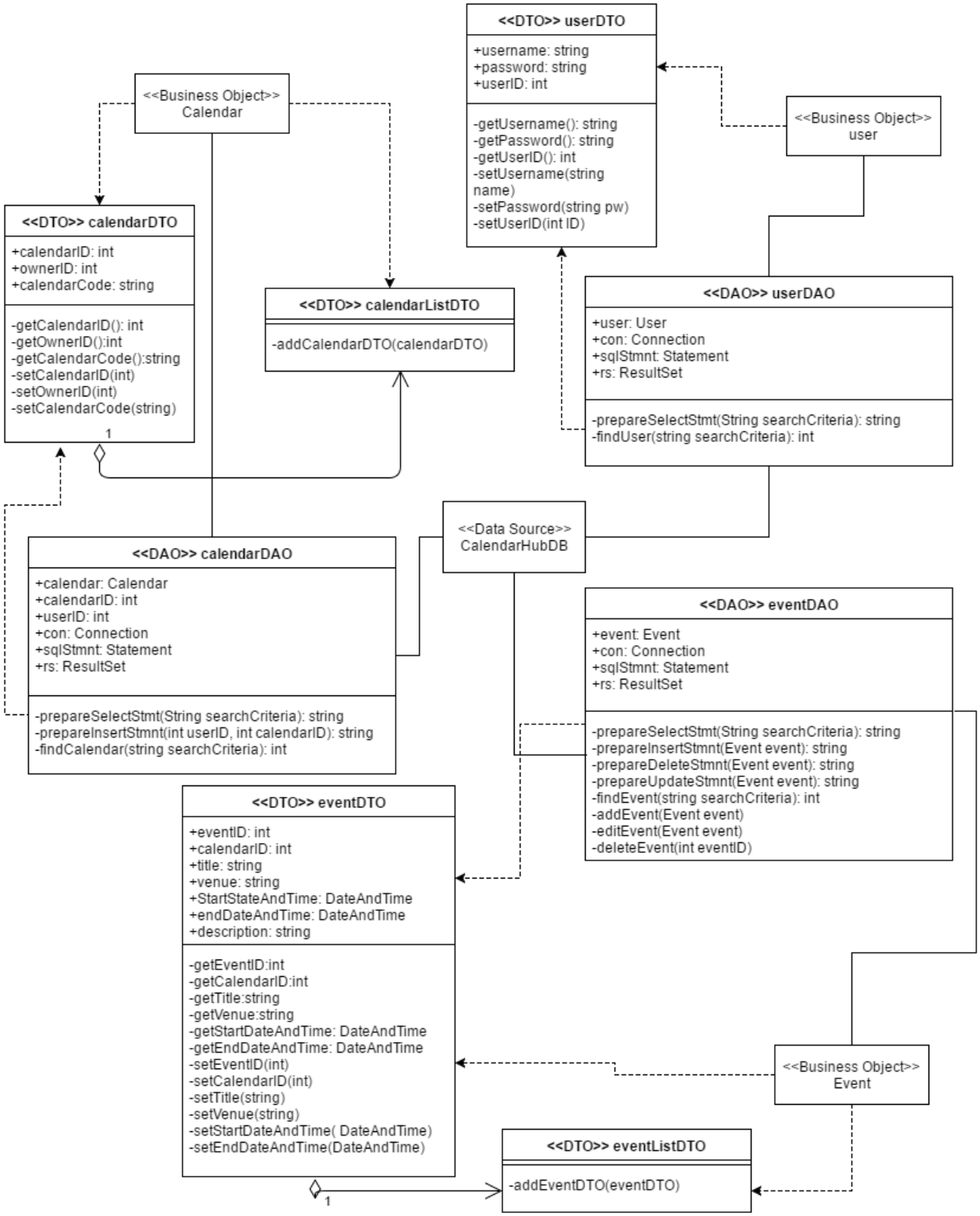
Revision Control

History Revision:

Revision Date	***Person Responsible***	***Version Number***	***Modification***
11/24/16	Diane Abegail Recuerdo	1.0	Initial Document; Added Class Diagram; Added Database Tables

Data Design:


<<DTO>> userDTO
+username: string
+password: string
+userID: int
-getUsername(): string
-getPassword(): string
-getUserID(): int
-setUsername(string name)
-setPassword(string pw)
-setUserID(int ID)
<<Business Object>> Calendar
<<Business Object>> user
<<DTO>> calendarDTO
+calendarID: int
+ownerID: int
+calendarCode: string
-getCalendarID(): int
-getOwnerID():int
-getCalendarCode():string
-setCalendarID(int)
-setOwnerID(int)
-setCalendarCode(string)
1
<<DTO>> calendarListDTO
-addCalendarDTO(calendarDTO)
<<DAO>> userDAO
+user: User
+con: Connection
+sqlStmnt: Statement
+rs: ResultSet
-prepareSelectStmt(String searchCriteria): string
-findUser(string searchCriteria): int
<<Data Source>> CalendarHubDB
<<DAO>> calendarDAO
+calendar: Calendar
+calendarID: int
+userID: int
+con: Connection
+sqlStmnt: Statement
+rs: ResultSet
-prepareSelectStmt(String searchCriteria): string
-prepareInsertStmnt(int userID, int calendarID): string
-findCalendar(string searchCriteria): int
<<DAO>> eventDAO
+event: Event
+con: Connection
+sqlStmnt: Statement
+rs: ResultSet
-prepareSelectStmt(String searchCriteria): string
-prepareInsertStmnt(Event event): string
-prepareDeleteStmnt(Event event): string
-prepareUpdateStmnt(Event event): string
-findEvent(string searchCriteria): int
-addEvent(Event event)
-editEvent(Event event)
-deleteEvent(int eventID)
<<DTO>> eventDTO
+eventID: int
+calendarID: int
+title: string
+venue: string
+StartStateAndTime: DateAndTime
+endDateAndTime: DateAndTime
+description: string
-getEventID:int
-getCalendarID:int
-getTitle:string
-getVenue:string
-getStartDateAndTime: DateAndTime
-getEndDateAndTime: DateAndTime
-setEventID(int)
-setCalendarID(int)
-setTitle(string)
-setVenue(string)
-setStartDateAndTime(DateAndTime)
-setEndDateAndTime(DateAndTime)
1
<<Business Object>> Event
<<DTO>> eventListDTO
-addEventDTO(eventDTO)

Data Access Object (DAO) Classes:

Class Name	**Description**
userDAO	Encapsulates user-specific information.
calendarDAO	Manages calendar related information.
eventDAO	Handles the altering of database with regards to calendar events.

TransferObject Classes:

Class Name	**Description**
userDTO	A DTO to facilitate the transfer of user particular information.
calendarDTO	A DTO to facilitate the transfer of calendar related information.
calendarListDTO	A container for multiple calendar DTOs.
eventDTO	A DTO to facilitate the transfer of event related information.
eventListDTO	A container for multiple event DTOs.

List of Data Source:

Data Source Name: CalendarHubDB
Description: A database of all persistent information for the system of CalendarHub. It is composed of four tables – the UserTable, the CalendarTable, the EventTable, and the UserCalendarTable.

The UserTable has three columns – UserID (primary key, autoincrement, unique), Username (text size 20, unique, not null) and Password (text size 25, not null, at least 6). It holds the necessary information for account related actions such as logging in.

The CalendarTable has three columns – CalendarID (primary key, autoincrement, unique), UserID (foreign key, not null), and CalendarCode (text size 25, not null, at least 6). It contains the information related to a calendar.

The EventTable has nine columns – EventID (primary key, autoincrement, unique), CalendarID (foreign key, not null), Title (text size 25, not null, at least 6), Venue (text size 50,), StartDate (general date, not null), StartTime (24-hour format, default = 00:00), EndDate(general date, default = StartDate), EndTime(24-hour format, default = 23:59), and Description (text size 100).

The UserCalendarTable has two columns – UserID (foreign key, not null) and CalendarID (foreign key, not null). This will map the user to the calendars he/she can view.

Sample Tables from the Database:

UserTable

UserID	Username	Password
1	drecuerdo	DB81CD5F59443B
2	jgarcia	F717F9E6146512
3	jlaborada	B9D1CC24BD4D22

CalendarTable

CalendarID	UserID	CalendarCode
1	1	F3F2C9
2	3	505F84

EventTable

Event ID	Calendar ID	Title	Venue	StartDate	StartTime	EndDate	EndTime	Description
1	1	Birthday	Bahay	06/26/2016	00:00	06/26/2016	23:59	My Birthday this year.
2	2	CS 191 Deadline		11/18/2016	17:00	11/18/2016	17:00	CS 191 Workshop 10 & 11 Deadline
3	2	CS 150	Engg	11/25/2016	12:00	11/25/2016	17:00	CS 150 MP

		Do-Day	Lib 2, ERG					do day with groupmates.
4	2	SET Period		11/16/2016	00:01	11/30/2016	23:59	

UserCalendarTable

UserID	CalendarID
1	1
2	2
3	2