Time Pies
Data Design Document

Submitted to:

Asst. Prof. Ma. Rowena C. Solamo
Faculty Member
Department of Computer Science
College of Engineering
University of the Philippines, Diliman

Submitted by:
Co, Patricia Kelly Dy
Otsuka, Kenneth Tigranes
Rubio, Mary Jane Talan

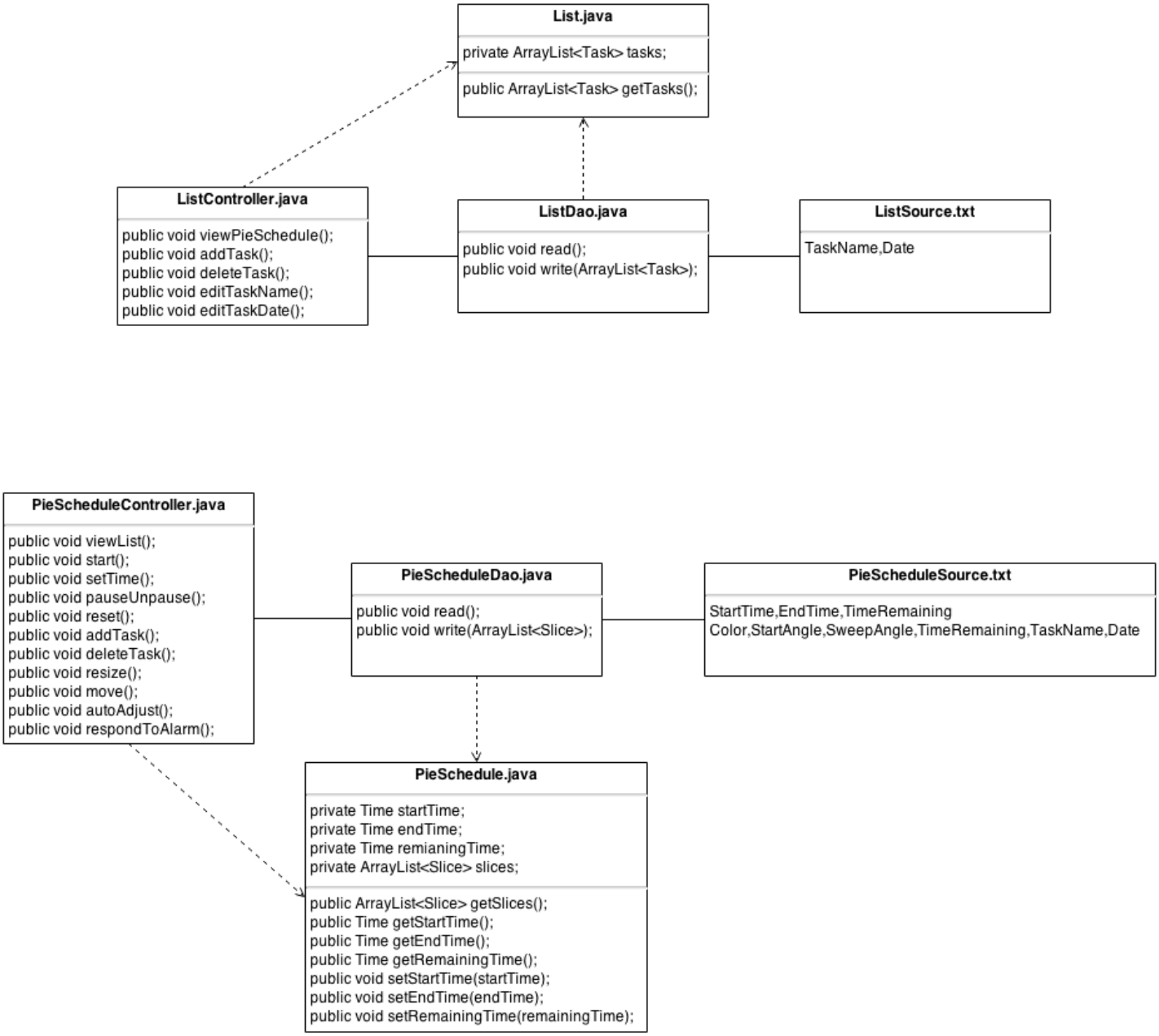
In partial fulfillment of Academic Requirements
for the course
CS 191 Software Engineering I
of the
1st Semester, AY 2014-2015

Revision Control

History Revision:

Revision Date	***Person Responsible***	***Version Number***	***Modification***
11/18/14	Patricia Kelly Co Kenneth Otsuka Mary Jane Rubio	1.0	Initial Document

Data Design:


List.java
private ArrayList<Task> tasks;
public ArrayList<Task> getTasks();
ListController.java
public void viewPieSchedule();
public void addTask();
public void deleteTask();
public void editTaskName();
public void editTaskDate();
ListDao.java
public void read();
public void write(ArrayList<Task>);
ListSource.txt
TaskName,Date
PieScheduleController.java
public void viewList();
public void start();
public void setTime();
public void pauseUnpause();
public void reset();
public void addTask();
public void deleteTask();
public void resize();
public void move();
public void autoAdjust();
public void respondToAlarm();
PieScheduleDao.java
public void read();
public void write(ArrayList<Slice>);
PieScheduleSource.txt
StartTime,EndTime,TimeRemaining
Color,StartAngle,SweepAngle,TimeRemaining,TaskName,Date
PieSchedule.java
private Time startTime;
private Time endTime;
private Time remianingTime;
private ArrayList<Slice> slices;
public ArrayList<Slice> getSlices();
public Time getStartTime();
public Time getEndTime();
public Time getRemainingTime();
public void setStartTime(startTime);
public void setEndTime(endTime);
public void setRemainingTime(remainingTime);

Data Access Object (DAO) Classes:

Class Name	Description
ListDao.java	This class holds data access methods that can access ListSource.txt, which is a data source file. This includes reading of the date source file, as well as the writing/overwriting the data source file.
PieScheduleDao.java	This class holds data access methods that can access PieScheduleSource.txt, which is a data source file. This includes reading of the date source file, as well as the writing/overwriting the data source file.

TransferObject Classes:

Class Name	**Description**
List.java	This class holds the data that was passed by or will be passed to the ListDao.java, which is the data access object. Data is stored in an *ArrayList* of type *Task*.
PieSchedule.java	This class holds the data that was passed by or will be passed to the PieScheduleDao.java, which is the data access object. Data is stored in an *ArrayList* of type *Slice*. It also contains the attributes *StartTime*, *EndTime*, and *RemainingTime* of type *Time*.

List of Data Source:

File Name: ListSource.txt
Description: This text file contains the tasks that are written in the To-do List. They are in CSV format and are arranged the same way they appear in the application. Tasks that fall on the same date are arranged alphabetically. Each task, denoted by each line, is composed of the *TaskName*, and its *Date*. The date is written in the format *mm-dd-yyyy*. Null values are denoted by the symbol of question mark (?).

Sample Source File:

```
Finish DAO,11-21-2014
Dinner with Family,11-22-2014
Christmas,?
Buy New Laptop,01-10-2015
Meet Advisers,01-10-2015
Watch Movie,01-10-2015
Deploy TimePies,?
OJT,?
```

List of Data Source:

File Name: PieSchedule.txt
Description: This text file contains the slices that are shown in the Pie. They are in CSV format and are arranged sequentially. The first line in text file indicates the *StartTime*, *EndTime*, and *RemainingTime* of the entire pie. Succeeding lines indicate the slices of the pie. Each slice, denoted by each line, is composed of the *Color*, *StartAngle*, *SweepAngle*, *RemainingTime*, *TaskName*. The attribute *Date* is also written if data is imported from the List. The date is written in the format *mm-dd-yyyy*. Time is written in the format *hh:mm:ss* and follows the 24-hour format. Null values are denoted by the symbol of question mark (?), however, default values of Time are set as 00:00:00.

Sample Source File:

```
20:30:00,23:30:00,02:10:00
red,0,60,00:00:00,Study 135,11-21-2014
orange,60,60,00:10:00,Watch Drama,11-21-2014
yellow,120,60,00:30:00,Facebook,11-21-2014
green,180,60,00:30:00,Eat Midnight Snack,11-21-2014
blue,240,60,00:30:00,Take a Bath,11-21-2014
violet,300,60,00:30:00,Read BoO,11-21-2014
```