

Programming Assignment 1 Solution

There are two files in my solution, University.java and Heap.java. Heap.java contains the code related to the Heap, and University.java contains everything else.

Here is my class hierarchy. Read the comments in front of a class or method for more specific information.

class Heap

public static interface Element

boolean HigherPriority(Element h);

Heap();

void insert(Element h);

Element getTop();

Element removeTop();

boolean isEmpty();



University.Project (on next page)

class University

static void main(String[] arg);

University();
void getInput(MyInputStream in);
Project[] pickProjects(int start);
void genProjects(int start, Project[] p);

void runUniversity();
void simpleOutput();

static private final class MyInputStream

MyInputStream(inputStream in0);
int readInt() throws IOException;
char readChar() throws IOException;

static private abstract class PayFunction

PayFunction(int a0, int b0, int c0);
int getPay(int id);



static private final class MultPayFunction

MultPayFunction(int mult0, int a0, int b0, int c0);
int getPay(int id);

private static final class ProjectHeaps

Heap cs;
Heap math;
Heap physics;
ProjectHeaps();
Heap getDept(int i);

private static final class Professor

Professor(String name0, int crazy0, int fund0, int indust0, int deptId0);
String getName();
int getDept();
Project pickProject(ProjectHeaps projectsReady);
String outString();

class University (continued)

