

Package **ATU**

Class Student

java.lang.Object
ATU.Student

```
public class Student
extends java.lang.Object
```

Class for every student entity
Each Student has SID, name, email, k1_energy, k2_energy, k3, preference and concerns.

Constructor Summary

Constructors

Constructor	Description
<code>Student(java.lang.String id, java.lang.String name, java.lang.String email, int k1_energy, int k2_energy, boolean k3_tick1, boolean k3_tick2, boolean my_preference, java.lang.String concerns)</code>	Typical constructor
<code>Student(java.lang.String id, java.lang.String name, java.lang.String email, java.lang.String k1_energy, java.lang.String k2_energy, java.lang.String k3_tick1, java.lang.String k3_tick2, java.lang.String my_preference, java.lang.String concerns)</code>	Constructor, all parameters are Strings

Method Summary

All Methods	Static Methods	Instance Methods	Concrete Methods
Modifier and Type	Method		Description
static float	<code>calEnergy_avg</code> (java.util.ArrayList<Student> stuArr, int energyType)		a helper function for calculating the average of k1_energy/k2_energy of an array of Students
static int	<code>calEnergy_max</code> (java.util.ArrayList<Student> stuArr, int energyType)		a helper function for calculating the max of k1_energy/k2_energy of an array of Students
static int	<code>calEnergy_min</code> (java.util.ArrayList<Student> stuArr, int energyType)		a helper function for calculating the min of k1_energy/k2_energy of an array of Students
	<code>java.lang.String getConcerns()</code>		
	<code>java.lang.String getEmail()</code>		
	<code>java.lang.String getId()</code>		

Modifier and Type	Method	Description
int	<code>getK1_energy()</code>	
int	<code>getK2_energy()</code>	
java.lang.String	<code>getName()</code>	
boolean	<code>isK3_tick1()</code>	
boolean	<code>isK3_tick2()</code>	
boolean	<code>isMy_preference()</code>	
static boolean	<code>strToBool(java.lang.String input)</code>	helper function to convert from "1" or "0" to boolean
static java.lang.String	<code>toNumeralBool (java.lang.Boolean input)</code>	helper function to convert boolean into "1" or "0"
java.lang.String	<code>toString()</code>	

Methods inherited from class java.lang.Object

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `wait`, `wait`, `wait`

Constructor Details

Student

```
public Student(java.lang.String id,
               java.lang.String name,
               java.lang.String email,
               java.lang.String k1_energy,
               java.lang.String k2_energy,
               java.lang.String k3_tick1,
               java.lang.String k3_tick2,
               java.lang.String my_preference,
               java.lang.String concerns)
```

Constructor, all parameters are Strings

Student

```
public Student(java.lang.String id,
               java.lang.String name,
               java.lang.String email,
               int k1_energy,
               int k2_energy,
               boolean k3_tick1,
               boolean k3_tick2,
               boolean my_preference,
               java.lang.String concerns)
```

Typical constructor

Method Details

strToBool

```
public static boolean strToBool(java.lang.String input)
```

helper function to convert from "1" or "0" to boolean

Parameters:

input - a string which is either "1" or "0"

Returns:

true if input is "1", false otherwise

toNumeralBool

```
public static java.lang.String toNumeralBool(java.lang.Boolean input)
```

helper function to convert boolean into "1" or "0"

Parameters:

input - the boolean value to be converted

Returns:

"1" if input is true, "0" if input is false, otherwise return "null"

calEnergy_avg

```
public static float calEnergy_avg(java.util.ArrayList<Student> stuArr,  
                                  int energyType)
```

a helper function for calculating the average of k1_energy/k2_energy of an array of Students

Parameters:

stuArr - an array of Student

energyType - 1 for k1_energy, 2 for k2_energy

Returns:

the average value of k1_energy/k2_energy, which is in float type

calEnergy_min

```
public static int calEnergy_min(java.util.ArrayList<Student> stuArr,  
                                int energyType)
```

a helper function for calculating the min of k1_energy/k2_energy of an array of Students

Parameters:

stuArr - an array of Student

energyType - 1 for k1_energy, 2 for k2_energy

Returns:

the minimum value of k1_energy/k2_energy, which is in int type

calEnergy_max

```
public static int calEnergy_max(java.util.ArrayList<Student> stuArr,  
                                int energyType)
```

a helper function for calculating the max of k1_energy/k2_energy of an array of Students

Parameters:

stuArr - an array of Student

energyType - 1 for k1_energy, 2 for k2_energy

Returns:

the maximum value of k1_energy/k2_energy, which is in int type

getId

```
public java.lang.String getId()
```

getName

```
public java.lang.String getName()
```

getEmail

```
public java.lang.String getEmail()
```

getK1_energy

```
public int getK1_energy()
```

getK2_energy

```
public int getK2_energy()
```

isK3_tick1

```
public boolean isK3_tick1()
```

isK3_tick2

```
public boolean isK3_tick2()
```

isMy_preference

```
public boolean isMy_preference()
```

getConcerns

```
public java.lang.String getConcerns()
```

toString

```
public java.lang.String toString()
```

Overrides:

toString in class java.lang.Object