Object Oriented Programming – 2018/2019 – 2nd Semester

Self-evaluation form

Group: 21 Oral discussion date: _____ Penalization (days): ____

Number: 70547 Name: João Ferreira Expected mark: 15

Number: 84109 Name: José Silva Expected mark: 18

Number: 84144 Name: Miguel D'Ajuda Expected mark: 17

Number: _____ Name: _____ Expected mark: _____

Please fill the following form relative to the **implementation** of the project:

General aspects:

How do you classify the UML tool used (identify it)? draw.io ☐ Good ☒ Fair ☐ Bad

Does your application use any external library, besides that provided within JDK?
☒ No ☐ Yes (which ones?):_____

How many packages does your application have? ☐ 1 ☐ 2 ☒ ≥ 3: 5

How many interfaces does your application have? ☐ 1 ☐ 2 ☒ ≥ 3: 3
Is your application extensible to further developments? ☒ Yes ☐ No ☐ Partialy
Does your application have at least one polymorphic invocation?
☐ No ☒ Yes (methods?): getTime()
How many times the `instanceof` operator is used in your application (really count them)? 0
In which methods? _____

Which XML parser is used to parse the input file? SAX
Have external libraries been required? ☒ No ☐ Yes (which ones?):_____
Do you provide a DTD? ☒ Yes ☐ No When parsing, is XML validated against it? ☒ Yes ☐ No

Concerning visibility of the fields, check visibilities that are used in the code:
☒ Public ☒ Private ☒ Package ☒ Protected
Concerning visibility of the methods, check visibilities that are used in the code:
☒ Public ☒ Private ☒ Package ☐ Protected
Concerning visibility of the classes, check visibilities that are used in the code: ☒ Public ☒ Package

Does your application contain any static field? ☒ Yes (how many?): 35 ☐ No
Does your application contain any static method? ☒ Yes (how many?): 4 ☐ No

Does your application contain any user defined exceptions? ☒ Yes (how many?): 2 ☐ No

Simulation problem:

Data structure of the events (PEC): Linked List From `java.util`? ☐ No ☒ Yes
Is it ordered? ☐ No ☒ Yes, with a: ☐ Comparable ☒ Comparator ☐ Other
Are all events implemented as described in the project description and the FAQ?
Ant Move: ☒ Yes ☐ With faults ☐ Not implemented
Edge evaporation: ☒ Yes ☐ With faults ☐ Not implemented
Are observations implemented as events? ☒ Yes ☐ No All 20 at once in the PEC? ☒ Yes ☐ No

Data structure of the colony: Array From `java.util`? ☒ No ☐ Yes
Is it ordered? ☒ No ☐ Yes, with a: ☐ Comparable ☐ Comparator ☐ Other

Data structure of the graph: Array of nodes and List of Links From `java.util`? ☐ No ☒ Yes

Is the best path stored in memory? ☒ Yes ☐ No, it is calculated only when needed ☐ Other
Is the best path always found when you run the xml file provided in the Project webpage? ☒ Yes ☐ No

Global evaluation:
What was the degree of participation of each element in the group? (% should sum 100%)? Num 70547 : 10 % Num 84109 : 60 % Num 84144 : 30 % Num _____ : ____ %

In the extent of your perception of the developed work, fill the following tables:

Project documentation	Yes	No
Is the project correctly documented through comments in the source code?	☒	☐
Was the javadoc tool used to build the documentation of the developed packages?	☒	☐
Is it complete, with:		
- overview of packages?	☒	☐
- summary of classes, interfaces and exceptions?	☒	☐
- brief description of classes, interfaces and exceptions?	☒	☐
- summary of fields, constructors and methods?	☒	☐
- detail of fields, constructors and methods?	☒	☐

Project compilation	Yes	No
Does the project compile without errors?	☒	☐
Does the project compile without warnings?	☒	☐
If the answer is no, are all these warnings unchecked warnings?	☐	☐

Running	Yes	No	With faults
Is the jar file runnable from the shell?	☒	☐	☐
Does the project read correctly the parameters?	☒	☐	☐
Does the project run with the input given in the project webpage?	☒	☐	☐
Does the project generate any supplementary information (status, debug, etc)?	☒	☐	☐

Development environment used? ☐ Linux ☒ Windows ☐ Unix ☐ Mac/OS

Java version used: 11

Was the final program tested in the laboratory workstations? ☐ Yes ☒ No

The following table is to be filled by the **professor**:

Report	Yes/Good	No/Bad	Incomplete/Fair
Cover identifies the course, authors and group number	☐	☐	☐
Goals of the work are very succinct but clearly stated	☐	☐	☐
Intelligibility of the document	☐	☐	☐
Structure of the document	☐	☐	☐
Clear/concise justification of main data structures used	☐	☐	☐
OO solution (extensibility, polymorphism, etc.)	☐	☐	☐
Critical evaluation of the application performance	☐	☐	☐
Description of functionalities beyond requested ones	☐	☐	☐
Conclusions	☐	☐	☐