Object Oriented Programming – 2018/2019 – 2nd Semester

Self-evaluation form

Group: 12 Oral discussion date: _____ Penalization (days): ____

Number: 76738 Name: Pedro Vieira Expected mark: 17

Number: 76934 Name: Miguel Leão Expected mark: 17

Number: 81161 Name: Constança Barroso 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)? Visual Paradigm ☑ 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: 4

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

Which XML parser is used to parse the input file? DOM
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?): 2 ☐ No
Does your application contain any static method? ☑ Yes (how many?): 1 ☐ No

Does your application contain any user defined exceptions? ☑ Yes (how many?): 1 ☐ No

Simulation problem:

Data structure of the events (PEC): PriorityQueue 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: Adjacency Matrix 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 76738 : 33 % Num 76934 : 33 % Num 81161 : 33 % 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: 11.0.2

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	☐	☐	☐