Object Oriented Programming – 2018/2019 – 2nd Semester

Self-evaluation form

Group: 27 Oral discussion date: _____ Penalization (days): ____

Number: 83991 Name: Alexandre Filipe Expected mark: 17

Number: 84185 Name: Sofia Salgueiro Expected mark: 17

Number: 94304 Name: José Rocha Expected mark: 15

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)? _____ ☐ 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?): methods - simulateEvent()

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? DOM

Have external libraries been required? ☐ No ☒ Yes (which ones?): org.w3c.dom org.xml.sax

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?): 16 ☐ No

Does your application contain any static method? ☒ Yes (how many?): 16 ☐ No

Does your application contain any user defined exceptions? ☒ Yes (how many?): 4 ☐ No

Simulation problem:

Data structure of the events (PEC): _____ 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: _____ From `java.util`? ☒ No ☐ Yes

Is it ordered? ☒ No ☐ Yes, with a: ☐ Comparable ☐ Comparator ☐ Other

Data structure of the graph:_____ 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 83991 : 40 % Num 84185 : 40 % Num 94304 : 20 % 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?	X	
Was the javadoc tool used to build the documentation of the developed packages?	X	
Is it complete, with:		
- overview of packages?	X	
- summary of classes, interfaces and exceptions?	X	
- brief description of classes, interfaces and exceptions?	X	
- summary of fields, constructors and methods?	X	
- detail of fields, constructors and methods?	X	

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

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

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			