

QUESTIONNAIRE 1 (pre-experiment)

Age	
Company	
Position	
Software development experience (years)	
Java development experience (years)	
Eclipse use experience (years)	

Answer each of the following question **by checking the preferred answer**.

1. Do you use to define the architecture of your software before coding it?

- Yes, informally on paper
- Yes, using UML diagrams
- Yes, using another tool (which one?)
- No

2. Do you find useful the tools you used for defining the software architecture?

- Yes
- No
- I don't know

3. Have you ever used some tools for code generation? Which ones?

4. Did you find useful the tools for code generation you have already used?

- Yes
- No
- I don't know

QUESTIONNAIRE 2 (post-experiment)

Express your level of agreement to **each of** the following statements by checking one box:

<p><i>I think that I would like to use this system frequently.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<p><i>I found the system unnecessarily complex.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<p><i>I thought the system was easy to use.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<p><i>I think that I would need the support of a technical person to be able to use this system.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<p><i>I found the various functions in this system were well integrated.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
<p><i>I thought there was too much inconsistency in this system.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<p><i>I would imagine that most people would learn to use this system very quickly.</i></p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #ffff00;"> <th style="padding: 5px;">Strongly Disagree</th> <th style="padding: 5px;">Disagree</th> <th style="padding: 5px;">Neither Agree or Disagree</th> <th style="padding: 5px;">Agree</th> <th style="padding: 5px;">Strongly Agree</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> </tr> </tbody> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<i>I found the system very cumbersome to use.</i>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>I felt very confident using the system.</i>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>I needed to learn a lot of things before I could get going with this system.</i>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Express your level of agreement to **each sub-item** of the following statements by checking one box:

<i>The following phases were easy:</i>					
• Design	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Implementation	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Testing et debugging.	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>DiaSuite is useful for:</i>					

<ul style="list-style-type: none"> designing the architecture of an application 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<ul style="list-style-type: none"> generating code 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<ul style="list-style-type: none"> abstracting from specific low-level details of the connected objects 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<ul style="list-style-type: none"> rapidly prototyping applications 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<ul style="list-style-type: none"> rapidly developing large-scale applications 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<ul style="list-style-type: none"> simplifying the maintenance and evolution of applications. 	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<p><i>DiaSuite is well integrated within Eclipse.</i></p>	<table border="1"> <tr> <td>Strongly Disagree</td> <td>Disagree</td> <td>Neither Agree or Disagree</td> <td>Agree</td> <td>Strongly Agree</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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GLOBAL EVALUATION

Choose **the 3 most satisfying dimensions** of DiaSuite among the following ones:

1. The language for defining the application architecture (DiaSpec).

2. The visualisation of the architecture as a graph.
3. The abstraction from low-level details of sensors and actuators.
4. The automatic event dispatching between physical and software modules.
5. The possibility to concentrate solely on application logic.
6. The guidance of the developer during architecture design.
7. The guidance of the developer during implementation.
8. The guidance of the developer following a change in the architecture.
9. The support for unit tests using mockup entities.
10. The possibility of sharing sensors and actuators among several applications.
11. The open eco-system of certified applications (DiaStore).
12. The administration interface of deployed applications (DiaSuiteBox).