Survey - Agreement Terms

This study aims at understanding the perceptions a Software Engineer has about executable models. Researchers from Federal University of Goiás (UFG) and Federal University of the State of Rio de Janeiro (UNIRIO) are involved in this research and conducting the investigation.

We invite you to participate and answer this survey. It does not take more than 15 minutes. Participating in this research means that you agree with the researchers about obtaining, using and disclosing information generated from the data in accordance with what is described below for academic purposes. We appreciate your colaboration.

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*Obrigatório

Conditions

1. I understand that all information are confidential. I agree to complete the survey with academic purposes and that the derivative data from this research may be anonymously published in proceedings of conferences, articles, reports and blog publications.

2. I understand that my participation in this study is totally voluntary and that negating participation will not involve any penalties or loss of benefits. If I choose to cancel my participation, I can remove my participation at any moment. I also understand that if I choose to participate, I can refuse to answer any question that I do not feel comfortable to answer.

3. I understand that I can get in touch with the researchers about any doubts related to the study. I am aware that my allowance will not benefit me directly. I am also aware that the researchers will keep my collected data perpetually and they may use them in future academy works.

4. By clicking the button below, I freely agree to consent and recognize my rights to participate voluntarily in the study, according to what was described above. I also recognize that the researchers can use the provided information for conducting the research on the areas mentioned above.

1.   *

   Marcar apenas uma oval.

   ◯ I agree

This study aims at understanding the perceptions a Software Engineer has about executable models.

Our survey is organized in three main parts:

1) Demographic questions, in which we ask you about your professional profile (Section 1);
2) Specific questions on two specific models (Sections 2 and 3);
3) Questions about modeling using your own experience (Section 4).

Survey on Executable Models for Software Development

Demographic Questions
Tell us who you're!

2. **What is your affiliation?**

By affiliation we mean the university, institution or company you are affiliated.

_____

3. **What is your age?**

_____

4. **In what country do you live?**

_____

5. **What is your education level?**

Marcar apenas uma oval.

◯ No academic formation

◯ Undergraduate Student

◯ Undergraduate

◯ Master Student

◯ Master's Degree

◯ PhD Student

◯ PhD

6.   **What is your main occupation?**

Marcar apenas uma oval.

◯ Student Only

◯ Unemployed

◯ Self-employed

◯ Academy Research

◯ Non-Academic Professional (e.g. Government, Industry, etc)

◯ Non-Academic Research (e.g. Government, Industry, etc)

◯ Outro: _____

7.   **What is your gender?**

Marcar apenas uma oval.

◯ Male

◯ Female

◯ Transgender

◯ Gender Variant / Non-Conforming

◯ Prefer not answering

◯ Outro: _____

8.   **What is your professional experience in academy?**
by studying, teaching, researching, etc.

Marcar apenas uma oval.

◯ None

◯ less than 1 year

◯ 1 year to 5 years

◯ 5 years to 10 years

◯ 10 years to 15 years

◯ 15 years to 20 years

◯ more than 20 years

9. **What is your professional experience in industry?**

   by industry we mean any non-academic area, e.g. government, software development enterprises, etc.

   Marcar apenas uma oval.

   ( ) None

   ( ) less than 1 year

   ( ) 1 year to 5 years

   ( ) 5 years to 10 years

   ( ) 10 years to 15 years

   ( ) 15 years to 20 years

   ( ) more than 20 years

10. **What is your experience with static models?**

    For example: UML, SysML, etc.

    Marcar apenas uma oval.

    ( ) I have never used them before

    ( ) I seldom use them

    ( ) I use them once in a while

    ( ) I use them frequently

    ( ) I use them in every project

11. **What is your experience with executable models?**

    For example: simulation, models@runtime

    Marcar apenas uma oval.

    ( ) I have never used them before

    ( ) I seldom use them

    ( ) I use them once in a while

    ( ) I use them frequently
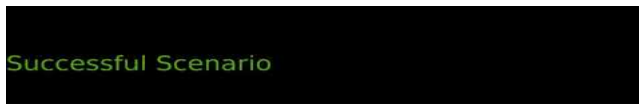
    ( ) I use them in every project

The first case scenario shows how user comments on some article are submitted to Pluck using several AJAX technologies.

Case 1

Comments submitted by the user are first validated by the web site hosting articles. DWR technology (AJAX for Java) is used to convert user comments HTML form data into Java object and possible validation errors - back into JavaScript callbacks.

Comments that look Ok are submitted to Pluck server hosting all comments to all articles. AJAX technology is also used in this case both to submit the new comment as well as to get back the list of all recent comments (including the new one). JSON is used to get comments back.

http://youtube.com/watch?v=S9a9bg4S29w

12.   When a CAPTCHA check fails, will the user be able to post his/her comments?

Marcar apenas uma oval.

◯ Yes

◯ No

◯ I don't know

13.   How confident are you about your answer?

Marcar apenas uma oval.

	1	2	3	4	5	
I am not confident at all	◯	◯	◯	◯	◯	I am very confident

14.   Which service will publish the comments?

Marcar apenas uma oval.

- ( ) :window
- ( ) <<javascript>> :Comments
- ( ) <<servlet>> : DWRServlet
- ( ) <<service>> DWRService
- ( ) <<javascript>> : PluckRequestBatch
- ( ) <<service>> : PluckService
- ( ) I don't know

15.   How confident are you about your answer?

Marcar apenas uma oval.

	1	2	3	4	5	
I am not confident at all	( )	( )	( )	( )	( )	I am very confident

16.   Do you feel any difficulty to understand the model?

Marcar apenas uma oval.

	1	2	3	4	5	
Yes, It is Very hard	( )	( )	( )	( )	( )	No, It is very easy

17.   Can you mentally execute/debug the model?

Marcar apenas uma oval.

	1	2	3	4	5	
No. it is very hard	( )	( )	( )	( )	( )	Yes. It is very easy

18. Have you felt any difficult? Please tell us.

_____

_____

_____

_____

_____

| Case 2 | The second case scenario shows a Spring application using Hibernate for transaction management.

When some business method is called, it could be intercepted by Spring Transaction Interceptor. This being behind the scene interceptor creates Hibernate session and starts Hibernate JDBC transaction, so that business method will run in the context of a new transaction.

Business method execution could complete (successfully or not) or by throwing some exception. |

http://youtube.com/watch?v=6jeELosgx90

19. What happens when saveOrUpdate() rises a exception?

Marcar apenas uma oval.

( ) It will try to execute commit() command

( ) It will try to execute rollback() command

( ) I don't know

20. How confident are you about your answer?

Marcar apenas uma oval.

	1	2	3	4	5	
I am not confident at all	◯	◯	◯	◯	◯	I am very confident

21. Does close() method is called when any exception occurs?

Marcar apenas uma oval.

◯ Yes

◯ No

◯ I don't know

22. How confident are you about your answer?

Marcar apenas uma oval.

	1	2	3	4	5	
I am not confident at all	◯	◯	◯	◯	◯	I am very confident

23. Do you feel any difficulty to understand the model?

Marcar apenas uma oval.

	1	2	3	4	5	
Yes, It is Very hard	◯	◯	◯	◯	◯	No, It is very easy

24. Can you mentally execute/debug the model?

Marcar apenas uma oval.

	1	2	3	4	5	
No. it is very hard	◯	◯	◯	◯	◯	Yes. It is very easy

25. Have you felt any difficult? Please tell us!

_____

_____

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_____

_____

We want to know your opinion!

We are interested on your perceptions about the use of executable models for Software Engineering

26. In your opinion, what were the strengths of using executable models to represent the cases?

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27. In your opinion, what were the weaknesses on the use of executable models to represent the cases?

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28. What could be added to the visual perception of the executable models to improve and/or enrich useful information for a software engineer?

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29. What application opportunities do you see for using executable models in your software engineering projects?

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30. Did you feel any difficulty or problem in this survey?

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