




My Report

Last Modified: 08/25/2015
Completion Status: Completed

1. 1. What is your current position?

#	Answer	Bar	Response	%
1	Undergraduate Student		0	0%
2	Graduate Student		5	71%
3	Developer		1	14%
4	Faculty		1	14%
5	Other		0	0%
	Total		7	

Other

Statistic	Value
Min Value	2
Max Value	4
Mean	2.43
Variance	0.62
Standard Deviation	0.79
Total Responses	7

2. 2. Do you have industry working experience?

#	Answer	Bar	Response	%
1	Yes		4	57%
2	No		3	43%
	Total		7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

3. 3. What is your year of experience on Java programming?

#	Answer	Bar	Response	%
1	Less than a year		2	29%
2	1 - 2 years		0	0%
3	2 - 5 years		2	29%
4	more than 5 years		3	43%
	Total		7	

Statistic	Value
Min Value	1
Max Value	4
Mean	2.86
Variance	1.81
Standard Deviation	1.35
Total Responses	7

4. Please make sure that you have downloaded all the requirement files since you cannot go back to this page.

#	Answer	Bar	Response	%
1	Yes		7	100%
	Total		7	

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	7

5. Q1.1 Please write a database related summary for the method allocateString(Connection) in Class fina2.i18n.LocaleUtil

Text Response

Find in SYS_STRINGS the greatest ID number. Increment this ID number by one and then insert a new row in SYS_STRINGS with the new ID and default values for language (1) and name (NONAME).

In this method the SYS_STRINGS database is being updated or new values are being inserted into this database based on missing fields for the already existing values, else an entirely new entry is being created.

The method allocate a new record in the table: SYS_STRINGS. In particular, the method firstly select the maximum ID in the table, then increment by one this value in order to create a new ID. Finally, insert the new record with the newly created ID, and two default values.

This method actually does increase primary key "id" by 1, then insert a new item (1,1,"NONAME").

The method runs a query to find the max ID from SYS_STRINGS, and then increments it by 1 before inserting a new line into SYS_STRINGS, which has the values: the incremented id, and a hardcoded langID (assuming 1=english) and string "NONAME". The method then returns the incremented ID.

Inserts a mock string in a string table and returns the new row element form the db

Insert three values (id, langID, value) into the table SYS_STRINGS

Statistic	Value
Total Responses	7

6. Q1.2 Please write a database related summary for the method moveUp(MDTNodePK) in Class fina2.metadata.MDTSessionBean

Text Response	
<p>Find the parent ID and sequence of the node with given ID. Find the ID and sequence of the node with matching parent ID and sequence. Take the two first nodes and swap their sequences.</p>	
<p>Setting/ Arranging the priorities of the entries in the database.</p>	
<p>The method moves up a given node in the sequence. In particular, the method firstly recovers the parentID of the given node, then if the sequence is greater than 0 it updates the sequence value (sequence -1), that determines the movement of the node in the sequence.</p>	
<p>This method Basically it select the required node, then see if it has parent node. If yes, it will update the parent node id with the required node id, namely "MDTNodePK pk".</p>	
<p>This one took longer to understand. It does a select based on ID in IN_MDT_NODES based on the parameter MDTNodePK. It then grabs up to two results from a query based on parentID and sequence, and it seems to simply switch the values of "sequence" in those two results, thus moving the MDTNodePK "up" in the table (based on sequence).</p>	
<p>This method updates the sequences of nodes in the cases the nodes match with the parent</p>	
<pre>select parentID, sequence from IN_MDT_NODES select id, sequence from IN_MDT_NODES update IN_MDT_NODES update IN_MDT_NODES</pre>	
Statistic	Value
Total Responses	7

7. Q1.3 Please write a database related summary for the method `getTableValuesRows(int, String, int, MDTNodePK, String, int)` in Class `fina2.returns.ReturnSessionBean`

Text Response

Find in `IN_RETURN_ITEMS` all the items whose nodes ID are given according to some table ID and version ID. Then, do all kind of weird things with these items ID and values. This code is really horrible to read and impossible to understand.

Obtaining all the associated row values by parsing initially through the parent node and eventually going down to the child nodes iteratively.

The method extract a list of `ValuesTableRow` from the table. It first extract the `tableID` and `tableType`, then, based on the type it executes other sql queries to extract the values.

Recursively collect the data for each row and its parents. (actually I dont figure the details, too long method... = =)

Skip - time out

Return all row values of a table for a given node id. It can be normal, multiple or variable.

```
select a.id, a.type from IN_DEFINITION_TABLES a, IN_SCHEDULES b, IN_RETURNS c select a.nodeID, a.value from IN_RETURN_ITEMS a select MAX(rowNumber) from IN_RETURN_ITEMS a select MIN(rowNumber) from IN_RETURN_ITEMS a select a.nodeID, a.value, a.rowNumber from IN_RETURN_ITEMS a
```

Statistic	Value
Total Responses	7

8. Q1.4 Please write a database related summary for the method
createReturnVersion(ReturnVersion, Handle) in Class
fina2.returns.ReturnVersionSessionBean

Text Response

Find the greatest ID in IN_RETURN_VERSIONS. Then, find the greatest sequence in IN_RETURN_VERSIONS. Create a ReturnVersion object with an ID greater than the greatest ID. Insert this new ReturnVersion object into IN_RETURN_VERSIONS with the same sequence, a unique code, and a new description.

Adding an entry for the version that is to be returned which is serial in order. Checks for the maximum values and then places accordingly.

The method create and store a returnVersion. The method first checks if the given code is unique. Then, get the maximum ID and the maximum sequence from the table RETURN_VERSION. Finally, it stores the ReturnVersion record with incremented values of max id and max sequence. Finally it returns the updated object.

Insert a new item in table IN_RETURN_VERSIONS with id/sequence increased by 1.

This method uses the table IN_RETURN_VERSIONS to create a new return version and insert it into that table. It grabs the max ID and increments it by 1, as well as the max sequence (version number) and also increments it by 1. It stores a description of the connection, and then inserts all of this information into the table. I am unsure of the third parameter used when storing: rv.getCode(). I imagine this method will only run completely if the code is unique as determined by the "checkCodeUniqueness" call run early in the function.

This will insert a return version extracting values from sys_strings, if and only if the code is unique

get the values from return version. select max(id) from IN_RETURN_VERSIONS select max(sequence) from IN_RETURN_VERSIONS insert into IN_RETURN_VERSIONS (" + "id,sequence,code,descStrID) values(?,?,?,?)

Statistic	Value
Total Responses	7

9. Q1.5 Please write a database related summary for the method setAddress(Handle, String) in Class fina2.bank.BankBean



Text Response
Call the method LocaleUtil.setSysString(), which create a database connection and calls LocaleUtil.setString(), which find the ID in SYS_STRINGS with a given language ID and ID and update it (if it exists) or inster a new one with the given value.
Sets the address object with the parameters pertaining to ID and the type of language along with a description.
The method set the address. It first call the method LocaleUtil.setSysString, than create the connection and call LocaleUtil.setString. This method insert a new record in the table SYS_STRINGS.
Set the addressID by desc.
This method calls the setSysString method in LocaleUtil, which appears to try to set the language of the database by connecting to the database. This mainly calls setString, and this method is quite confusing. I am unsure as to how an address comes into play here. If I were to guess, this sets the address of something to String and classifies it based on the language Handle passed in.
Updates the value of the address on the sys_string table using the id
set address ID

Statistic	Value
Total Responses	7

10. Q1.6 Please write a database related summary for the method
getDescription(Handle) in Class fina2.bank.BankCriterionBean



Text Response	
Essentially the same thing as Q1.5. Call the method LocaleUtil.setSysString(), which create a database connection and calls LocaleUtil.setString(), which find the ID in SYS_STRINGS with a given language ID and ID and update it (if it exists) or insert a new one with the given value. Return the new string.	
Method that requests the string description associated with the language that is being requested.	
Skip - time out	
Get the addressID by the handle "langHandle"	
This method is similar to the question above, where getDescription calls getSysString which calls getString, and getString is quite complicated. If I were to guess I'd say that this gets the description of something based on the language (Handle) provided.	
gets the value of the description from the sys_string table using the id	
get the description from the database	
Statistic	Value
Total Responses	7

11. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		3	43%
2	The description misses some important information to understand the database-related operations		4	57%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			7	


Statistic	Value
Min Value	1
Max Value	2
Mean	1.57
Variance	0.29
Standard Deviation	0.53
Total Responses	7

12. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		6	86%
2	The description contains some redundant/useless information.		1	14%
3	The description contains a lot of redundant/useless information.		0	0%
	Total		7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

13. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?

#	Answer	Bar	Response	%
1	The description is easy to read and understand.		7	100%
2	The description is somewhat readable and understandable.		0	0%
3	The description is hard to read and understand.		0	0%
	Total		7	




Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	7

14. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)

Text Response	
The provided summary misses the logic of incrementing the ID and setting default values.	
The main important points of the description are captured, but it does not tell the entire story	
The information summarized by the description are, surely, concise, precise and complete (if we focus our attention on the db-related operations). They are not complete if we want to consider the whole logic of the method.	
Very simple and abstracted summary for the method, even the same function was defined as chain-call?	
I think if it said what it queries the table based on for Q1, it wouldn't be missing anything. I think the select being based on max(id) is important	
The information is presented very clearly and the description is meaningful	
The description is quite clear.	



Statistic	Value
Total Responses	7

15. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		3	43%
2	The description misses some important information to understand the database-related operations		2	29%
3	The description misses the majority of the important information to understand the database-related operations		2	29%
Total			7	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.86
Variance	0.81
Standard Deviation	0.90
Total Responses	7

16. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		6	86%
2	The description contains some redundant/useless information.		1	14%
3	The description contains a lot of redundant/useless information.		0	0%
	Total		7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

17. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?



#	Answer	Bar	Response	%
1	The description is easy to read and understand.		6	86%
2	The description is somewhat readable and understandable.		1	14%
3	The description is hard to read and understand.		0	0%
	Total		7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

18. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)



Text Response	
The summary misses the important database-related logic of swapping the two first row.	
For this question, when we do not understand what exactly the object being passed or returned is, it is difficult to gain an understanding of what the method does.	
Same considerations as the previous one	
Dependencies between tables are missing. Why query 2 but just update 1? And how to update?	
The whole second part of the method is conditional and based on the result of the first query - maybe if that were added in that could be helpful? Again, I think the parameter used for the select/update is important to know.	
The description of the method is clear and doe snot contain redundancy	
It is quite clear	
Statistic	Value
Total Responses	7

19. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		4	57%
2	The description misses some important information to understand the database-related operations		3	43%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			7	



Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

20. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		4	57%
2	The description contains some redundant/useless information.		3	43%
3	The description contains a lot of redundant/useless information.		0	0%
Total			7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

21. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?



#	Answer	Bar	Response	%
1	The description is easy to read and understand.		5	71%
2	The description is somewhat readable and understandable.		2	29%
3	The description is hard to read and understand.		0	0%
Total			7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.29
Variance	0.24
Standard Deviation	0.49
Total Responses	7

22. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)



Text Response	
Again, the summary misses important database-related logic but it is hard to describe because this method is horrible to read.	
MDTNodePK is not described, but the rest is understandable and is an ideal format	
The description contains also method called via delegation, that are quite useful especially during maintenance activities.	
Duplicate tables (IN_MDT_NODES) and function calls (getRecursiveChildNodes).	
The second and third bullet points are somewhat redundant, but otherwise this method was a mystery to me and I think this helped.	
I think is important to now what values are you using to query the tables (in this case the primary key)	
Too much information. I think a summary would be better.	
Statistic	Value
Total Responses	7

23. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		4	57%
2	The description misses some important information to understand the database-related operations		3	43%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.43
Variance	0.29
Standard Deviation	0.53
Total Responses	7

24. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		3	43%
2	The description contains some redundant/useless information.		4	57%
3	The description contains a lot of redundant/useless information.		0	0%
Total			7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.57
Variance	0.29
Standard Deviation	0.53
Total Responses	7

25. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?

#	Answer	Bar	Response	%
1	The description is easy to read and understand.		6	86%
2	The description is somewhat readable and understandable.		1	14%
3	The description is hard to read and understand.		0	0%
	Total		7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

26. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)

Text Response

The summary misses the database-related information about the values inserted.

Constraints wouldnt be required unless one is testing or extending the certain method. Although it is nice to have, I'm not sure if it should be included in the main description

Something useful that I missed in my description was the constraint on the string value. It was difficult to catch just manually looking at the code.

Some important info is missing. E.g., query table SYS_STRINGS twice. But Why? What's the difference between the two queries?



This one was fantastic, and even picked up on information that I missed.

It is missing information for parameters in the select, method fina2.returns.ReturnVersionSessionBean.checkCodeUniqueness is used to check uniqueness returning a CODE_NOT_UNIQUE in the exception. I liked the constrains section.

Maybe a summary would be better.




Statistic	Value
Total Responses	7

27. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		6	86%
2	The description misses some important information to understand the database-related operations		1	14%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			7	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

28. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		5	71%
2	The description contains some redundant/useless information.		1	14%
3	The description contains a lot of redundant/useless information.		1	14%
	Total		7	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.43
Variance	0.62
Standard Deviation	0.79
Total Responses	7

29. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?

#	Answer	Bar	Response	%
1	The description is easy to read and understand.		6	86%
2	The description is somewhat readable and understandable.		1	14%
3	The description is hard to read and understand.		0	0%
	Total		7	




Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

30. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)

Text Response	
This summary is quite okay.	
This is a simple setter method and the description is longer than the code, which makes it seem like it has a lot of unnecessary information.	
Similar comments	
What are the parameters for?	
It got the same result as me, but I'm still not sure what the method exactly does.	
Very simple queries and updates	
The description is quite clear.	

Statistic	Value
Total Responses	7

31. Q1. Only focusing on the content of the description without considering the way it has been presented, do you think the message is complete?

#	Answer	Bar	Response	%
1	The description does not miss any important information.		4	57%
2	The description misses some important information to understand the database-related operations		2	29%
3	The description misses the majority of the important information to understand the database-related operations		1	14%
Total			7	


Statistic	Value
Min Value	1
Max Value	3
Mean	1.57
Variance	0.62
Standard Deviation	0.79
Total Responses	7

32. Q2. Only focusing on the content of the description without considering the way it has been presented, do you think the message is concise?

#	Answer	Bar	Response	%
1	The description contains no redundant/useless information.		7	100%
2	The description contains some redundant/useless information.		0	0%
3	The description contains a lot of redundant/useless information.		0	0%
	Total		7	

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	7

33. Q3. Only focusing on the content of the description without considering the completeness and conciseness, do you think the description is expressive?

#	Answer	Bar	Response	%
1	The description is easy to read and understand.		7	100%
2	The description is somewhat readable and understandable.		0	0%
3	The description is hard to read and understand.		0	0%
	Total		7	



Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	7

34. Q4: Please provide the rationale for your answers to Q1 to Q3. (Open question)

Text Response
This summary should be essentially identical to the summary of the previous question (method fina2.bank.BankBean.setAddress(Handle, String)) because it performs the same call.
This is the best description and suits ideally for this situation.
Similar comments
Fair enough, but if could indicate the returned value it will be more helpful. :-)
Just a simple getter method. Again, I think the parameter for what it queries based on could be helpful here especially since it's a getter.
I think the select needs to mention the parameters to be used
Good description

Statistic	Value
Total Responses	7

35. General question 1: Is our generated summary useful for understanding the database usages in the system?

#	Answer	Bar	Response	%
1	Yes. It's useful. Why?		6	86%
2	No. It's not useful. Why?		1	14%
	Total		7	

Yes. It's useful. Why?	No. It's not useful. Why?
<p>Its useful because if someone is trying to gain some quick information about a certain module.</p> <p>Because it generate a quite concise, complete and useful documentation for developers. Some of the information included are quite difficult to detect by simply manually looking at the code.</p> <p>Highlight the queries and functions, could avoid people from getting lost when reading code.</p> <p>It's nice to be able to see all the calls to the database, and how far the system steps down into multiple methods. The only thing missing is being able to see what the tables are queried on.</p> <p>It presents chain relation/delegation in a very easy way to read in most of the cases</p> <p>It summarizes the usage of database.</p>	<p>It helps, but they miss some important database-related information when it comes to the values inserted/updated in the DB and, maybe, the rationale for doing so.</p>

Statistic	Value
Min Value	1
Max Value	2
Mean	1.14
Variance	0.14
Standard Deviation	0.38
Total Responses	7

36. General question 2: What software engineering tasks would you use this type of summary for? (Open question)

Text Response

First understanding of the code. For example, the summary <http://www.cs.wm.edu/semeru/data/DBScribeData/fina.html#fina2.returns.ReturnSessionBean.getTableValuesRows.int-String-int-MDTNodePK-String-int> could help me understand this crazy piece of code!

Software Architecture associated to reverse engineering and some parts of software organization to make things more modular or to optimize the function calls by arranging them in memory more efficiently.

Definitely Maintenance tasks. It would be very useful during bug fixing (since it provides several information about the method), but also when implementing new/modified requirements.

Object dependencies tracking.

Almost anything using databases, particularly ones with heavy database usage such as server backends.

For generating software documentation

If I want to do some coding with a database centric application that I am not familiar with, I would like to use this type of summary.

Statistic	Value
Total Responses	7