




# 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		12	80%
3	Developer		0	0%
4	Faculty		2	13%
5	Other		1	7%
	Total		15	

Other
Ph.D. Student

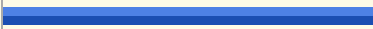
Statistic	Value
Min Value	2
Max Value	5
Mean	2.47
Variance	0.98
Standard Deviation	0.99
Total Responses	15

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

#	Answer	Bar	Response	%
1	Less than a year		1	7%
2	1 - 2 years		2	13%
3	2 - 5 years		4	27%
4	more than 5 years		8	53%
	Total		15	

Statistic	Value
Min Value	1
Max Value	4
Mean	3.27
Variance	0.92
Standard Deviation	0.96
Total Responses	15

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

#	Answer	Bar	Response	%
1	Yes		15	100%
	Total		15	

Statistic	Value
Min Value	1
Max Value	1
Mean	1.00
Variance	0.00
Standard Deviation	0.00
Total Responses	15

4. Q1.1 Please write a database related summary for the method deleteUser in Class com.riskit.controller.AgentManager

Text Response	
a stupid way to delete a user and all tuples that use it as a foreign key (use foreign key constraints and cascade instead of deleting from each table (otherwise wrap it in a transaction!))	
Then, using the SSN provided as an argument, the method searches for existing records in the table "userrecord". If there is any record in this table related with the ID, deleteUser will remove such records from the table "userrecord". Moreover, since "userrecord" has string relationships with other tables, the other tables must be updated as well. Note that "userrecord" enforces these relationships using foreign keys based on the SSN. The tables that should be updated are: job, education, employment, investment, migration, youth. This method executes a set of queries to remove any record identified with the given SSN from the described tables. After the removal, the method checks again for the existence of any record in the table "userrecord" containing the given SSN. If there is still a record in the table, the method is executed again on the entire set of queries.	
The method is used to delete the user with the SSN provided in the parameter. The parameter should correctly be transferred into long type. If the user with the specified SSN ID exists, the method will delete it from all the 7 tables and then double-check whether it has been deleted.	
The method deletes a user and all its related information contained in the database by using the SSN field, primary key for all involved tables (i.e., userrecord, job, education, employmentstat, investment, migration, and youth). At the end, a further query is executed to verify if the data has been actually deleted from the database.	
This method first counts all the records related to the given SSN in table userrecord. And then delete all the records related with the given SSN in table userrecord, job, education, employmentstat, investment, migration and youth. No other constraints need to be considered.	
Delete a user's records from table userrecord, job, education, employmentstat, investment, migration, and youth by the user's SSN. Check if the user exists by selecting the user's record from table userrecord before the deletion.	
It deletes the data from the tables userrecord, job, education, employmentstat, investment, migration and youth by the SSN columns. It double-checks the deletion by querying the table userrecord.	
If the user identified by a given SSN exists in Table userrecord, then delete all records with the given SSN from all these tables: job, education, employmentstat, investment, migration, and youth. An integer "1" is returned. If the user identified by a given SSN does not exist in Table userrecord, then nothing needs to be done. An integer "0" is returned.	
The method deletes the person represented by the key attribute SSN from the tables: userrecord, job, education, employmentstat, investment, migration, youth. Finally it returns 1 for success, 0 otherwise.	
The method deleteUser is deleting all records that belong to a specific SSN from the tables userrecord, job, education, employmentstat, investment, migration and youth. After the method checks if the record was deleted. Otherwise, it triggers an exception.	
Delete the information of a user. Input is the user's SSN	
Delete all user information based on a given SSN. This method will remove information from the following tables: job, education, youth, employmentstat, investment and migration in addition to userrecord. In case of success, the method returns the integer value 1, otherwise 0 is returned.	
Given an SSN, deleteUser will delete the corresponding rows in seven tables: userrecord, job, education, employmentstat, investment, migration, and youth. Developers should consider all tables with SSN dependencies to prevent orphaned data. Then deleteUser will verify all rows with the SSN were deleted.	
deleteUser method deletes all data for a specific user (based on his/her SSN) from the relational database. Data for a user are spread over multiple tables and there exists a database model constraint (primary key, foreign key relationship). So the order of the database query execution must be kept as written in the method.	
Delete the information from one person based on the SSN of the person, it double-checks that the data has been deleted	
Statistic	Value
Total Responses	15

5. Q1.2 Please write a database related summary for the method `getEducationResultSet` in Class `com.risklt.controller.Requirements19_24`

Text Response
a stupid way to return a predefined array
The method creates a table called "educationmap". Then, it populates such table with predefined records. After that, the method retrieves all the records contained in the table, in order to return a list with the values found in the second column. Finally, the method drops (removes) the table. The first and final step suggest that "educationmap" is not related with any other table.
The method uses a temporary educationmap table as a data structure for count the education info.The sql operations will execute locally and will create a table with constrains. Then it will do insertion and query operations. The table will be then dropped.
The method initializes table educationmap, by inserting in it basic information to run the system. Then, a check is performed to make sure that the folder is not empty (it should not be empty after the initialization.
This method just temporarily create a table and insert records, then put all the information into an array. Finally, it will drop this table. No constraints need to be considered, because this method even does not use any database in Riskit.
Create table educationmap and insert 17 records. Select all the 17 records from table educationmap and fill the data into an array. Drop table educationmap after that.
It creates the educationmap table and inserts each education level. The information is retrieved and returned through the method's parameter. Before the return, the table is dropped.
Create an internal table named educationmap. Insert all 16 education levels into the table. Select all 16 education level names from the table. Then, the table educationmap is dropped. The results (all 16 education level names) are stored in a string array argument.
The method take as input a String[] and fill it with values of level, education from the educationmap table.
The method create a table called educationmap with two fields: LEVEL and EDUCATION. The field LEVEL is the PK. After the method inserts 17 records in the new table. The field called LEVEL has values from 0 to 16. At the end the table is dropped.
create a table for an education array. Insert all information
Create temporary table to load educationmap application attribute. After the execution of this method the temporary table is deleted.
Create a table (educationmap) with two columns (Level and Education) and inserts 16 rows into this table. Then, getEducationResultSet queries the rows in this table and loops through to load the strings in the Education column into an array of strings. Afterward, the educationmap table is dropped.
method getEducaitonResultSet creates a database table named educaitonmap for temporary use. It inserts 17 distinct education level with an int mapping for each. Then it loads all these data in an array called educationArray. When it is done it deletes the educationmap table from the database
This method initializes the table "educationmap" with the require data

Statistic	Value
Total Responses	15

6. Q1.3 Please write a database related summary for the method FindCccupationIndustryWithHighestLowestEducation in Class com.riskit.controller.Requirements19\_24

Text Response
given a table name finds the first value with an attribute called same as the table + code.
The method starts by retrieving the codes and the names of industries or occupations, i.e. the method can use the table "industry" or the table "occupation". Then, for each code (i.e. for each industry/occupation) the method delegates the computation the average education of the users working in such industry/occupation. Then, the method defines the industry/occupation with the highest and lowest level of education; with these two codes, the method delegates the calculation of the average income for each industry/occupation code. This last calculation is done using a query against the table "job".
The method query the database with the provided parameter. Two and only two types of parameter should be provided. The method then query the table specified by the parameter and then return the attributes, which are also defined by the parameter. The query operation will executed locally.
The method firstly retrieves the codes of the industries or the occupations stored in the database (based on the value of the provided parameter). Then, it retrieves the maximum and minimum level of education for each of the industry/occupation codes previously identified. Finally, the salary for the minimum and maximum level of education is retrieved.
This method first selects all the code (industry or occupation). For each code, compute their average education level. This level is computed by the adding all the users'(selects users' SSN from job with the related code) education level and divided by the total number of users. List code with highest and lowest code. Then compute the average income(consulted from job) of the code with both highest and lowest education level. When using this method, pay attention that it can be only used for table industry and occupation.
Select data from the table given by the argument "String selection" and do some computation. The selected data fields are also derived from the argument "String selection".
It gets all the data from the tables industry and occupation. It finds the average education for each job to find the max and min level of education. Then calculates the avg income of each of the two jobs. The last two DB tasks are delegated by other methods.
The argument can be either "industry or "occupation". Get all occupation/industry codes and categories from table occupation/industry. For each occupation/industry code, calculate the average education level from Table job. Then, extract the occupation/industry codes with the highest or lowest education level. After that, calculate the average wage for the two occupation/industry codes extracted respectively. Then, compare those two average wage and calculate the percentage of difference.
The method FIND OCCUPATION/INDUSTRY WITH HIGHEST/LOWES EDUCATION looking in the table passed as input.
The method is receiving a string as a parameter and it is being used this value in several parts of the query to complete the SELECT and to pass the name of the table.
get the data of "selection" (input) from database, use this data to find occupation with highest or lowest education.
Based on the parameter received the method will load information from one of the following tables: industry or occupation.
First, the method checks whether a resultset is empty. If there are rows in the resultset, FindCccupationIndustryWithHighestLowestEducation will read the values from the first two columns into distinct arrays. The rest of the method appears to use helpers for computing different values.
This method returns occupation/industry with highest and lowest education level. Based on the selection (either occupation or industry), it queries the corresponding database table. Then if records exist in the table then it queries the job table to find the SSN for those employes for the given code and compute average educaiton level, iterate this process until it finds the highest and lowest education level by comparing with the average education level.
This method finds the lowest and highest education required for one category and computes its income

Statistic	Value
Total Responses	15

7. Q1.4 Please write a database related summary for the method AgentAndUser in Class com.risklt.ui.SubMenuChoices

**Text Response**

It is just a menu. NO use of the database in the method (maybe in the actions). I appears to ask what user to use for the access to the DB

This method does not directly interact with the database. It is part of the UI and it was designed to display options depending on the "role" selected by the user.

i find nothing related with database...

The method filters the access to some menus of the system, by checking if the user is an agent or not. If not, it connects to the database to verify if she has valid credentials to login.

This method has no database operations.

Print several options on the screen and wait for the user's input. Do different computations according to the user's choice. Related to UI but not DB.

For login purposes, it retrieves the agent information from AgentTable, before creating the table (method AgentLogin) and inserting the users.

First, a number needs to be input: 1 for Agent, 2 for user and 3 for exit. If it is a Agent, then verify if the agent is already logged in or not. If yes, then show the agent menu. Otherwise, show the UI for agent login. If it is a user, then show the UI for customer quotes.

The method, in case the agent does not have an ID, create an AgentTable

This procedure doesn't include any SQL instruction.

create a instance for the class SubMenuChoices

Case is an agent login, load information from AgentTable. (not specified in the schema)

If agent has not given his ID, then AgentAndUser will create an AgentTable with two columns (Name and id) and insert five rows. (Developers likely need to consider keeping these values current.) Then it checks to see whether the agent already exists in the AgentTable. If the agent already exists, information is accepted from user and stored in an Invitation object.

Based on the option selected by the user from the menu, it takes to agent menu or calls the AgentLogin method, which takes agentName and agentId as input and queries the agentTable to see if there is a match. If a match is found it calls the agentMenu method, otherwise display login failure message to the user. And based on user input it can also generate quotes.

This method calls a method that initializes AgentTable table and then check the login data to authenticate the person

Statistic	Value
Total Responses	15

8. Q1.5 Please write a database related summary for the method inputForCreateUser in Class com.riskIt.ui.SubMenuChoices



Text Response	
Get info for a new tuple in Users (validating it in the process).	
The method uses the user input (SSN) to check if there already exists a record in the database. To do this, the method uses a query against the table "userrecord" using the SSN as a parameter. Then, the method delegates the creation of the user to a second method called AgentManager.createNewUser(). This new method checks again for an existing SSN in the table "userrecord". If the SSN does not exist, "createNewUser" uses a set of queries to insert new records in the tables "userrecords", "investment", "youth", "employmentstat", "education" and "job". Note that these tables use SSN to establish relationships (through foreign keys).	
The method creates a new user with users' input parameters. The method first queries the table and checks whether the input user exists in the table. It then constructs the user's info with user's input values.	
The method interacts with the class AgentManager to create a new user Ui (and its related information, like her job, education, etc) in the database. In particular, the interaction is toward the createNewUser method that also verifies if a user having the same SSN of Ui already exists in the database (in this case, Ui is not inserted).	
The opposite operation to deleteUser. It gets information about a new customer from UI and first consults table userrecord to see whether this customer has already been in this database, and then it inserts the corresponding information into userrecord, investment, youth, employmentstat, education and job. When using this method, need to check the given code is valid, e.g. the industry code, occupation code should be correct in this database.	
Prompts the user to input a new user's data on the screen and inserts the new user's record by calling agent.createNewUser(), which checks the new user's data by selecting records in table userrecord through ssn and inserts records in table userrecord, investment, youth, employmentstat, education, and job.	
Search for the user record in userrecord to check its existence. If it does not exist in DB, the user info. is inserted in the tables userrecord, investment, youth, education, employmentstat and job. This is performed in method AgenManager.createNewUser	
First, the customer is asked to input his/her SSN, expenses and deductible amount. Then the system calculates the amount that can be offered and shows it to the customer. The system asks if the user wants to accept the offer or not. After a user's answer is collected, the data is saved.	
The method accepts the information about a new user, checks in the userrecord table if the user already exists, if not it updates the table.	
The method asks for the input to create a user if the user doesn't exist. First, validate that not null values are filled and after query the existence of the user if the user doesn't exist, then ask for the information. The used table is userrecord.	
get answers from users	
Insert user information. This method will add information in the following tables: job, education, youth, employmentstat, and investment in addition to userrecord.	
Checks to see if a customer is already in the database by filtering the userrecord table using the SSN. If the customer does not exist, the method will get the data from the user and create a new user in the database by calling agent.createNewUser. createNewUser will verify the user does not exist before inserting rows into six tables: userrecord, investment, youth, employmentstat, education, and job.	
This method takes all user data. First based on the provided SSN, it queries the database to see whether the user already exists or not. If a user doesn't exist with that SSN, then it lets the users input more user data. Then it calls a method named createNewUser, which inserts all these given data into different tables in the relational database. The given order of insertion must be kept as there are dependencies between them (primary key, foreign key relationship etc)	
This method calls a method that checks if the SSN is already in the db. Then if the person is not already in the db it inserts a record with the data in multiple tables such as: userrecord, investment, youth, employmentstat, education, job.	
Statistic	Value
Total Responses	15



9. Q1.6 Please write a database related summary for the method main in Class com.risklt.app.testCalculateScoreDriver




Text Response	
Given the ssn of a user computes some sort of quote.	
The method contains test cases for three methods: calculateScore: To calculate the score, this method uses a query which describes a inner join involving 6 tables ("industry", "job", "occupation", "education", "userrecord" and "investment"). The result of this query is used to compute the score. calculateQuoteForCustomer: This method uses calculateScore. CalculateLikelihoodToMoveFactor: This method uses an SSN as a parameter to execute a set of queries involving several tables. The tables are "job", "userrecord" and "statername". The results of these queries are used to compute an score.	
he method do nothing with SQL. It maybe invoke some methods concerning database. but i think it goes too far away..	
It seems to test the method "calculateScore" in the class testCalculateScoreDriver. CalculateScore retrieves all information in the database related to a specific SSN. Honestly, it is hard to understand what this core is.	
This method computes the score of customer's quote. The procedure of computing score is really complicated but I'm sure it must have some relationship with the database.	
Use args[0] as ssn and test three testcases. Testcase #1: agent.calculateScore(); jointly select data from table industry, occupation, investment, education, userrecord and job, and do some computaion. Testcase #2: user.calculateQuoteForCustomer(), which also calls agent.calculateScore(). Testcase #3: requirements.CalculateLikelihoodToMoveFactor(); select data from table job, userrecord and ziptable, and do some computation.	
The method executes two tests cases than involve db operations: 1. computation of an agent's score, retrieving the information of the tables industry, occupation, investment, education, userrecord, job. 2. computation of the likelihood-to-move factor, retrieving data form tables job, userrecord and ziptable.	
This method takes a SSN as input. Together with the default property value of 10000 and deductible amount of 50, it first calculates a quote for the customer with the specified SSN. Then, it calculates the Likelihood To Move Factor for this customer. To get the quote value, a customer score is calculated by comparing the customer's income with other users' income with the same zipcode. In this step, table userrecord, investment, job, industry, education, and occupation are joined together to get the income information for this customer. To get the likelihood to move factor, the customer's occupation code and wage are extracted from Table job and the state he/she stays in is extracted from Table userrecord and ziptable. After that, average wages for all states are calculated. If the customer's income is higher than half of the states, then, the likelihood to move factor is high; otherwise, the likelihood to move factor is low.	
The method reads attributes from tables: industry, occupation, investment, education, userrecord, job and calculate the score of the driver	
This method doesn't include any SQL statement.	
calculate score and customerQuetes.	
Load information from the following tables: industry, occupation, investment, education, userrecord and job.	
Calculate a "likelihood to move factor" using four attributes: job.occupationcode, job.weekwage, userrecord.zip, and ziptable.statername.	
This method first calls teh calculateScore method, which queries the database for the given SSn and calcaulte the score. It then calls the calculateQuoteForCustomer method.Then it calls CalculateLikelihoodToMoveFactor method with SSN, which queries the database for that particular SSN to compute the likelihood.	
This method is a test case that call methods that compute an score based on the marital status, zipcode, gender, income and more. Other test call methods that compute the quote to be deductible per mont using the same score in the previous test. In addition this method test and computes a wave value based on the job and occupation.	
Statistic	Value
Total Responses	15

10. 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.		9	60%
2	The description misses some important information to understand the database-related operations		6	40%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			15	




Statistic	Value
Min Value	1
Max Value	2
Mean	1.40
Variance	0.26
Standard Deviation	0.51
Total Responses	15

11. 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.		11	73%
2	The description contains some redundant/useless information.		3	20%
3	The description contains a lot of redundant/useless information.		1	7%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.33
Variance	0.38
Standard Deviation	0.62
Total Responses	15

12. 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.		13	87%
2	The description is somewhat readable and understandable.		1	7%
3	The description is hard to read and understand.		1	7%
	Total		15	




Statistic	Value
Min Value	1
Max Value	3
Mean	1.20
Variance	0.31
Standard Deviation	0.56
Total Responses	15

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

Text Response
The purpose of the method is to delete a precise tuple. It is obvious that it has SQL statements that operate on those tables. But in this case what matters is that we want to delete a certain tuple. Not just "tuples"
Although the description is really accurate about the DB operation performed by the method, it does not contain the criteria used to select and delete the records from the database. That is important information that should not be ignored.
the generated summary is too simple but covers everything.
The rational behind the operations is missing. For example, why we are deleting from all these tables? It is a consequence of deleting an user. Also, a specific querying operation is done to verify if the previous queries were successful (see the manual summary)
I just selected what I thought. No rationale.
The summary describes pretty much all the db operations in the method. I would add to the summary that the operations are executed by ssn column.
missing information: the delete operations only happens when the ssn is found in table userrecord.
The description is Ok for the 3 question. Of course, I assume that the repetition of the sentences is part of the "how the description is presented", because I would not like the same sentence: " It deletes rows from table(s)" all the time.
It's not included the value to be deleted on the table. It seems to delete all the records of the tables. For example: It deletes rows from table(s) migration. Can be understood that all rows can be deleted.
I think the description is clear, but sometimes too much text, like no.63
Q1: I believe deleteUser also verified all rows with the SSN were deleted after it deleted rows from the last of the seven tables. However, I did not regard this check as "important information to understand the database-related operations."
All the tables accessed are listed, tables using the same operation like delete could be merge. It doesn't have a context of the usage of the tables.




Statistic	Value
Total Responses	12

14. 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.		9	60%
2	The description misses some important information to understand the database-related operations		3	20%
3	The description misses the majority of the important information to understand the database-related operations		3	20%
Total			15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.60
Variance	0.69
Standard Deviation	0.83
Total Responses	15

15. 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.		12	80%
2	The description contains some redundant/useless information.		2	13%
3	The description contains a lot of redundant/useless information.		1	7%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.27
Variance	0.35
Standard Deviation	0.59
Total Responses	15

16. 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.		9	60%
2	The description is somewhat readable and understandable.		5	33%
3	The description is hard to read and understand.		1	7%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.47
Variance	0.41
Standard Deviation	0.64
Total Responses	15



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

**Text Response**

Again, this is too low level. What matters in this case is that the method is simply using the DB to create an array. I does not actually modify the database after it has finished.

The description is really close to my own description. However, the order in which the operations were presented made it a little bit difficult the comprehension of the method. the generated summary just read the code but know nothing about the semantic of code.

Again, the rational. What is the reason for this sequence of operations?

The order of the operation is incorrect.

I just selected what I thought. No rationale.

The sequence of the descriptions are not consistent with the code, which can be confusing.

Similar to the previous one. The comment should be organized in a different way, but this is a problem of how to present these information.

The query doesn't include the field value to search on the Database. I mean is not included the value on the "where" part of the SQL statement.

it is clear.




Q1- T Q2- Q3-

Q1: The description is not enumerated, but expect the first operation to be the create table operation, and the last operation to be the drop table operation. I regard this as important information since the method leaves the database schema in state without the educationmap table. Q1: Although the description does not specify that there are 16 rows that were inserted into educationmap, I do not regard this to be "important information."

It is too general saying that inserting values for the first two columns (actually I can change the order on an insert you should mention the columns). Some context about the usage of tables is important.




Statistic	Value
Total Responses	13

18. 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.		8	53%
2	The description misses some important information to understand the database-related operations		6	40%
3	The description misses the majority of the important information to understand the database-related operations		1	7%
Total			15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.53
Variance	0.41
Standard Deviation	0.64
Total Responses	15

19. 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	47%
2	The description contains some redundant/useless information.		4	27%
3	The description contains a lot of redundant/useless information.		4	27%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.80
Variance	0.74
Standard Deviation	0.86
Total Responses	15

20. 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.		9	60%
2	The description is somewhat readable and understandable.		3	20%
3	The description is hard to read and understand.		3	20%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.60
Variance	0.69
Standard Deviation	0.83
Total Responses	15

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

**Text Response**

In this case the table is not called selection. Selection is a variable that supposedly includes a string that is the name of a table. It might be useful to know that other tables are accessed in the methods called.

Again, the description shows the operations but does not show the criteria involved in the queries. Particularly, in this case the description fails when it shows the first DB operation: the method does not query the table "selection"; instead, the method queries a table whose name is given by the parameter "selection". It seems that this parameter can take the values "industry" or "occupation" which are the names of two tables in the DB. Additionally, the description mentions several queries to the table educationmap. I think that this table does not exist in the DB schema. The whole call hierarchy makes a little bit difficult to understand each operation. However, the hyperlinks to other methods helps to the comprehension of the operations.

the method read the recall relationship and generate some deep things. the procedure may be right but hard to understand. It do some complicated things than user but somewhat too complicated.

Again the rational, and I'm not sure all these chains of invocations are useful in a summary

I cannot understand what this summary what to tell me. Besides, I have no patience to read such a long tedious summary.

Although the description is not so easy to read, I think it is good enough and cannot be improved much. So I chose "The description is easy to read and understand".

To name a few, these operations are repeated: - It creates the table(s) educationmap via the chain-call com.riskIt.controller.Requirements19\_24.ComputeAverageEducation com.riskIt.controller.Requirements19\_24.initializeLevelToEducationHashMap com.riskIt.controller.Requirements19\_24.getEducationResultSet - It inserts values for the first 2 columns of table educationmap via the chain-call com.riskIt.controller.Requirements19\_24.ComputeAverageEducation com.riskIt.controller.Requirements19\_24.initializeLevelToEducationHashMap com.riskIt.controller.Requirements19\_24.getEducationResultSet The summary is fairly understandable, however, it is very detailed which may seems kind of overwhelming.

The description is complete and easy to read. The problem is how to organize all these information to be as concentrated as possible

In my opinion, the name of fields should be included instead of only include something like "It inserts values for the first 2 columns of table educationmap"

it will be great if you can provide the high-level goal of this method.




Q2: Some of the information appears to be redundant.

It queries the table(s) selection, selection is a variable not a table, selection can have value industry or occupation, which are table names in the DB.

Contains very detailed information, description method repeats a lot the package and class in delegate section, I think it can be grouped. It's too long, I think grouping by method calls can decrease the lines and helps to make it readable.




Statistic	Value
Total Responses	13

22. 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.		9	60%
2	The description misses some important information to understand the database-related operations		5	33%
3	The description misses the majority of the important information to understand the database-related operations		1	7%
Total			15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.47
Variance	0.41
Standard Deviation	0.64
Total Responses	15

23. 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.		9	60%
2	The description contains some redundant/useless information.		4	27%
3	The description contains a lot of redundant/useless information.		2	13%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.53
Variance	0.55
Standard Deviation	0.74
Total Responses	15

24. 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.		9	60%
2	The description is somewhat readable and understandable.		4	27%
3	The description is hard to read and understand.		2	13%
	Total		15	



Statistic	Value
Min Value	1
Max Value	3
Mean	1.53
Variance	0.55
Standard Deviation	0.74
Total Responses	15



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




Text Response	
This data feels too low level.	
I think that in this case I failed trying to find the interactions between this method and the database. Since this method is related with the UI, I did not see any relevant relationship between the method and the DB. If we navigate through all the call hierarchy of an application using the "Main" class as the starting point, we obviously will find a lot of interactions with the DB in the lowest layers of the class hierarchy. Despite this fact, it seems that the description properly shows the interactions between the UI method and the DB, even if these interactions involve other methods. Again, the whole method call hierarchy make a little bit difficult to understand the operation, but it is not a big deal.	
too complicated for user to understand. but may be do the right thing.	
Same as Q3	
The same, I cannot understand what the summary wants to tell me.	
Although the description is not so easy to read, I think it is good enough and cannot be improved much. So I chose "The description is easy to read and understand".	
It's not included the name of the field that are being query. For example, the next sentence says "It queries the table(s) AgentTable via a call to the com.riskIt.ui.SubMenuChoices.AgentLogin method" without including the field to be query.	
i think this one is clear	
Q1: The description appears to miss the insertion of values into the tables userrecord, investment, youth, employmentstat, education, and job.	
Contains all the information from access to tables, many packages are repeated in the delegation part. It is too long making it difficult to read sometimes.	
Statistic	Value
Total Responses	10

26. 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.		14	93%
2	The description misses some important information to understand the database-related operations		1	7%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			15	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.07
Variance	0.07
Standard Deviation	0.26
Total Responses	15

27. 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.		10	67%
2	The description contains some redundant/useless information.		4	27%
3	The description contains a lot of redundant/useless information.		1	7%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.40
Variance	0.40
Standard Deviation	0.63
Total Responses	15

28. 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.		11	73%
2	The description is somewhat readable and understandable.		4	27%
3	The description is hard to read and understand.		0	0%
Total			15	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.27
Variance	0.21
Standard Deviation	0.46
Total Responses	15

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

**Text Response**

This seems more useful. I like that it traverses the methods and tells me which db operations are done.

This description definitely outperformed the description that I just made. The details shown by this description really help to understand all the entities involved in the creation of a new user, and this information is helpful when someone tries to modify/extend the source code. Was really comfortable to read this description since it does not contains a lot of call hierarchies.

the result looks like very good

Very nice the summary of the constraints. Again the rational would be a big plus.

For the constraints part, the first three rows are the same. If I read such kind of summary, I will have no patience to read it.

Although the description is not so easy to read, I think it is good enough and cannot be improved much. So I chose "The description is easy to read and understand".

Too much information, I'm not sure if the columns listings in the insertion descriptions are needed. Also, the references foreign keys might not be necessary (well, it depends on what i need the summaries for). This makes the summary is not very concise

I cannot say that there is useless or redundant information...but the amount of information is huge. It really depends on the use of this description. Of course cannot be a comment to a method, but maybe an extended documentation available.



I would add the same feedback for the query sentence: " It queries the table(s) userrecord via a call to the com.risklt.controller.AgentManager.createNewUser method" without including the field to be search.

It provide almost all the information i want to know. Easy to read and understand.

This description is very complete. Adding information about the columns that are used is very important. I liked the constrains parts this is very useful, however I think constrains can be grouped to avoid repetitions.



Statistic	Value
Total Responses	11

30. 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.		12	80%
2	The description misses some important information to understand the database-related operations		3	20%
3	The description misses the majority of the important information to understand the database-related operations		0	0%
Total			15	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.20
Variance	0.17
Standard Deviation	0.41
Total Responses	15

31. 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.		11	73%
2	The description contains some redundant/useless information.		4	27%
3	The description contains a lot of redundant/useless information.		0	0%
Total			15	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.27
Variance	0.21
Standard Deviation	0.46
Total Responses	15

32. 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.		10	67%
2	The description is somewhat readable and understandable.		4	27%
3	The description is hard to read and understand.		1	7%
	Total		15	

Statistic	Value
Min Value	1
Max Value	3
Mean	1.40
Variance	0.40
Standard Deviation	0.63
Total Responses	15



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

**Text Response**

This is a case I need summarization. Knowing which tables are accessed is not enough. What matters is why they are accessed.

For me the description shows most of the relevant information. However, it says that the method delegates a query to the tables occupation, userrecord, job, education, industry and investment. We I read that description I immediately think about a different query for each table, but in fact, the method uses a big query with a inner join of some of those tables. I think that this is important information that should not be ignored. Besides that, the description is good.

the result deal good with the recall chain... very good

Same as the FindCccupation... method

For this method, I have no idea about the relationship with DB. I'd like to look this summary. But there still miss some details which forced me from understanding this summary.

Although the description is not so easy to read, I think it is good enough and cannot be improved much. So I chose "The description is easy to read and understand".

item 3 and 4 are redundant? item 5 and 6 are redundant?

The same as previous question

I would add only the field for queries.

good. But i still think it would be better if you can provide high-level goal of this paper.

Package repetition on the delegation section.

Statistic	Value
Total Responses	11

34. 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?		12	80%
2	No. It's not useful. Why?		3	20%
	Total		15	

Yes. It's useful. Why?	No. It's not useful. Why?
It is useful when we need to know all the entities (i.e. tables, constraints, indexes, etc) involved in a database operation. This information helps a lot if someone need to modify/extend the code.	It misses the conditions of the queries (knowing that a table is accessed in some cases is obvious, what matters is what condition is used). Also, I would prefer higher level concepts (think store procedures rather than many queries that independently don't mean much).
There should be a third option: in part. Without an explanation of the rational behind the performed operations the usefulness is limited. For sure one could save some time if she needs to perform comprehension activity	i think the summary just deal with the recall map and do nothing fancy
Summaries written by people always contain flaws, and some people cannot even write understandable summaries.	Well it's hard to say whether it is useful or not. But it seems like I get few information from this tool. However, these few information also gives me a clear view of this method.
Overall, the summaries are complete and understandable. They might be useful as a NL description of what the system is executing in the database, avoiding to look at db code. I think the summaries would save me time understanding the db operations executed through delegation, avoiding to browse each method. I'm not sure, though, if the summaries would save me time understanding the db structure. In this case, a ER diagram seems more appropriate.	
It shows all database related operations	
Is definitely useful when a developer need more information about how the method use the database. Of course, these kind of description cannot be inserted as a comment of the method.	
Yes, because the summary showed the relation between the tables. However, adding the fields that are used to query on tables can be useful for DBA or analyst to have a direct information about PK,FK	
Yes, it make the method easy to understand, especially for the ones who are not familiar with the source code	
It is useful when you do not have a direct access to the database, or when you are just reading trough an specific method and you want a quick overview about the database interaction.	
Consolidating information on database operations, delegation, and key constraints is useful.	
can have an idea on the database operations performed in the source code within short time	
I think it is useful specially in the case of the cosntrains	

Statistic	Value
Min Value	1
Max Value	2
Mean	1.20
Variance	0.17
Standard Deviation	0.41
Total Responses	15

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

Text Response	
Reverse engineering	
Refactoring, Program comprehension, Concept Location.	
show the code procedure for naive java developers.	
Comprehension activities	
For debugging of a software, especially for software with limited documentation.	
Designing testcases for a project.	
Bug fixing. Adding new features. Impact analysis. Self-Documentation about db accesses.	
Bug fixing (to find out useful information possibly related with the bug) and refactoring/remodularization (in order to make sure that modification will not invalidate some constraints)	
I would use for analyzing a new system or in integration between systems can be useful.	
Fix bugs, or add new functions that need to call other methods.	
For debugging and re-engineering.	
Program comprehension	
In testing tasks will be very useful. Also in maintenance and evolution of the software	
Statistic	Value
Total Responses	13