

SPRINT 2

Design Inspection

Team 9

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Product: TripEase

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Defect No.	Description	Severity	How to Correct
1	Input provided by the user is truncated or has blank spaces when adding to the database.	2	Assign enough memory to each variable and remember to null terminate strings.
2	Server crashes while retrieving large amount of data from the database.	1	Make server robust by adding proper error handling code so that it exits gracefully and doesn't crash.
3	The user interface does not load properly or fails to load on slow internet connections	2	Create checks for internet connections and provide the user with a message regarding the slow execution.
4	After the user performs an action, the interface does not carry out desired action or does not save data on the database	1	Check that there are action listeners assigned to each button which carry out the desired tasks.
5	The user interface does not take you to the specific page	2	The links stored in memory are broken

	requested and either breaks or takes you to the wrong page.		or the link to the next web page is not being updated properly.
6	The server malfunctions and processes transactions, without user approval.	2	Create checks within the code to allow transaction processing only after user approval
7	Inaccurate data is loaded while processing a user request	2	Check that the action handler for the specific request is pointing to the correct table.
8	Passwords are not being hashed/encrypted	1	Add checks within the code to handle the scenario
9	Trips are not being saved for a returning user	3	Transfer data efficiently to the database and create more space in the database for storage

Code Inspection

Defect No.	Description	Severity	How to Correct
1	SQL query formatted incorrectly this can cause no results to return and the user to not use product	1	Unit test every query to ensure it is formatted correctly for MySQL
2	Code for handling button presses or enter commands not all handled. If not handled correctly can cause user choices to not be entered	2	Ensure all commands for entering information are handled correctly

3	Appropriate error handling is not being done which causes the server to crash and not exit gracefully.	2	All functions should be enclosed in proper try catch blocks so that server doesn't crash and exits gracefully.
4	Matching is case-sensitive and thus, does not return results without a perfect match	3	Create checks for dealing with partial matches and provide relevant results, in such cases. Use the equalsIgnoreCase() function for matching of strings.
5	Fields in the database are not given given enough bytes which leads to truncation of data	2	Make sure that each datafield has enough bytes and all strings are null terminated to not allow any extra white-space characters,
6	Redundant and unnecessary code	3	Remove unused or redundant code, to be able to increase efficiency
7	Limited checks for security leaks in the database code	2	Increase exception handling and handling of buffer overflows, within the code

Unit Testing

Registration / User Details

10/16/15

Nikhil Mehta, Aishwarya Ajay

Defect No.	Description	Severity	How to Correct
1	Inserting data is in wrong format	1	Do a Client and Server side check of format
2	Check for valid email address when the user signs up	3	Have a function which checks if the email address is valid or not and not allow the user to signup with invalid email addresses.
3	Inappropriate username or password	3	Set a catch for vulgar language when creating an account or changing a password

Database Wrapper Unit Tests

10/16/15

David Olaves-Mullican, Vijay S Balasubramanian

Defect No.	Description	Severity	How to Correct
1	Hotel Search outputs empty when no hotels are found	3	Output changes to "No hotels found" when none are found
2	Check if the place where the user wants to visit is a valid place	3	Check the database and output "The city you are trying to visit doesn't exist", if the entry is not found in the database.

3	Trip itinerary doesn't show optimized results (Price according to budget, distances for attractions from hotels, etc) for hotels and restaurants	1	Develop an efficient algorithm to return optimized results for a user.
4	Dietary preferences and health concerns are not taken into account for the generation of the search results	2	Develop an algorithm to create results ONLY after the preferences are used as filters