Diagram 1

The following model represents the results of the created quiz when tested against three arbitrary restaurants (R(1), R(2), and R(3)). The final array represents the suggested outcome for an arbitrary user's quiz response. The model displays the point values added to restaurants based on accordance with the question choice (corresponds to doc 'Quiz'). R(1) is a restaurant that "matches" all 10 answers, R(2) is a restaurant that matches 0 answers, and R(3) is a restaurant that matches every other answer.

	R(1)	R(2)	R(3)	... R(n)
Q1	+10	+0	+10	
Q2	+10	+0	+0	
Q3	+100	-1000	+100	
Q4	+100	-1000	+0	
Q5	+100	-1000	+100	
Q6	+10	+0	+0	
Q7	+20	+0	+20	
Q8	+20	+0	+0	
Q9	+10	+0	+10	
Q10	+10	+0	+0	
	390	-3000	240	= [R(1), R(3)]

Explanation:

a. The quiz has a possible total of 390 points. Each question is either awarded the full amount of points for a "matching" answer, or 0/-100 points for an answer that does not match. Any restaurant that receives -1000 points or less can be disqualified from the list, since questions 3, 4, and 5 are considered "critical" and an awarded value of -1000. Any negative answer on questions 3, 4, or 5 will automatically result in a negative total; any negative totals should be ignored and disregarded from the final array.

b. Therefore, the final array consists of only the two restaurants which are relevant to the user, and ordered in highest to lowest point total order. The resulting array is [R(1), R(3)], and the array should be outputted in a human-readable result list to the user page.

Diagram 2 - User Flowchart

The following model represents the potential activities of a user on the web application.