Product overview: QuizOracle

QuizOracle is a semi-private question answering system. Users can 'check in' and use our system as long as t
know one of the daily secret words. QuizOracle sends the daily secret words to a variety of sources who are t
to share them with whoever they see fit.

Once checked-in, users can ask our oracle to answer questions from a wide range of topics. These are organi
categories: topic areas, subtopics within each, sub-sub-topics within those, and finally a set of specific questi
at the end of the chain. The specific question types are definition, explanation, example, fact-check, and calcu

QuizOracle also provides its administrators with the ability to add/remove new distributors (the sources who
our secret words to others) and to analyze the effectiveness of its distributors over time.

Each aspect of QuizOracle is discussed in greater detail below.

Checking in

When the user connects to our system they are presented with a screen asking them to enter one of today's
words. There are five words, changed at noon local time each day (Nanaimo, PST or PDT). These words are av
from any of our distributors, discussed in a later section. (If they don't know any of the words too bad!)

No user information is collected, but the system does take note of how many times each secret word is used
in over each 24-hour period.

Once checked in, users are automatically forwarded to the Query System.

Query System

On entry, the query system provides the user with a list of topic areas. Once the user picks a topic area they a
presented with a set of subtopics to choose from, and from there a set of sub-sub-topics. Finally, the user is
presented with a list of specific items/terms/concepts they can make queries about.

Once a specific item/term/concept has been chosen, the user can pick one of five question styles:

- definition: this provides a short definition of the term/item in question.
- explanation: this provides a longer, more detailed description of the term/item.
- example: this provides an example illustrating the term/item.
- fact check: this prompt the user to pick a fact category then answers a simple question about the item, e
  canine a mammal".
- calculation: this performs a simple numeric calculation given the necessary user data, e.g. "Calculate surf
  of a sphere" would require the user to provide a radius for the circle in question.

The query system itself would run off lists of topics/subtopics/sub-sub-topics/queries with supporting definit
explanatios, examples, facts, and calculation routines.

Secret Word Distribution and Distributors

QuizOracle maintains a collection of distributors: people who will be sent a secret word to share (or not) with
they see fit. QuizOracle administrators can add/remove distributors and update their contact information (inc
their preferred way of being sent the secret word).

Each night at one second after midnight (Nanaimo time) the QuizOracle system will randomly pick the 5 wor
used starting at noon that day. One of the distributors will be chosen at random and sent the first word, whil
the other distributors will be sent one of the other four words (randomly chosen for each).

The secret words will be randomly chosen from a dictionary stored within QuizOracle, and the system admini
can add/remove words to the dictionary. Any given word cannot be chosen twice on the same day, but coul
chosen again on any other day.

Analyzing Distributor Effectiveness

QuizOracle will keep track of which words were assigned to which distributors each day, and will also track h
each word was used to check in each day. Over time this allows the analysis of how much traffic each distribu
driving. (Each day it gets precise information about the distributor who was uniquely assigned the first secret
but each of the remaining words are likely given to multiple different distributors that day.)

QuizOracle administrators can ask the system to generate an analysis of traffic generated by a distributor ove
This is provided as a bar chart, one bar per day, where the height of the bar is the number of checkins for the
distributor's word that day divided by the number of distributors given that word that day. The bar is bolded
when that distributor is the only one with the given word (i.e. where the information is exact for that distribut