

Interview Question

Quantum Inventions Private Limited

Product Description

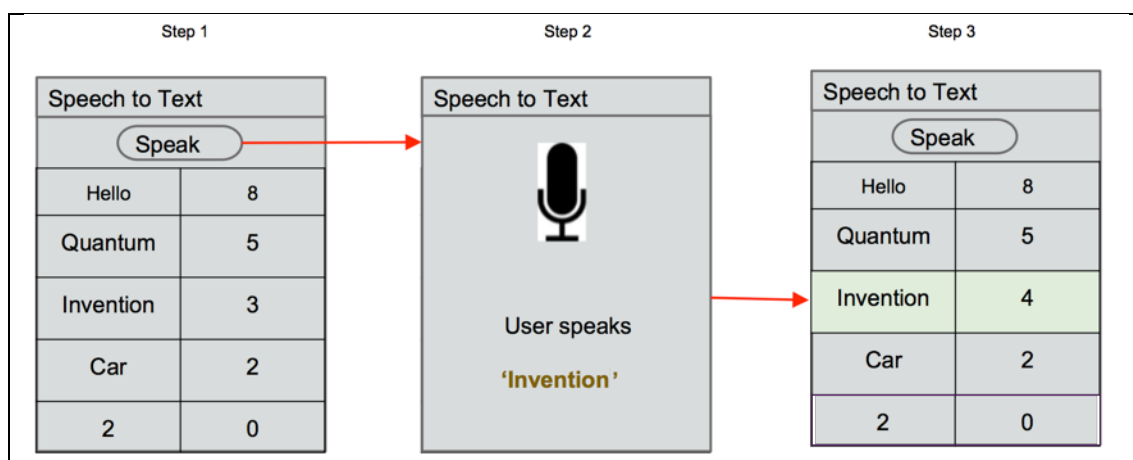
The candidate is required to design and develop an Android or iOS. application which converts Speech to Text.

- The application fetches Speech as input from user.
- Recognizes the input speech stream.
- Converts the speech into text.
- Identifies if the spoken phrase is present in the dictionary or not.
- Update and displays the frequency – i.e. the number of times a phrase is spoken.

User Interface

- The sample dictionary can be retrieved from the following API.
 - <http://a.galactio.com/interview/dictionary-v2.json>
 - You are free to use any library to fetch the data from online
- You may use the below mockup for your reference.
- The System will perform the following functionalities:
 - All words in the dictionary are displayed to the user.
 - User shall tap on a button and begin to speak.
 - If an exact match of the spoken phrase is available in the dictionary, highlight the phrase.
 - If the phrase is not available in the dictionary - user is notified about the non-existence.
 - Application will display the frequency of the spoken phrase.
 - E.g. If user says 'Hello' and if the phrase exists in the dictionary then increment the frequency by 1
 - The dictionary is sorted by the frequency
 - The most frequently spoken word is displayed at the top of the list followed by the next one.

User Interface – Mockup



We evaluate

- Quality of design and documentation
- Quality of product (look & feel, user interface etc.)
- Quality of code/ deliverables
- Extensibility of code
- Timeliness - the deadline should not exceed a **week** from the reception of this exercise.

We expect

- A working Android or iOS application.
- **Unit test** for the application logic. You may choose Junit or Apple XCode Test or any Test framework of your convenience.
- Submit for assessment
 - Working app.
 - Compilable source code.
 - Documentation that may help us understand your design.
- Breakdown of the effort (how many hours) you spent on each component of the project
 - Design, development, testing, packaging, documentation etc.
- Return this question sheet - after the test
 - Mark your name on this sheet with start and end time of the test.