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| **“We Hear You”– Survey Portal**   * By Hackaholics | |  |
| Problem | | |
| Often government organizations spend a significant amount of time and effort gathering data of citizens to analyze the data and act upon it to improve services or provide better offerings. It is also one of the costliest functions of any execution. So, it is important to make sure Government can gather this information with ease without much energy or funds to acquire the same. The alternative is to continue with the time-consuming process of gathering this data.  We look to address the unavailability of single source which captures the data of individual's occupation, health & travel details to assist the various government organizations to make informed decisions. | | |
| |  | | --- | | abstract image of a wave | | 1. “Arogya sethu” app is compatible only with the smart phones, while the other population have no alternative. 2. Ease of access of this IVR survey would be high compared to others 3. Solution leverages Business Analytics & Modern Analytics | | Solution Setting up call survey via web portal, gathering data and maintaining them with relevant personal updates of individuals. Leveraging modern analytics to provide intelligent data which would assist the decision makers. The Idea : “We Hear You” survey portal – Easy , Quick As data collection plays vital role during pandemic & emergency situations like Covid-19, creating the “We Hear you” call survey and utilizing the same for analytics and prescribe actions through interactive dashboards, reports, predictive analysis.   * Building an interface to collect data for implementing various services. * Mandatory call to be initiated by all mobile service providers. * Store & analyze large volumes of structured & non-structured data with optimized systems. | |



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| Web Portal  **Language**  Java, Spring Boot  **Database**  MySQL Server or IBM Open Shift  **Dashboard**  HTML, CSS, Bootstrap, Chartjs  **Chatbot**  IBM Watson Assistant, Node js | “We Hear You” Process:  * A government authorized admin will login to the web-portal. * Admin would trigger a call using the web portal UI. * Functions using the Node.js/ Spring framework of Java will connect to the database. * IBM Discovery will search the network provider database and will trigger a call to the set of individuals basis the selected criteria in the functions. * User will receive an audio call requesting to share their information using the IVR Menu. * The IVR Menu is designed using twilio & text to speech API. * The collected information is stored in MySQL database using cross-work framework. * Using modern analytics & business analytics with the help of chartjs - java script library, insights of gathered information would be provided in the various dimensions via multiple dashboards to give the government organizations a holistic view of the citizens. * Gathered data is monitored using standard procedures in MySQL to search the database and capture any incomplete entries from individuals. * A flag will be set for the incomplete entries to re-trigger a call for those individuals on a set cadence. * The chatbot option created using the IBM Watson assistant is part of the UI which can be leveraged by the government authorized admins for assistance in understanding the trends from dashboard to make informed decisions. |  |

# Architecture

**Benefits of the portal features**

The analytics from this portal can be used by the government entities for the below:

* Risk prediction: To predict the risk of the pandemics location wise and can restrict the spread.
* Communication channel: Notification and alerts sent to citizens about the various factors related to precautionary measures or announcements.
* Services: Provide services to the needy people in an organized way, rather than providing it randomly by assessing the various categories: no of citizens to be tested vs tested, needing assistance, etc.
* COVID-19 Test: leveraging data about symptoms -- in order to perform home tests by govt.
* Coverage Areas: By utilizing the data we can cover all areas and all types of users.
* History: We can determine the travel history and ease the contact tracing process.