

Mosquito Zero™

Mosquito Zero is an application that is designed to demonstrate the efficiency and effectiveness of information, education and communication between public authorities and citizens regarding *Aedes aegypti*, the diseases this mosquito transmits and the health impacts, providing citizens with a smooth and accessible channel of communication about the mosquito and arboviruses through the application and virtual robots.

Using automated point-of-conversation technology (Chatbot for interactivity with the citizen and the city of Salvador, through Facebook, messenger and social network), this is a bot/application that can interact with users of Facebook, Instagram, Tweeter, other applications, and web environments, in an intelligent and humanized way. It responds to and guides users regarding the main problems and related solutions to *Aedes aegypti* and its pathologies, as well as the information to the public management.

It is an application that has agility and precision, it is fast, friendly and accessible in a technological environment of +1 billion users, with personalized and integrated information of content between public authorities and the user. Mosquito Zero can cross communications and notify the number of users who accessed the bot application; as well as number of user interactions; % of most accessed organizations; % of errors and quizzes (evaluation of user knowledge); number of messages that the



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bot was unable to interpret; number of users who re-interacted with the bot; number of users who demonstrated satisfaction with the interaction with the bot.

The application has the following functions:

A - Interaction on *Aedes* (Morphology, Biology and Behavior);

B - Quiz (Knowledge Assessment) at the primary, intermediate and advanced levels;

C - Geolocation of the nearest health units;

D- Geolocation of vaccination units against yellow fever;

E - Interaction on arbovirus (symptoms, treatment, diagnosis)

F - Preventive measures;

G- Self-service terminal (Bot) for face-to-face evaluation and feedback.

The application is currently installed in a totem in the main shopping malls in the city of Salvador, Bahia, Brazil. The proof of concept is now being validated, evaluating the number of interactions between the user and the robot; interacting with children, young and old, low to medium income population. Furthermore, there is an application which is being validated more specifically by young people who interact with the web, mainly in social networks. It is worth emphasizing that the number of interactions between the user and the robot demonstrates the population's interest in learning about mosquito prevention and control measures in homes.

