

Components Implementation and Integration For Decision Support in Food-Borne Decease Epidemy*

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Abstract

The article describes the implementation of applications dedicated for conducting interviews with patients and inspection of food serving and selling objects during an epidemic of foodborne diseases. Interviews with patients and objects inspections must be conducted in a relatively short time. Then, the dates, places and nutritional content of eating food are determined within a fixed number of days before the first symptoms of illness. The people with whom the food was eaten are also recorded. The number of patients to be interviewed is relatively large compared to the number of sanitary inspectors. Therefore, there is a need to establish a schedule for interviews. This must be done in the shortest possible time to determine the sources of spreading the disease as quickly as possible. Every day, new patients arrive dynamically, so the process of modifying the interview schedule is permanent. In result of interview the list of objects to inspected is received. Such a problem for epidemics of foodborne diseases is not considered in the literature.

Keywords: epidemics of foodborne diseases, interviews with patients, objects inspections, genetic algorithm, application architecture