

Agricultural Assistant Chatbot using Artificial Neural Network

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Abstract: *This study presents the development of a chat room and a chatbot designed to facilitate discussions on prevalent farming issues among peers and experts. Its primary aim is to provide timely support to farmers in making informed decisions about their farming practices. To create a structured framework for these conversations, a standardized set of questions was formulated through consultations and surveys involving farmers, experts, and other stakeholders. The questions were analyzed to extract 'intents,' representing the specific information or assistance users might seek, and 'examples,' which are concrete instances users provide to express their particular intent. Additionally, 'entities' were identified to represent distinct objects or concepts related to these intents. The model was trained using the Artificial Intelligence Markup Language (AIML) to predict the intent based on the provided examples. This training process enhances the chatbot's ability to understand and respond to user queries effectively. Furthermore, the chatbot was deployed on a cloud platform, reducing the computational resources required on the client end. This approach ensures accessibility and usability for a broader user base without significant hardware constraints.*

Keywords: Chat-Bot, Agriculture, Chat-room, Artificial Intelligence, Farming Industry, intents, examples

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