**MamaBot A System Based on ML and NLP for Supporting Women and Families during Pregnancy**

**Abstract :**

Artificial intelligence is transforming healthcare with a profound paradigm shift impacting diagnostic techniques, drug discovery, health analytics, interventions and much more. In this paper we focus on exploiting AI-based Pregbot systems, mainly based on machine learning algorithms and Natural Language Processing, to understand and respond to needs of patients and their families. In particular, we describe an application scenario for an AI-Pregbot delivering support to pregnant women, mothers, and families with young children, by giving them help and instructions in relevant situations

**EXISTING SYSTEM**

Pregbots receive increasing attention from media and industry, but at the same time it is notyet well known what Pregbots really are, what they can be used for and how to create them. The goal of this work is to answer these three questions by analyzing existing platforms, products and technologies, and additionally developing an exemplary Pregbot. Explaining what Pregbots are, demystifying what to use them for and showing how to create them will help more people to be able to use and create Pregbots and thereby accelerate the development of the Pregbot ecosystem. Starting by defining fundamental terms, the first half of the work focuses on showing available platforms, products and technologies, while the second half guides through the development of an exemplary Pregbot, including user interaction design and software architecture.

**EXISTING SYTEM ADVANTAGES:**

• It is used for general conversation not for the specific task.

**3.3 PROPOSED SYSTEM**

This is an automated chat robot design to answer users frequently asked questions, earlier natural language processing techniques were using to design this robots but its accuracy of giving correct answer was less and now due to Deep Learning algorithms accuracy of giving correct answer increase, so here using python deep learning project we are building PREGBOT application to answer users questions.

To implement this technique first we train deep learning models with the train data (all possible question’s answers) and whenever users give any question then application will apply this test question on train model to predict exact answer for given question.

Earlier companies were hiring humans to answer user’s queries but by using this application we can answer user’s question without using any man power. Chabot can be described as software that can chat with people using artificial intelligence. Chabot ’s are generally used to respond quickly to users. Chabot’s, a common name for automated conversational interfaces, present a new way for individuals to interact with computer systems. Traditionally, to get a question answered by a software programinvolves using a search engine, or filling out a form. A Chabot allows a user to simply ask questions inthe same manner that they would address a human. There are many well-known voice-based catboatscurrently available in the market: Google Assistant, Alexa and Siri. Chabot’s are currently being adoptedat a high rate on computer chat platforms.

To implement this project we are using python deep learning neural networks and NLTK (natural Language Processing API) to process train and test text data.

**PROPOSED SYSTEM ADVANTAGES:**

* It will be more useful for the pregnancy women.

**HARDWARE REQUIREMENTS**

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| • | System | : Pentium IV 2.4 GHz |
| • | Hard Disk | :40GB |
| • | Floppy Drive | : 1.44 Mb |
| • | Monitor | : 15 VGA Colour |
| • | Mouse | : Logitech |
| • | Ram | : 512 Mb |

**SOFTWARE REQUIREMENTS**

* Operating system : Windows 10

• FRAMEWORK : DJANGO

* Coding Language : python