LITERATURE SURVEY FOR SMART FASHION RECOMMENDER

SURVEY PAPERS:

1)

Author Name: M.Mamatha, C.Sudha

- **Title:** Chatbot for E-Commerce Assistance: based on RASA
- **Publication website:** Turkish Journal of Computer and Mathematics Education
- **Published Date:** 10 May 2021.

OBJECTIVE:

Whenever a customer using an Ecommerce sites like Amazon, Flipkart etc. he may face issues which may trouble him. It takes time for the customer support to resolve the customer issues since billions of people are using those platforms and reporting issues regularly.

This bot will be useful for filtering the products from whatever the ecommerce sites it has been incorporated it with here the own site developed, which runs in local server as other ecommerce api procurement is taking much time than expected and also replying to some of the issues before they get to the customer call center.

PROPOSED MODEL:

Rasa Modules:

A raw chatbot build on top of deep learning and machine learning techniques basically uses any of the frameworks like tensor flow etc. They need to be modeled from scratch.

But using Rasa we simply use the modules provided by rasa to train the inbuild model with the input data where the intent from the user can be get and also customizing the output for the user intent.

2)

Author Name: A. R. D. B. Landim, A. M. Pereira,

- **Title**: Chatbot design approaches for fashion E- commerce: an interdisciplinary review
- **Publication website**: https://www.tandfonline.com/loi/tfdt20
- **Published Date**:02 Nov 2021

Literature Review:

A first distinction of chatbots studies is along the lines of computational aspects (i.e. aspects related to the area of Computer Science or Information Technologies, such as the use of NLP) and non-computational aspects (i.e., all other aspects such as studying consumer acceptance).

Most research on chatbot computational aspects had English as their primary language (76.3%), followed by papers on Indonesian chatbots (6.8%) and other languages like Chinese and Bangla.

it is also worth mentioning that, while non-computational research mainly employed a diversity of ready-to-use chatbot tools like Amazon Alexa, computational papers usually focus on chatbot development using a specific programming language.

3)

Author Name: Jhonny Cerezo, Juraj Kubelka, Romain Robbe's

- **Title:** Building an Expert Recommender Chatbot
- **Publication website:** https://www.researchgate.net/publication/335645153
- **Published Date:** May 2019

Literature Review:

Software bots. Leboeuf developed a taxonomy of software bots Følstad and Brandtzæg argue that HCI may transition from graphical to conversational interfaces via chatbots

They also conducted a survey of chatbot users, finding that the most common reason, by far, was productivity (68%)

Pharo. Pharo is an open-source programming language, with a strong community concentrated in Discord (a chat platform service) and a mailing list.

The chatbot identifies source code artifact names (key-concepts) in user messages, e.g., in “Who is GLMAction class expert?”, the key-concept is “GLMAction”.

Inverse document frequency (IDF) algorithm:

IDF (t, D) = log |D| /1 + TF (t, D)

where t is a user message word, D is the IDF-dataset, and TF (t, D) is term frequency algorithm computing number of term t occurrences in **D.**

IDF is a numerical statistical method reflecting how important a term (word) is in a user message. The algorithm uses an IDF-dataset (D) that includes all questions that we extracted from the Pharo Discord chat channels.

4)

Author Name: Amir-reza Asadi, Reza Hemadi

- **Title:** Design and implementation of a chatbot for e-commerce
- **Publication website:** ICTD (Information Communication Technology and Doing Business)
- **Published Date:** 2018

Literature Review:

This research is following the usage of conversational interaction for existing online stores whether they sell goods or services.

Since WooCommerce is the most popular solution technology for e-Commerce and 43% of the entire of internet is using it, we have implemented the project based on WooCommerce.

Telegram is the most popular messenger in Iran the bot is implemented based on the Telegram API but the purposed design can also be implemented in a pop-up window of internet browser or Facebook messenger with a few modifications.

Related Works:

Chatterbots are not new programs in the computer world and ELIZA, the first chatter bot was released in 1966 by but most of the existing chatbots are mainly for recreational and research purposes.

Most notable chatbots that were designed with the purpose of conversational commerce were released by the banking sector, for example DBS bank of Singapore has created its own virtual assistant which is called Digi Bank.

chatterbot is integrated with their website which is coded in PHP and has a MYSQL database. To make the chatterbot intelligent they used River Script.

5)

Author Name: Siddharth Gupta,Deep Borkar

- **Title:** An Ecommerce Website Chatbot
- **Publication website:** International Journal of Computer Science and Information Technologies
- **Published Date:** 2015

Literature Review:

A user visiting an E-commerce may look for a specific product, or generally browse the website. The search tools use keyword matching to display multiple results to the user's query

The search tools fail to deliver relevant results when ambiguous and imprecise words is used to describe a product.

The chatbot attempts to address the above-mentioned issues by presenting a more intuitive way of interacting with the website. It interacts with you and also suggests products suitable for you.

This project takes the FAQ chat approach, where instead of using a complex Natural Language Processing System and logical inference, a simple but large set of patterns matching templates will suffice

6)

Author Name: Maria D. Illescas-Manzano , Noe Vicente Lopez

- **Title:** Implementation of Chatbot in Online Commerce, and Open Innovation
- **Publication Website:** Journal of Open Innovation
- **Published Date:** May 2021

Literature Review:

Chatbots are conversation engines that interact in real time with customers, machine operators, maintenance workers, etc. In addition, they can offer advanced dialogue and technology conversations using machine learning (ML) and artificial intelligence (AI) enhancements

Different types of chatbot:

Based on rules.

Smart. This chatbot is based on artificial intelligence, by which it collects information through conversations with customers.

Hybrid. This is a mixture of the two previous types, combining rules and artificial intelligence.

Objectives:

Analyze the usability of the platform to generate leads (implementation, use, data processing, and effectiveness in established conversations).

Design and implement a chatbot for the e-commerce of a company.

Evaluate the results of implementation.

Uses:

In the field of health, due to the coronavirus disease 2019 (COVID-19) situation, in Germany a chatbot was designed to provide information related to preventing the disease and detecting possible symptoms.

American Eagle Outfitters, in the field of fashion, and Domino's Pizza [33], in the field of restaurants, have launched chatbots to collect orders and make product suggestions

7)

Author Name: Anusha Vegesna, Pranjal Jain, Dhruv Porwal

- **Title:** Ontology based Chatbot
- **Publication Website:** International Journal of Computer Applications
- **Publication Date**: January 2018

Proposed System:

The proposed system is an Ontology based chat-bot which will be mainly based on the E-commerce domain.

Ecommerce website APIs (Ebay website which is freely available) are used as the data source.

Ontology template is built using PROTEGE platform that retrieves data from the data source (using Jape rules).

Ontology follows java object-oriented approach, such as inheritance to avoid redundancy that prevails in the existing systems

Modules Used:

Knowledge base (KB)

Ontology Template

8)

Author Name: B. Erdebilli

- **Title**: Development of an E-Commerce Chatbot for a University Shopping Mall
- **Publication website:** https://www.hindawi.com/journals/acisc/2021/6630326/
- **Published Date:**20 March 2021

Objective:

This work attempts to overcome this ongoing challenge by creating a chatbot for shopping mall. The chatbot's purpose is to have a smart, accurate, and real-time conversation with the students.

In this way, users can chat with the bot to inquire about particular items they seek to purchase and pay online for the items before visiting the mall.

The chatbot will be accessible via portable mobile devices or computers, which students can log in to anywhere and anytime on campus, thereby providing a 24-hour online service.

WORKING:

chatbot is an automated AI software program that allows for human-bot interaction. These conversations can be implemented through text interfaces and voice interfaces.

Besides, chatbots are embedded AI features that accompany websites and messenger applications and, in some instances, serve as standalone bot.