

## E-Commerce Chatbot

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**Abstract** - This document shows the required format and appearance of a manuscript prepared for SPIE e-journals. The abstract should consist of a single paragraph containing no more than 200 words. It should be a summary of the paper and not an introduction. Because the abstract may be used in abstracting and indexing databases, it should be self-contained (i.e., no numerical references) and substantive in nature, presenting concisely the objectives, methodology used, results obtained, and their significance. A list of up to six keywords should immediately follow, with the keywords separated by commas and ending with a period.

Many online markets are currently beginning to replace the traditional market. Due to the increased competition in the online market, shoppers expect sellers to deliver the best customer care, hence many online marketers provide round-the-clock support. If it is performed manually, this task requires a lot of money. A chatbot can be used as an automated solution for it. The bot must be able to respond promptly and accurately. This study makes a suggestion for an intelligent bot built on an Android application that can serve as an assistance for online shopping. The e-commerce application uses this chatbot. The Chatbots are able to revolutionize customer service and internet support. Fashion firms also started using chatbots to give individualized customer experiences. Chatbots is having various uses in various fields like medicine, education, and e-commerce. The E-commerce industry is the industry where interaction between customer and retailer is important for a successful business as well as it is important in order to understand the requirements and expectations. chatbot acts as a virtual assistant. This paper's objective is to provide an integrative review by thoroughly classifying current research on the subject and to guide upcoming investigations.

**Key Words:** E-commerce, Chatbot, Shopping, Customer, Communication, etc

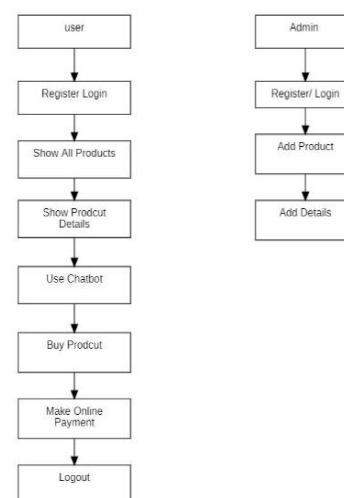
### 1. INTRODUCTION

An E-Commerce chatbot is a bot based on Artificial Intelligence. It is Virtual Assistant which is able to answer customers' questions and engage customers. chatbots are the best tools to facilitate conversational marketing or chat commerce.

It is helpful to enhance the shopping experience of customers/buyers. The main goal of this is to present an online shopping app with an integrated chatbot that saves the time of the customer and is helpful in solving their queries quickly and also helps to choose a good product. A chatbot is a better choice than hiring employees for customer support as it is very expensive and not possible to serve effectively all time.

- Chatbots for e-commerce are typically designed to:
- Provide complete buyer's purchase
- Give more information about the product to the customer
- Provide customer support
- Interact effectively

### 2. PROPOSED SYSTEM



#### 1. System Architecture

In the existing system, there is no customer support available in the form of a chatbot on E-commerce sites. So in the proposed system, we are implementing a chatbot in E-commerce.

## Data flow Diagram 1



Fig. 2. Data flow Diagram 1

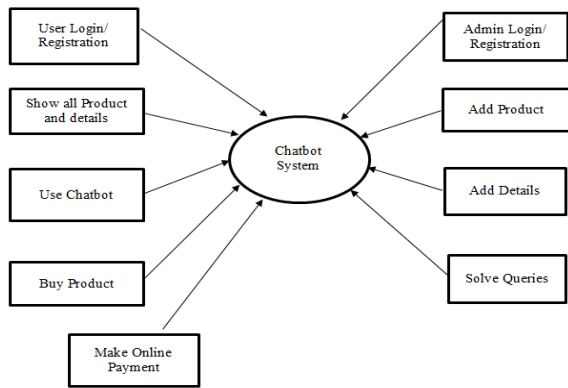


Fig. 2. Data flow Diagram 2

## 2. Activity Diagram

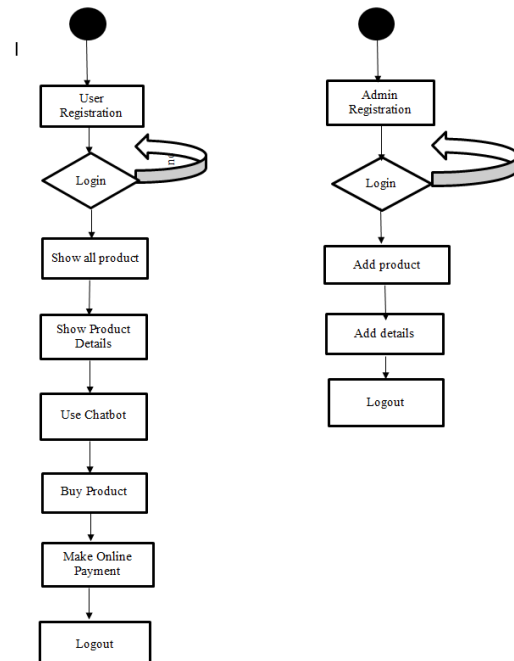


Fig. 2. Activity Diagram

## UML Diagrams

Unified Modeling Language is a standard language for writing software blueprints. The UML may be used to visualize, specify, construct, and document the artifacts of a software-intensive system. UML is process independent, although optimally it should be used in a process that is use case driven, architecture-enteric, iterative, and incremental. The Number of UML Diagram is available

- Use case Diagram.
- Activity Diagram.
- Sequence Diagram.
- Class Diagram.
- Component Diagram
- Deployment Diagram

### 1. Use Case Diagram

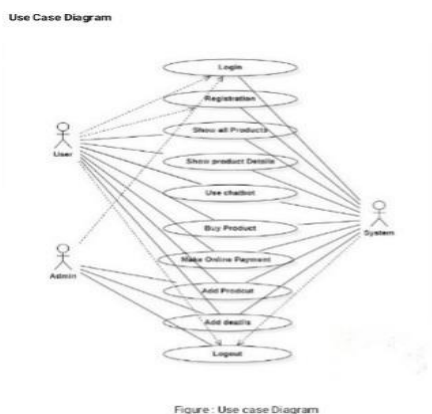


Fig. 1. Use case Diagram

### 3. Sequence Diagram

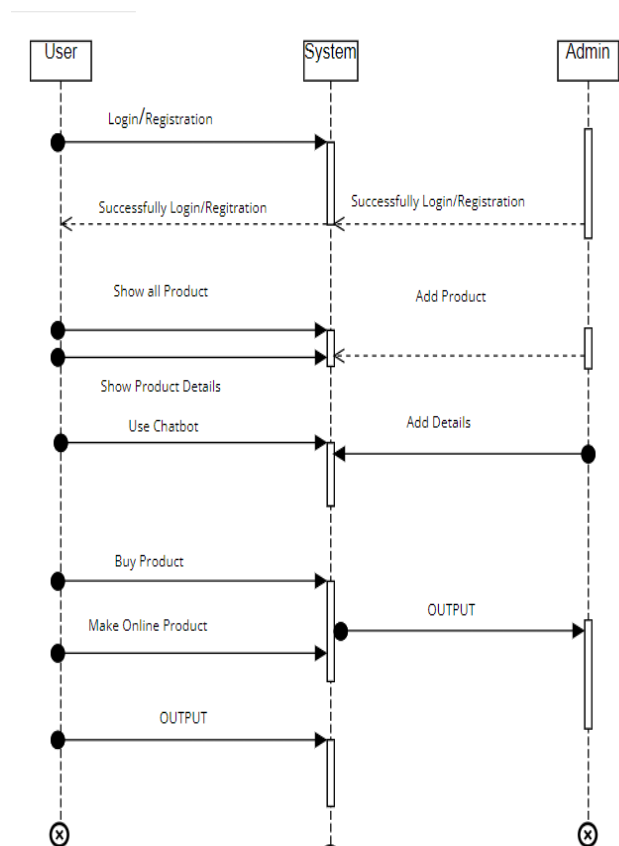


Fig. 3. Sequence Diagram

#### 4. Deployment Diagram

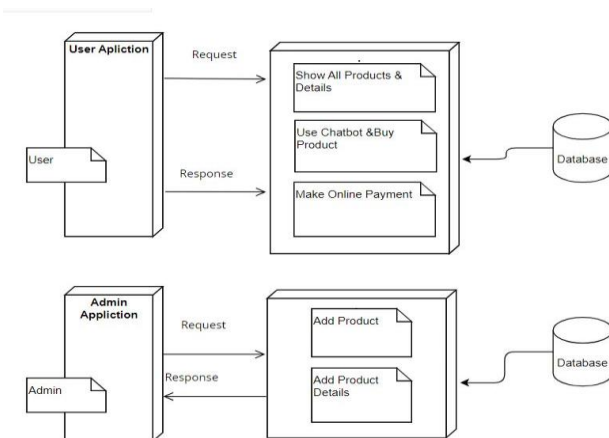


Fig. 4. Deployment Diagram

#### 4. Class Diagram

Class Diagram

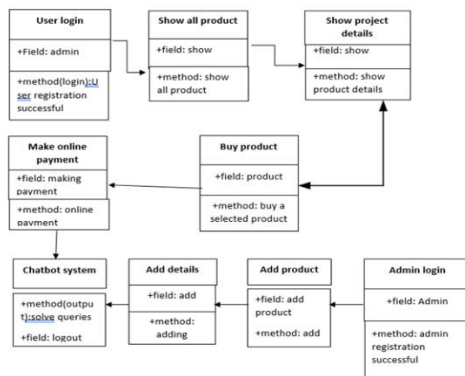


Fig. 4. Class Diagram

#### 4. Component Diagram

Component Diagram

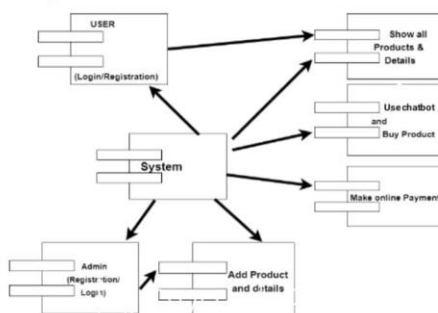


Fig. 4. Class Diagram

#### 3. ADVANTAGES

1. Chatbots Can Enhance Sales
2. Chatbots Can Manage Accounts
3. Chatbots are Customer Executives

#### 4. APPLICATION

1. Online Shopping
2. Customer Service

#### 5. CONCLUSIONS

The Chatbot uses artificial intelligence and hence understands how users react more effectively. Chatbot is able to react like a human so that the effort taken by human beings can be easily produced. Therefore, this paper is intended to introduce a chatbot based on the E-commerce engine which seeks to improve the user's engagement with the E-Commerce engine. Chatbot stores a variety of answers, but can also consider intricate user feedback and hence includes appropriate answers and product recommendations.

#### 6. REFERENCES

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