Augmented Reality Chatbot: Increasing User Engagement

Team Details

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Problem Statement

Augmented Reality Chat-bot: Increasing User Engagement

Problem: Traditional chatbots are limited by the text-based interface, which can be difficult for users to understand and interact with. This can be especially problematic in areas where users need to be able to visualize information in order to make decisions, such as in customer service, healthcare, and education.

Solution: AR chatbots can overcome these limitations by overlaying digital information in the real world, allowing users to interact with information in a more natural and intuitive way. This can make it easier for users to understand complex concepts, make informed decisions, and complete tasks more efficiently.

Existing solution/Literature Survey

Customer Support and Service:

Many companies have integrated AR chatbots into their Customer Support and Service. Many companies have integrated AR chatbots into their customer support systems. Customers can use AR-enabled apps or devices to get virtual assistance and visualize solutions to their issues. For example, an AR chatbot can help troubleshoot technical problems by overlaying instructions on the physical product customer support systems.

Tourism and Navigation:

AR chatbots have found applications in tourism and navigation, where they can guide tourists through landmarks, historical sites, and cities. Users can point their devices at locations to receive relevant information and directions.

Company – Google Maps

Education and Training:

AR chatbots have been utilized in educational settings to engage learners with interactive content. They can provide real-time explanations of complex concepts, offer language learning support, and deliver interactive quizzes through AR interfaces.

Proposed solution

- The proposed solution is versatile and can be adapted to any use case. This is because the AR chatbot is trained with data specific to the use case, so it can be used for a variety of purposes. For example, the AR chatbot could be used for medical purposes, e-commerce, customer service, or education.
- The Application uses Vuforia, which is a maker-based AR platform. This means that you can use the platform to create AR experiences without having to be an expert in AR development. After the development AR chatbot with all the necessary scenes we can deploy the AR chatbot in websites or in any app with built-in unity packages for Android, IOS, and the web.
- The AR chatbot will use natural language processing (NLP) to communicate with users. This means that users can talk to the chatbot using real-time speech and we will use deep learning NLP algorithms to understand what users are saying. This will allow the chatbot to provide accurate and relevant responses to users' questions and request

Innovation in 360°

Tech aspects

- **Hardware**: AR chatbots require AR hardware, such as a smartphone or tablet with AR capabilities.
- **Software:** AR chatbots require software to run. This software can be either built in-house or purchased from a third-party vendor.
- **Data**: AR chatbots require data to answer user questions and provide information. This data can be gathered from a variety of sources, such as text documents, images, videos, and 360-degree content.
- Algorithms: AR chatbots use algorithms to process data and provide information to users.
 These algorithms can be either simple or complex, depending on the purpose of the chatbot.
- **User interface**: The user interface of an AR chatbot is important for making the chatbot easy to use and understand. The user interface should be designed to be intuitive and engaging.

Business aspects

Cost: The cost of building and deploying an AR chatbot can vary depending on the complexity of the chatbot and the hardware and software that is used.

- **Marketing**: AR chatbots need to be marketed to users in order to be successful. This can be done through a variety of channels, such as social media, search engine optimization, and paid advertising.
- **Monetization**: There are a number of ways to monetize AR chatbots. Some common methods include charging users for access to the chatbot, selling advertising space, or generating revenue from in-app purchases.
- **Licensing**: AR chatbots can be licensed to other businesses. This can be a way to generate revenue from the chatbot.

Comparison/Advantages of Proposed Solution with Existing

Feature	AR chatbot	Traditiona 1 chatbot
Technology	Augmented reality	Text-based
Engagement	More Engaging and interactive	Less engaging and interactive
Helpfulness	More helpful	Less helpful
Information	More information	Less information
Limitations	Requires AR hardware	Can be difficult to understand and interact with
Applications	Customer service, education, healthcare, retail	Customer service, education, healthcare

Advantages of AR chatbot

- More engaging and interactive: AR chatbots can provide users with a more engaging and interactive experience by overlaying visual information in the real world.
- **More informative**: AR chatbots can provide users with more informative experiences by overlaying images, videos, and other visual information in the real world.
- **More personalized**: AR chatbots can be more personalized by using the user's location and other data to provide more relevant information and assistance.