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WEDDING PLANNER CHATBOT

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ABSTRACT

Online chat bots have already proved their merits when it comes to bringing in business and providing customer support. Both of these factors that the wedding planning industry heavily relies on. .Instead of asking users to get to know the wedding service better,AI chatbots work the other way round. Chatbots have gained increasing importance for research and practice with a lot of applications available today.They provide coversational output in response,and if commanded ,can sometimes also execute tasks. Wedding planner chatbot development is thus a dynamic process over the course of their interactions with customers,the bots get smarter and allow the wedding planner business to offer improved services and user experiences.Customers are constantly increasing their information needs. Apart from the growing demand for more wonderful wedding experiences, They want businesses to meet the demand for communication and engagement across all media and platforms.The popularity of wedding planner chatbots is in rapid growth mode.

Keywords   *: Chatbot, Wedding Planner ,Media, Tasks,Platform.*

1. INTRODUCTION

The creation and analysis of intelligent agents (software and machines) is called Artificial Intelligence, or AI. It can be implemented in nearly each and every sphere of work. Intelligent machines can do many tasks – from labor work to sophisticated operations. Prominent trends in this field are human brain simulation, natural-language processing and neural networking etc. One of the typical examples of an AI system is a "chatbot". Artificial Intelligence will define the next generation of software solutions. This computer science course provides an overview of AI, and explains how it can be used to build smart apps that help organizations be more efficient and enrich people's lives. It uses a mix of engaging lectures and hands-on activities to help you take your first steps in the exciting field

There are number of approaches to human-computer interaction.One of them is via natural language(NL),which again has the more sub approaches and goals.In this paper we focus on chatbots, which are gaining popularity again due to success of the virtual assistants such as Siri,Evi,SVoice,Jeannie,CallMom and others.Communicating with systems based on natural language is very much appealing and of growing interest and importance also for industry.Natural language interfaces(NLI) offer a lot of new possibilities for humans to interact and collaborate with users .Chatbots are a form of artificial intelligence system that allows a human-computer interaction in a natural language form.They could be based on rule sets or neural networks in order to decide the correct answer to the users request.Chatbots are not restricted to certain application domains.They are flexible enough to be used in different applications scenarios and domains including systems for tourists recommending sights,hotels,or even complete travel plans.   Chatbots rely on pre-specified patterns that trigger the chatbots behaviour,restricting its space of interaction with users. A Chatbot is nothing but it is a conversational interface-voice,images,or text-that streamlines tasks by allowing users to engage naturally through language Amazon,Apple,Google, Microsoft and slack support chatbots and conversational interfaces.

The wedding planning sector is on the brink of a revolution due to technological advancements. Studies show that by 2020, almost 85% of bookings will be completed from a mobile device. Clients prefer these gadgets because they are convenient. As for wedding planning operators, chatbots could handle questions about the lightening , soundsystem, what to bring, and more, bringing complicated information from FAQs, wedding listings, and customer accounts together in one location. A chatbot ought to solve its users' problems otherwise is going to fail. Your bot must make it easier to get something valuable that existing methods can't match. If not, customers have got no incentive to use it over platforms they already trust and are familiar with. A good example is Perfect day which is designed to be an all-in-one wedding planner agent. The user tells him where they want to celebrate and when, plus any additional

requirements they might have (for food ,catering) and the bot does the rest. So, rather than using different platforms to find hotels and other relevant information, customers can do everything in one place

You should try to create a wedding planner bot that can handle complex inputs. The chatbot should handle all the request at once. However, technology is not at that point yet and a bot can't handle every situation as well as a human. Consequently, you need to make sure you have a well-designed exit strategy! The wedding planner bot has to understand when users are getting frustrated or when it does not have an answer to the query. In addition, the bot should also know when is the right time to handoff to a human agent. Giving multiple choice responses often leads to higher engagement rates. As a matter of fact, it is known that customers do not want to type every single answer, consequently, you ought to make sure that your bot has anticipated what they need and presented it when they actually need it. Providing multiple choice responses is almost a requirement these days! Just like us, Chatbots need to be trained regularly so they are shaped to tackle the daily queries from the users. The more you train the chatbot, the more independent and smart he will become.

The rest of the thesis is organized as follows:chapter-2 depicts the relevant work on chatbots and wedding planner chatbots.Chapter-3 proposes the wedding planner chatbot.Chapter-4 discuss the procedure and implementation.Chapter-5 concludes the thesis followed by references

2. LITERATURE SURVEY

An Interactive Web-Based Wedding Planner with Comparative Analysis Decision Support System : This web based wedding planner provides a platform for brides and grooms to acquire information on bridal products and services, as well as information of vendors registered with Wedding Arc hand make wedding planning reservations online with the simple click of a mouse. Thus, the long and tedious task of information gathering has been shortened and made more convenient. Most importantly, Wedding Arc also functions as a web based comparative analysis decision support system that allows the brides and grooms to subscribe to a service that will assist them in the process of wedding planning and preparations. The system assists brides and grooms in making decisions based on their preferences and budget while taking in updated and current market pricings for their desired bridal products and services [1].

Method and systems for internet based event planning and event management: A plurality of modules provides tools to plan and manage an event. An event planning system provides a method for planning and managing all aspects of an event. An event info centre provides a URL for an event where attendees of the event may access information for the event at once central location. A task manager allows users and event planners to create and assign plurality of tasks to event attendees. The created tasks of event attendees. The created tasks may assign to various users, modified, and deleted dynamically. Any changes made to event information by the planner may be dynamically updated on the event Web site. An expense tracker provides an improved method for managing event related expenses. A personalized event home page where users may view their tasks, agenda, and event information [2].

Organizing and planning device for weddings : The inventive device includes binder including a back cover, a front cover, and spine portion hingedly joining the back cover, and the front cover where in the binder further includes a plurality of open able retaining rings mounted to the spine portion thereof. A plurality of pocketed dividers, a plurality of monthly planning calendars, and a plurality of tabbed dividers are each recoverably and replaceable retained in the binder by the plurality of openable retaining rings. Each of the plurality of openable retaining rings. Each of the plurality of packeted dividers corresponds to an element of the wedding occasion.[3]

Interactive event planning and payment method and system :A method for an event organizer to arrange receipt of gifts and services rendered in conjunction with the event in which an online database of gifts and services is created, and each gift and services is associated with the gifts and services with the second price that is greater than first price, and can select gifts and services for purchase on behalf of the organizer and directs gift and service providers to provide the selected gifts or perform the selected service at the event. A difference between the first and second prices is determined and the organizer can use at least part of this difference to purchase gifts and services prior to event [4]

Internet-based wedding planning device with multipleinteractive capabilities and method of use: This invention is directed toward an internet-based, inter- active wedding planning and management program which allows a wedding

group, including the brides, grooms, guest, and wedding planner to interactively plan the wedding, where the bride is the primary account owner and can give each invited guest different usernames and passwords, along with the ability to give administrative access to others, such as a wedding planner, and can set up "user "access limitations which denies information to certain people regarding sensitive features of the wedding. The bride and her administrative users can assign tasks to various guests, which the invention tracks through to their completion. The invention also provides online and interactive features to assist in wedding planning and management, including budget calculators, wedding item organizers, task lists, calendar functions, guest manager functions, a message centre &community chat, printing managers, wedding day schedulers, and a wedding checklist.[5]

Computer system and method for providing an on-line mall : A computer system and method for providing an on-line mall. An on-line mall environment is provided. The on-line mall environment is partitioned into at least one community and having at least one store in each community. Each store is made available to a merchant to occupy. The merchant may customize the store by providing for storage on the on-line mall site design data and merchandise data. Customers access the on-line mall through a remote location. The customers may connect with the on-line mall web site through direct connection to the on-line mall or through links provided by other websites. Customer specific data is stored on the on-line mall allowing the customer to enter purchasing data one time for the many stores in each community. Customer purchasing selections are stored and submitted to the merchant on standard intervals.[6]

System for providing wedding management :A system including a terminal and a network configured to communicatively couple with the terminal, the network including a database configured to store information concerning the user and a wedding card, and a server configured to provide web services that include receiving personal information concerning a user, determining whether to authorize the user based on the personal information, granting a wedding card to the user based on the determination to authorize the user, where in the wedding card is associated with an upcoming wedding of the user, and providing access to a website for the user, where in the website provides a wedding

management system assisting the user in planning the upcoming wedding.[7]

Plan-based complex event detection across distributed sources: Complex Event Detection (CED) is emerging as a key capability for many monitoring applications such as intrusion detection, sensor-based activity & phenomena tracking, and network monitoring. Existing CED solutions commonly assume centralized availability and processing of all relevant events, and thus incur significant overhead in distributed settings. In this paper, we present and evaluate communication efficient techniques that can efficiently perform CED across distributed event sources.Our techniques are plan-based: we generate multi-step event acquisition and processing plans that leverage temporal relationships among events and event occurrence statistics to minimize event transmission costs, while meeting application-specific latency expectations. We present an optimal but exponential-time dynamic programming algorithm and two polynomial-time heuristic algorithms, as well as their extensions for detecting multiple complex events with common sub-expressions. We characterize the behaviour and performance of our solutions via extensive experimentation on synthetic and real-world data sets using our prototype implementation.[8]

An Analysis of Time-Dependent Planning :A framework for exploring issues in time-dependent planning: planning in which the time available to respond to predicted events varies, and the decision making required to formulate effective responses is complex. Our analysis of time-dependent planning suggests an approach based on a class of algorithms that we call anytime algorithms. Anytime algorithms can be interrupted at any point during computation to return a result whose utility is a function of computation time. We explore methods for solv- ing time-dependent planning problems based on the properties of anytime algorithms. [9]

A Web-Based Comparative Analysis Decision Support System: Wedding Arch :A long list of preparations usually awaits soon-to-be brides and grooms before their auspicious wedding ceremony. The most common hassles the brides and grooms face includes registration of marriage, wedding photographs, location for the occasion, dinner ceremony, guest lists, seat placements and the list goes on. Without guidance and recommendations, these brides and grooms face the unpleasantness of hunting for the suitable bridal products and services. The ideal world for any couple is to be able to retrieve information on the available products and

services, such as types of services and price lists, in the shortest possible time. However, the ideal world is very lowly part of reality. A web based wedding planner that lessens the hassles and rogressively shortened the time consuming process is a step towards the ideal world.   It would be desirable if the brides and grooms are able to acquire the information online or within the same location and subscribe to a service that is able to assist them in the preparations. Wedding Arch is a web based comparative analysis decision support system that assists the brides and grooms in the process of planning their wedding.[10]

 Wedding trends change throughout the years and are for the most part greatly influenced by many societal factors. These factors and trends influence many couples' choices when it comes to what they want in their weddings. The smaller, popular trends can seem the most important to brides, but the broader trends are just as important to consider when planning a wedding. Trends like the budget allotted and venue location can greatly affect the decisions made regarding the wedding planning (Daniels & Loveless, 2007)[11]. The wedding budget can be the biggest limiting factor for a bride when planning a wedding. The budget is considered in every decision about the wedding and determines how big and extravagant or simple and

small the wedding must be (Engstrom, 2008)[12]. In 2007, "the U.S. bridal industry [was] estimated at between $50 and $70 billion annually…Nearly 2.4 million marriages [were] performed each year" (Engstrom, 2008, p. 60). In 2012, the average couple had a $26,989 wedding (Grossman, 2012)[13].

This significant cost makes the already major event of marriage even more major. Currie (1993)[14] stated that, "many families save for years and spend considerable sums on wedding clothing and receptions, even though the event itself is short lived" (p. 404). Normally, the wedding planning period is thought of as a period of overwhelming excitement during which couples are much more likely to forget about their worries and go on a wedding planning spending spree (Daniels, Lee, & Cohen, 2012)[15]. In order to stay within their budgets, brides are spending more time in their wedding planning process to make sure they avoid any extra spending (Dosh, 2008)[16]. Some brides are even cutting costs by adopting a "good enough" attitude when planning their wedding (Dosh, 2008, p. 44). Weddings can be a daunting expense for manycouples. Luckily, new trends are helping couples tighten up their budgets by finding new cost-effective ways to make their wedding special

3. PROPOSED CHATBOT

ARCHITECTURE OF NODE-RED In the node-red first select the input node inject and give the name as hello, Now from the output node select the debug node and give the name as msg.payload.

- ➤ Connect the output of hello to input of msg.payload .The msg called successfully injected will appear on the screen now deploy.
- ➤ Now again successfully inject "hi".In the IBM cloud ,go to resource list and create resource. Now drag the assistant from IBM Watson through search filter.
- ➤ Edit the injected node hello as "hi"and click on done.
- ➤ Now, connect the assistant node to msg.payload and hello. hello input to input of assistant and output of assistant to input of msg.payload by changing the username as apikey and giving password.
- ➤ Change the service endpoint and workspace from edit function node copy the function and by clicking on the done it will be done.

Figure 1: NODE-RED Flow1

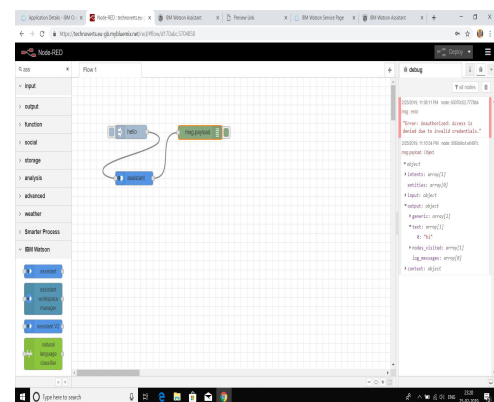- ➤ Now drag the function called output parsing and connect it to output of the assistant an dinput of the msg.payload.Now,go to deploy and that go to manage palette.
- ➤ After completing the above process go to user settings nodes and select the palette. Now install the node-red dash-board and click on install.
- ➤ In the node properties give group as home size as auto and example as text and click

on done.Now,drag the form from search filters and click the assistant input to form output. Create a new function and connect the new function to form output to input of assistant.Now,again select the msg.payload=msg.payload.text;from the functions.

➢ Now, the two text blocks onto the screen and connect the text blocks with the name you to the output of input parsing and otherone with the name bot to the output of output parsing.
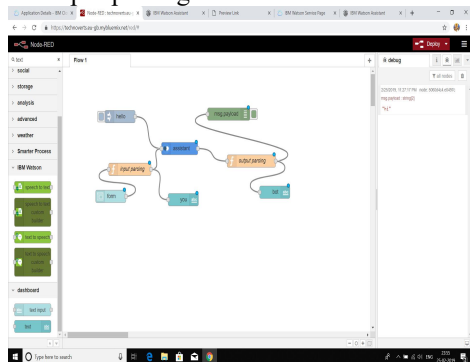

Figure 2:NODE-RED Flow 2

➢ Now, go to debug and give label as bot and you.Value format as{{msg.payload}} and click on done.After the above process is done create a new block and give it as form. On the right side of the screen click on dashboard and go to layout and click on home. Now, deploy the total block.

➢ Now, drag the audio out by searching it in the search filter and connect its input to output of output parsing. Now the again deploy the total block.

➢ Dash board is on the rightside of the screen and go to edit audio out node. Give TTS voice as shown in the figure and click on done.

➢ After the audio out is connected drag a switch .Edit switch node by giving data base as marriage events. Now, connect the one output of switch to marriage events and other to bot. Now again connect the output of marriage event to input of bot. Debug the above function and edit the function node which is dragged on to the screen by giving the name as database parsing .After the name is given as database parsing then select the function msg.payload=msg.payload events;

➢ In the node properties give the name as subscribe and click on done .Connect the database parsing to events clock output and output of database parsing to bot input. Now, againdeploy the function .Now

dialogie box default occurs click on submit.
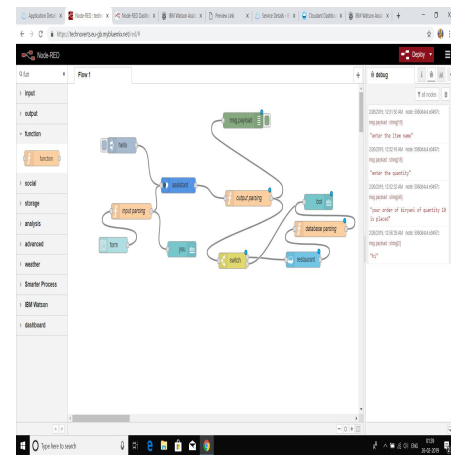
Figure 3: NODE-RED Flow 3

➢ Now login into your facebook account by giving the user name and password.Then go to the and create a page

➢ And give the page name as chatbot.Now,select the(…) in the page and click on view as page visitor.By clicking on the visitor we can visit the page.

➢ You can build a bot that automatically posts content into groups, responds to questions with extra information or takes action when mentioned in comments on a post.

➢ You can also build bots that can converse with people in Work Chat, providing information in real time, or handling requests with structured conversation elements like quick replies and persistent menus.

➢ While in groups, bots are able to consume and share information across a group of people asynchronously, bots in chat are best for direct real-time interaction with a single person or defined group of people.

➢ For instance, a chat bot can be used to send important reminders or notifications to someone based on an upcoming event like an interview or a meeting.

Figure 4:NODE-RED Flow 4

➢ After visiting the page go to settings on facebook developers and generate a page, Now,the events selected will be completed.

➢ In the new page subscription give the URL, verify token and select the required columns and click on verify and save.In the new page subscription select the subscription fields as messages and messaging.Postbacks and click on verify and save.

➢ Now a one more block from facebook page will be presented and select the page and attach it to the node-red and see weather the page is correctly on the flow.
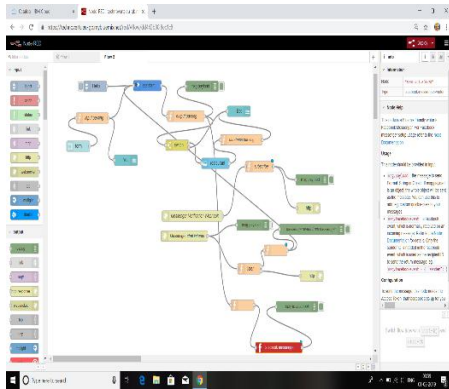
➢ Paste the flow-2 below the folw-1 see that both the flows are not one on other.Go to layout and click on home add the name,function and click on done.
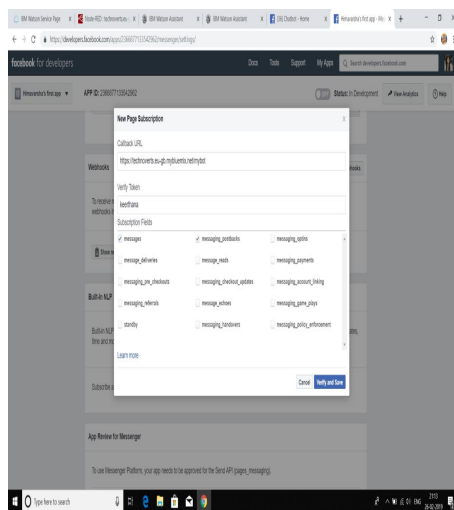
Figure 5: Facebook Integration

4. RESULTS AND DISCUSSION
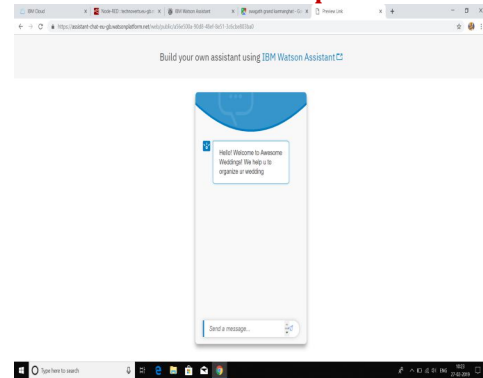
Figure 6: Welcome message

In the IBM Watson assistant we can create our own assistant .The assistant responds in the following manner. Firstly the greetings are given to the assistant bot when we open the preview link it directly gives that hello welcome to awesome weddings we can help you to organize weddings. Then we need to give the input as I would like to plan a wedding .Then bot asks to give the location which we are willing to. It gives some locations in your city .And we have to select one among them. After selecting the location the bot gives the function halls available in that location in that we have to select one function hall which we preferable. Then the bot gives the all information about the function hall which we selected before like cost, capacity and also google location link.
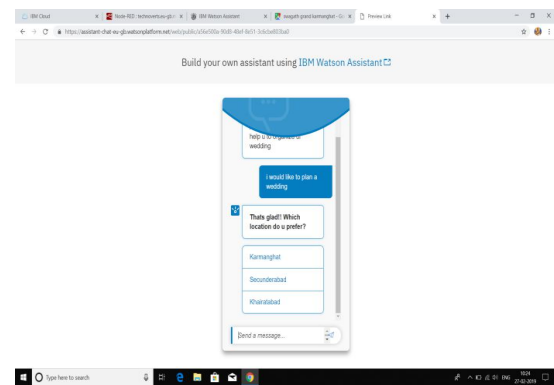
Figure 7: Output for first question

We need to select the options as per our necessity. Now ,when all the details required for the bot is given, it confirms our bookings at so and so place and on particular date with the fixed amount of budget.The marriage event can be easily planned by using chatbot with all the necessitives of us about the location, function hall, capacity, decoration, ratio of distribution of budget, number of visitors, items to be prepared and our budget.So, by responding to all the above we can easily make the event succcessfull.

101

Figure 8:output for second question

Figure 9:Output for third question

5. CONCLUSION

In this wedding planning system the user can see budget planning also. User can add all the cost details and finally can calculate the budget. It will reduce the money waste and pre allocate the money as well. The user can plan their wedding according to the time period left. Event by event user will take alerts from the system. If the person wants to search some vender relevant to that event he/she can use search engine and find. Current World finding wedding planner is easy. But finding wedding effective wedding planner is difficult. All of us know they charge high cost and sometimes not doing what the couple wants. So no worries with the "Your Dream" Virtual Wedding Planning system. User can plan everything by his own. No need to worry about pre knowledge and experience. System will take care everything and finally make more beautiful wedding.

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102

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