

ARTIFICIAL INTELLIGENCE BASED ADVISOR SYSTEM

FIELD OF INVENTION

[001] The present invention relates to the field of Artificial Intelligence (AI) based Advisor System. Particularly, the present invention relates to a system that serves as a leadership advisor, corporate advisor, business advisor, or personal advisor in any specialized structural setting and method thereof.

BACKGROUND OF THE INVENTION

[002] The world is gradually coming to terms and learning to interact with the Conversational AI models that have started playing a pivotal role in assisting us with our daily tasks at home through simple voice commands which responds in a pleasing tone. Some of the roles include setting a morning alarm, controlling our home electrical appliances, updating us about the weather, and initiating a phone call without having to look up a contact in the phone book.

[003] The core-underlying reason to invent and adopt an AI Advisor is to handle the limitations of a human advisor. The following are critical areas where humans have limitations – a human advisor has limits on his/her ability to recollect situational information, personal bias is often involved, individuals have different ways of reasoning – reasoning by analogy versus reasoning by first principles, humans have a limited understanding of the context and environment in question, human advisors have the industry expertise without the out-of-the-box problem solving ability, and many a times humans not knowing the unknown in the vast knowledgebase is a disadvantage.

[004] The key benefits to removing the man-in-between are the following. The AI Advisor provides a deeper level of personalization in the quality of advice rendered. There is a sea of knowledge available, yet the advice response is brief and to the point. The introduction of AI allows for a way of avoiding individual human judgements being made. This provides a better way to circumvent human ego and conflicts. The AI Advisor provides a great deal of support in avoiding corrupt practices. Machines have no fear of retaliation and hence can expect authentic advice.

[005] The support of Artificial Intelligence models has been found to be increasingly credible and valuable in several fields. AI models are devised to listen to interactions between a doctor and patient to ensure the prescription medication assigned by the doctor is in alignment with the recommendation provided by the AI trained on medical diagnostic data. In the case of fully or partly autonomous self-driving vehicles, AI models are used to provide suggestions on the lane change, halt and accelerate decisions to be made. In the financial services industry, AI models are used everywhere from customer verification to credit score assignment. In geographies with limited manpower - security and surveillance systems utilize AI models to signal and raise alarms on unprecedented events.

[006] The recent developments in Conversational AI have led to the introduction of OpenAI's ChatGPT, Google's Gemini and Microsoft's Copilot for users to try out and in some cases as an alternative to traditional search engines. Some of these Conversational AI Models and their instances will be free-to-use and some features are availed at a pay-per-use method. They are trained on massive amounts of data from across the web and serve as great products for a general-purpose web search. The invention in this disclosure is aimed at utilizing a state-of-the-art Conversational AI model and developing a system to fill in a super-specialized advisory role by training them on a specialized advisory-related data corpus, solving for the token limitation, compute capability limits, and an engineering workaround to solve for AI hallucination.

[007] US11488055B2 a prior art document discloses a training corpus refinement and incremental updating includes obtaining a training corpus having training samples, refining the training corpus to produce a refined training corpus of data, by applying to the training corpus overlap and noise reduction treatments, maintaining an incremental intelligence database based on filtered user feedback and having candidate feedback training samples to augment the refined training corpus, controlling integration of the candidate feedback training samples with the refined training corpus, and augmenting the refined training corpus with at least some of the candidate feedback training samples to produce an augmented training corpus. However, the invention fails to serve the teaching regarding leadership advices and business advices.

In view of the above problems there is a need for an Artificial Intelligence based Advisor System to serve as a leadership advisor, corporate advisor, business advisor, or personal advisor in any specialized structural setting.

OBJECTIVE OF THE INVENTION

- 5 **[008]** The primary objective of the present invention is to provide an Artificial Intelligence (AI) based Advisor System and method thereof to focus on textual data that enhances the quality of decision making for providing leadership advice, corporate advice, business advice or personal advice in any specialized structural setting while preserving the confidentiality of the advice.
- 10 **[009]** Yet another objective of the present invention is to generate various output types such as audio, video, image, neural response, and other multi-dimensional outputs.
- [0010]** Yet another objective of the present invention is to develop and update a specialized data corpus through a robust iterative feedback loop.
- 15 **[0011]** Yet another objective of the present invention is to store each message as an individual text without revealing the name of the person in the conversation.
- [0012]** Yet another objective of the present invention is to handle the unsatisfactory responses and parse any redactable, non-communicable, unfriendly output to predefined statement.
- 20 **[0013]** Another objective of the present invention is to eliminate AI hallucination, meaning keeping the creativity in response at the lowest level, thus preserving the factual correctness of the advice provided.
- 25 **[0014]** Other objectives and advantages of the present invention will become apparent from the following description taken in connection with the accompanying drawings, wherein, by way of illustration and example, the aspects of the present invention are disclosed.

BRIEF DESCRIPTION OF DRAWINGS

[0015] The present invention will be better understood after reading the following detailed description of the presently preferred aspects thereof with reference to the appended drawings, in which the features, other aspects and advantages of certain exemplary embodiments of the invention will be more apparent from the accompanying drawing in which:

[0016] Figure 1 illustrates the block diagram of the computing device in accordance with the embodiment of the present invention.

[0017] Figure 2 illustrates the block diagram of user interface unit.

[0018] Figure 3 illustrates the block diagram of high-level modules and components of the system.

[0019] Figure 4 illustrates the design of the user interface in accordance with the implementation of the embodiment.

[0020] Figure 5 illustrates the block diagram of the workflow automation module.

[0021] Figure 6 illustrates the block diagram of components of the model integration & training module.

[0022] Figure 7 illustrates the flow diagram of interaction data monitoring process and recursive feedback loop.

[0023] Figure 8 illustrates the block diagram of text splitting functionality.

[0024] Figure 9 illustrates the flow diagram of the steps to be followed in the data corpus developmental process.

[0025] Figure 10 illustrates the flowchart of complete end-to-end interaction and data flow across the different system components and modules of the infrastructure.

SUMMARY OF THE INVENTION

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[0026] The present invention provides a product system, process method, and experimentally proven value range composition to develop an Artificial Intelligence (AI) Advisor; said product system could be implemented by a user interface unit, workflow automation module, Conversational AI Model, data corpus, data monitor, and web services offerings. The said process method comprising: development of a specialized data corpus to feed the advisory model, updation of the data corpus through a robust iterative feedback loop, best practice recommendations for confidentiality, security, and data integrity throughout the architecture as process control. The said value range composition comprising: a range of proven values for temperature in the Conversational AI Model, chunk size and chunk overlap size in the recursive text splitter, future component upgradations and configuration value moderation directed towards the development of a comprehensive super-intelligent AI advisor with minimal hallucination and a workaround to gracefully handle prompts for which the data corpus has insufficient/incorrect context.

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DETAILED DESCRIPTION OF INVENTION

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[0027] The following detailed description and embodiments set forth herein below are merely exemplary out of the wide variety and arrangement of instructions which can be employed with the present invention. The present invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. All the features disclosed in this specification may be replaced by similar other or alternative features performing similar or same or equivalent purposes. Thus, unless expressly stated otherwise, they all are within the scope of the present invention.

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[0028] Accordingly, those of ordinary skill in the art will recognize that various changes and modifications of the embodiments described herein can be made without departing from the scope

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of the invention. In addition, descriptions of well-known functions and constructions are omitted for clarity and conciseness.

[0029] The terms and words used in the following description and claims are not limited to the bibliographical meanings but are merely used to enable a clear and consistent understanding of the invention. Accordingly, it should be apparent to those skilled in the art that the following description of exemplary embodiments of the present invention are provided for illustration purpose only and not for the purpose of limiting the invention.

[0030] It is to be understood that the singular forms “a,” “an,” and “the” include plural referents unless the context clearly dictates otherwise.

[0031] It should be emphasized that the term “comprises/comprising” when used in this specification is taken to specify the presence of stated features, integers, steps, or components but does not preclude the presence or addition of one or more other features, integers, steps, components, or groups thereof.

[0032] The present invention relates to a system that provides advice to leadership in any structural setting and for any specialized business operations and method thereof.

[0033] Some of the key underlying technologies that have given way to developing this invention are interactive desktop/tablet/mobile instant messaging user interfaces, workflow automation modules, model integration and training module, usage-based Conversational AI Model instances, software system development modules, web service deployment offerings, database, data browsers and concurrent service health and logs monitoring dashboards.

[0034] The data security best practices suggested in this disclosure play a vital role in the confidentiality of the AI Advisor – Client communication. Data leakage and Personally Identifiable Information (PII) leakage across the technology platforms have been observed and guarded in the best manner possible throughout the process flow for maintaining data integrity.

[0035] Fig. 1 illustrates the example computer system architecture (100) in accordance with the disclosure. The system architecture (100) includes a central computer bus (101) with connections to a network interface (102), a memory unit (103), a processor unit (104), a data storage device (105) and an input-output device (106). These foundational components of the basic computer system architecture form the basis for any computing device used on the client-side and server-side operations of this invention.

[0036] Fig. 2 illustrates the user interface unit (301) in accordance with the disclosure. The user interface unit (301) includes three key layers – the presentation layer (201), business layer (204) and data layer (209). The presentation layer (201) has two sub-components – the user interface (202) and the presentation logic (203). The business layer (204) has four sub-components – the application façade (205), workflow (206), underlying components (207), and entities (208). The data layer (209) has three sub-components – data access (210), data utilities (211), and service tools (212). The three key components of this architecture that are common to all the three layers are configuration (213), security (214) and communication (215).

[0037] The high-level modules and components 300 illustrated in Fig. 3 enlist the user interface unit (301) at the top of the block followed by the workflow automation module (302), then the model integration and training module (303) within which runs the Conversational AI Model (304). To this central block of the Conversational AI Model there are two key monitoring components of data monitor (305) and web service monitor (306) connected in parallel. For the complete functioning of this system presented in accordance with the disclosure, it is essential for a basic desktop user interface (401) or a basic mobile user interface (402) as illustrated in Fig. 4 to be rendered on the client's computing device.

[0038] From a process standpoint, the workflow automation module (500) illustrated in Fig. 5 demonstrates the inbound request (501) from the user interface (401) or (402) from Fig. 4 is sent to the update watcher bot (502), which is then forwarded to the transmission protocol (503). The transmission protocol (503) posts the request to the Conversational AI Model (504) and gets the

response back in return. The transmission protocol response is then sent to the reply generation bot (505) which is then forwarded as an outbound response (506) back to the user interface (401) or (402).

5 **[0039]** The model integration and training module in Fig. 6 illustrates the components in accordance with the disclosure. In no specific sequence, the connections show an instance of the AI model (602) to be the primary building block of the system. This instance of the AI Model is responsible for performing the operation of training on the data corpus and rendering the advice to the user's query. The key input for this instance of the AI Model is the temperature value that
10 keeps the AI hallucination reduced and this temperature value implies its level of creativity in providing response will be minimal if it is unable to find the response in the training data corpus with a confidence level. At the same time, the Conversational AI Model should not provide an "I don't know." response to all questions without trying to entirely lookup the data corpus. This invention in accordance with the disclosure proposes an optimum input temperature value range
15 between 0.1 and 0.4 in a range set between 0 and 1 wherein 0 represents 100% factual correctness and sticking exactly to what is identified in the specialized data corpus and 1 represents complete freedom for the large language model to be creative with the response.

[0040] In addition, the proposal suggests an engineering workaround to post "I'm afraid that isn't
20 my area of expertise. Let me learn more on the subject. Please be sure to ask me the same question again in a few days." as a replacement to the "I don't know" response that is commonly thrown for low temperature levels when the Conversational AI Model is unable to come up with a factually correct response. Flagging these unsatisfactory responses (709) within the interaction data monitoring feedback loop in Fig. 7 provides a way to gracefully respond to the user as a responsible
25 AI Advisor who would take the initiative to learn more, understand the context and reach back with the satisfactory response (708) through the proposed iterative process as opposed to providing a blunt response on the model not being trained on the relevant dataset to answer the question. This workaround with handling the temperature range, output parsing, prompt template language modification and response flagging mechanism enables facilitating the transition of the
30 Conversational AI model from an AI Assistant to an AI Advisor.

[0041] This instance of the AI Model (602) is then connected to the conversation retrieval chain (603). This component performs the operation of looking back at the conversation with the user to understand the context of the conversation in addition to the query before providing a response. This conversation retrieval chain (603) is connected to the database - instore memory unit (604) which stores the user input as well as the AI Model's response which is the reply generated by the AI Advisor. On the other end, the conversation retrieval chain (603) is also connected to the storage unit (606) which is responsible for processing the data corpus as developed in Fig. 9. The storage unit (606) is connected to the document loader (607) which is the component responsible for looping through all the files in the data corpus folder and learning from the data. The document loader (607) is in-turn connected to the recursive character text splitter (608) which is the component responsible for reducing the text into sizable chunks and processing them in parts to map, comprehend, learn, and respond to the user query. The composition of input range that yield best results for chunk overlap and chunk size are 150 to 350 and 15 to 30 respectively. The embeddings (605) component connected to the storage unit (606) is responsible for developing and tokenizing the array.

[0042] Fig. 7 illustrates the flow diagram of the interaction data monitoring and feedback loop (700) in accordance with the disclosure. The interaction module block (701) demonstrates the basic four step interaction. Wherein the user input (702) initiates a session and a data session is created (703). This in turn would trigger a Conversational AI Model response (704) which leads to the data session updation (705). These four blocks create an interaction module loop. The next step in the process flow is store interaction (706) followed by which is the manual response review (707). This is the stage where the Conversational AI Model response (704) is reviewed in relevance to the user input (702) and categorized as satisfactory response (708) or unsatisfactory response (709). In case the response is satisfactory; the process flow ends there. For the unsatisfactory response (709), the process flow recommends reviewing the details on the data corpus in relevance to the user input (702) and suggests to update data corpus (711). The next step on the process flow is to upload the reviewed data corpus and run the deployment (712). The final step of the feedback loop in this process flow is to test the same user input for the expected revised repost response (713) until a satisfactory response (708) is obtained as a desired result.

[0043] In addition, the artificial intelligence based advisor system (300) build a specialized data corpus of advisory material including but not limited to ancient literary text; text sources with references on leadership principles and anecdotes; management and organization handling texts; strategic advice text on business operations; quotes and anecdotes from world leaders of nation-
states; children's moral stories framed with fictional characters for nurturing a well-mannered society; through a formal file categorization system (300) for proprietary and non-proprietary text; routing all proprietary text for formal stakeholder approval before usage in the model.

[0044] Fig. 8 illustrates the text splitting functionality (800) in accordance with the disclosure. The file looping and content splitting (801) chunk performs the operation of looping through a folder (802) with several different files that belong to the data corpus. Each of these files (803) are split into smaller content parts (805) with the references to the meta data which typically contain the file name and page number from which they were extracted. These content parts (805) are in-turn converted into arrays and store in the database (806). The storage unit (807) illustrated in Fig. 8 and illustrated as component (606) in Fig. 6 performs the mapping operation of matching the metadata and the respective array and holding them as records.

[0045] The flow diagram in Fig. 9 illustrates the data corpus development flowchart where the process method begins with the start (901) step and the decisioning block will lead to making a choice on the type of AI Advisor (902) that will need to be developed. Among the three given options - business advisor with internal context (903), leadership advisor (904), and business advisor with external knowledgebase (905). For developing the three types of AI Advisor's data corpus the secret sauce for each is as follows. For the business advisor with internal context (903), the next step includes routing all the organizational policy and procedural documentations, key emails, meeting transcripts and annual reports as covered in (906). For the leadership advisor (904), route all relevant leadership and management self-help sources, anecdotes, and stories from great leaders with quotes that are of relevance to the module as covered in (907). This category showed promising signs of drawing similar analogy-based advice from anecdotes for the query. For the business advisor with external knowledgebase (905), route all industry, markets, and operations specific materials (908).

[0046] The common next step for all these three paths of AI Advisors is to categorize the information source as public information (non-proprietary) and proprietary information and receiving the stakeholder approval for usage in the AI Model. The step is to group all these documents in a folder (910). Followed by which is step to upload the folder into the document loader (911) which is depicted as (607) in Fig. 6. The next step is to save the Conversational AI Model (912) and then step is to upsert the database (913) and bring the data corpus development process to completion with step (914).

[0047] Fig. 10 illustrates the flow diagram of the end-to-end process flow in accordance with the disclosure. Step 1: The user types in a question seeking advice from the AI Advisor on a specific subject through the user interface (1001). Step 2: The user interface then sends the query to the workflow automation module (1002). Step 3: The update watcher robot within the workflow automation module receives the query (1003). Step 4: The query text is then forwarded to the transmission protocol (1004). Step 5: The transmission protocol posts the query to the server hosting the Conversational AI Model (1005). Step 6: The Conversational AI Model uses the query to understand the user's needs (1006). Step 7: The Conversational AI Model utilizes the conversation retrieval tool to further understand the context of the user's query based on previous interactions in the chain (1007). Step 8: The Conversational AI Model uses the query to look up relevant information from the data corpus (1008). Step 9: Based on the Conversational AI Model's functioning, the top four most appropriate results are picked up through the storage unit and rendered (1009). Step 10: The Conversational AI Model parses the response and frames it into a human advisor tone and language (1010). Step 11: The response is forwarded to the workflow automation module (1011). Step 12: A dedicated robot reads the response at the workflow automation module and forwards it to the user interface (1012). Step 13: The reply from the Conversational AI Model is displayed on the user interface on the user's device (1013). Step 14: The entire conversation history gets stored in the database as sessions that are available to view and retrospect through the data browser (1014). Step 15: Any follow-up question is routed with the same process enlisted above starting from the first step (1015).

[0048] Although the long-term purpose of this invention is to create an autonomous AI Advisor, continuous training and data corpus update requires human support for maintenance. The facility

to categorize the AI response as satisfactory response and unsatisfactory response forms the crux of how the AI Advisor is designed to become super-intelligent over time using the Reinforcement Learning from Human Feedback (RLHF) methodology. For this maintenance and support operation to not hinder the data security, data integrity and confidentiality of the system (300), this disclosure recommends the usage of specially integrated memory or similar memory capability that creates sessions for the data browser without including any details of the user in conversation.

[0049] The Conversational AI Model will evolve over time with several structural and configurable enhancements that will get them to be incrementally better than the previous one. A great example for this evolution is that of Google which was the sixteenth search engine to be tested by users and gain people's confidence. Although there will be several configurable values being defined in the future usage of these Conversational AI Models, "temperature" will be playing a key role keeping the AI hallucination to a minimum with the recommended low temperature value range.

[0050] Similarly, with the explosion of data being generated in the world today, there will be questions around what is relevant data and how do we define the quality of data that is fed to these AI Models for which the proposed data corpus development and updation method provides a solution. Along with the methodology, the system (300) also proposes utilizing the recommended text chunk size and text chunk overlap values to be used in the text splitter for the very reason that it enables optimal usage of compute capabilities in a space where all the Conversational AI Models in existence have token limits on how much text character data they will be permitted to be trained on and how long they could take to respond to a query while looking up details in the data corpus. The text chunk size and text chunk overlap values of the text splitter define the broken-down and digestible pieces of information that will need to evaluate in conjunction with other pieces of text broken down from other parts of the data corpus in overlap for understanding and reasoning before summing up the response.

[0051] The advice rendered by the AI Advisor is often subjective. There is no one correct answer or solution that universally fits the needs of every individual or organization. For an executive utilizing the Artificial Intelligence based Advisor System (300) looking for some advice on

whether their organization must scale up production for the next quarter, there answer would differ on several internal metrics and macro-economic conditions. In order to be able to provide the appropriate advice, the data corpus fed into the Conversational AI Model must include both details of organizational metrics as well as sound knowledge of external market conditions. Aside from
5 providing a binary response of scale-up or scale-down for the next quarter production, the proposed system (300) will be able to cite the top four reasons that enabled it to come up with advice either as part of the primary prompt or a follow up question to explain the reasoning for the advice rendered by the AI Model. These Conversational AI Models possess a significant lift-up from the traditional black-box models for the fact that they can demystify and reason what enabled them to
10 come up with the response.

[0052] A reasonable analogy would be that of the Find & Replace functionality in word, which provides a list of all occurrences of a keyword in an entire document. In this case, the Conversational AI Model will be able to provide a list of top-four citations or references that act
15 as supporting evidence for the advice rendered through its Find, Learn, Understand, and Respond functionality.

[0053] The key difference between the Conversational AI Models proposed in this system (300) and Generative AI Models is that although the underlying models and their learnability remains
20 the same, they will not re-generate the response with a different answer to the same prompt. On the contrary, if the advice rendered is not convincing, on request, the system (300) will also be able to provide reasonable advice on an opposing recommendation. The document loader that forms a key role in looping through the files also holds the capability to cite/reference from the different source materials included to the data corpus. This improves the credibility of the advice
25 provided.

[0054] Another key component of this invention is the workflow automation module which forms a layer between the user interface and the Conversational AI Model. The reason for embedding this layer is to allow for a wide range of futuristic interaction channels with the user in
30 communication. The highly advanced workflow automation module (302) facilitates the usage of dedicated robots to look out for request and response signals from the different sources and

coordinate the flow of information in a seamless manner across the internal component modules and user interface platforms.

5 **[0055]** The Artificial Intelligence based Advisor System (300) is designed to utilize an instance of the best Conversational AI Model developed through the integration framework that supports plugging in any state-of-the-art model to perform the advisory function.

10 **[0056]** The underlying architectural modules and components established in this disclosure in Fig. 3 may change or be re-configured with the rapid evolution of components and processes in this field. The crux of this invention recommends similar components, modules, configuration compositions and data corpus handling methods aimed at factual correctness of the AI Advisor's output while retaining the empathetic nature of response, basic creativity, and learnability of any good Conversational AI System (300) that is developed.

CLAIMS:

1. An artificial intelligence based advisor system (300), comprising:

- a computing device;
- a user interface unit (301) installed on a computing device;
- a model integration and training module (303) is connected with a conversational

5 AI model (304);

- a workflow automation module (302) comprises an update watcher bot (502), a transmission protocol (503), and a reply generation bot (505);

- a data monitor (305) and a web service monitor (306) to monitor key components; wherein,

10 • the user interface unit (301) sends a query to the workflow automation module (302) and receives a reply from the conversational AI model (304);

- the workflow automation module (302) connects the user interface unit (301) with the model integration and training module (303) and allows a channel with the user in communication; and

15 • the conversational AI model (304) performs the operation of training on a data corpus to handle the query and eliminate the possibility of generating misleading responses.

2. The artificial intelligence-based advisor system (300) as claimed in claim 1, wherein the key input to keep the AI hallucination reduced is having an input temperature value between 0.1 and 0.4 within the permissible temperature range of 0 to 1.

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3. The artificial intelligence-based advisor system (300) as claimed in claim 1, wherein the model integration and training module (303) further comprises an AI model (602), a conversation retrieval chain (603), a database-instore memory unit (604), a supplemental API tools (601), a plurality of embeddings (605), a storage unit (606), a document loader (607) and a recursive

25 character text splitter (608);

4. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the user interface platform (301) includes a plurality of layers i.e. a presentation layer (201), a business layer (204) and a data layer (209).
5. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the computing device have connections to a network interface (102), a memory unit (103), a processor unit (104), a data storage device (105).
6. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein
- the update watcher bot receives the query generated from the computing device;
 - the query is further transmitted to the transmission protocol;
 - the transmission protocol posts the request to the conversational AI model (304) and receives a response back in return; and
 - the response is sent to the reply generation bot which is forwarded as an outbound response to the user interface unit (301).
7. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the system (300) handles the temperature range, output parsing, prompt template language modification and flagging mechanism.
8. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the processor unit (104) stores, monitors and report the health of all the components.
9. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the system (300) flags the unsatisfactory response (709) within the interaction data monitoring feedback loop to train the conversational AI model (602).
10. The Artificial Intelligence based Advisor System (300) as claimed in claim 3, wherein the model integration and training module (303) comprising:
- the conversational AI model (304) connected to the conversation retrieval chain (603);

- the conversation retrieval chain (603) connected to the instore memory unit (604) and the storage unit (606);

- the storage unit (606) is connected to the document loader (607);
- the document loader (607) is connected to the recursive character text splitter (608);
- the embeddings (605) connected to the storage unit (606);

wherein,

- the conversation retrieval chain (603) understands the query by looking back at the entire conversation and provide a response generated by the conversational AI model (304);

- the instore memory unit (604) stores the user input as well as the response from the conversational AI model (304);

- the storage unit (606) is responsible for processing the data corpus and the document loader (607) loop through all the files in the data corpus;

- the character text splitter (608) reduces the response into a plurality of chunks that are converted into a plurality of arrays through the embeddings and store in the database.

11. The Artificial Intelligence based Advisor System (300) as claimed in claim 10, wherein the optimal chunk size and chunk overlap size having range from 150 to 350 and 15 to 30 respectively.

12. The Artificial Intelligence based Advisor System (300) as claimed in claim 1, wherein the system (300) works in three modes i.e. business advisor with internal context (903), leadership advisor (904) and business advisor with external knowledgebase (905) or in plurality.

13. A method for operating Artificial Intelligence based Advisor System (300) as claimed in claim 1, comprising steps of:

(i) sending a question/query seeking advice through the user interface unit (301) to the workflow automation module (302);

(ii) receiving the query in the update watcher robot within the workflow automation module (302);

(iii) forwarding the query to a transmission protocol;

(iv) posting the query from the transmission protocol to the model integration and training module (303);

(v) understanding the query through the conversational AI model (304) inside the model integration and training module (303);

(vi) utilizing a conversation retrieval tool to understand the context of the query based on previous interactions in the chain;

5 (vii) analyzing the query to look up relevant information from the data corpus;

(viii) learning from a plurality of results stored as chunks in the storage unit;

(ix) framing a response based on the plurality of results;

(x) posting a summed-up response towards the workflow automation module (302);

10 (xi) forwarding the result from the workflow automation module (302) to the user interface unit (301) through the reply generation bot; and

(xii) storing the entire conversation history in the database.

14. The method for operating Artificial Intelligence based Advisor System (300) as claimed in
15 claim 1, wherein the conversational AI model (304) respond with “I’m afraid that isn’t my area of expertise. Let me learn more on the subject. Please be sure to ask me the same question again in a few days.” on not finding relevant information in the data corpus.

ABSTRACT

ARTIFICIAL INTELLIGENCE BASED ADVISOR SYSTEM

The present system provides an Artificial Intelligence (AI) based Advisor system; implemented by a user interface unit (301), workflow automation module (302), model integration and training module (303), data monitor (305), and web services monitor (306). The system employs development of a specialized data corpus to feed the advisory model, updation of the data corpus through a robust iterative feedback loop, best practice recommendations for confidentiality, security, and data integrity throughout the architecture as process control. The key value range composition comprising: a range of proven values for temperature in the Conversational AI Model, chunk size and chunk overlap size in the recursive text splitter, future component upgradations and configuration value moderation directed towards the development of a comprehensive super-intelligent AI advisor with minimal hallucination and gracefully handling prompts for which the data corpus has insufficient/incorrect context.

Figure 3