

EFFECTIVE SEARCH MECHANISM FOR SUGGESTIVE RESPONSE TO PARLIAMENT QUESTIONS (UTTAR)

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Abstract -Effective Search Mechanism for Suggestive Response to Parliament Questions is one of the reliable software mechanism to answer the member of parliament's questions. During parliament session, each Department receives number of Parliament Questions (PQ) on varied topics raised by MPs. These PQ are to be handled in a very time bound manner on top priority. Each reply is generally prepared by seeking inputs from all the other relevant departments which requires lot of efforts and is also time consuming. It is desired a platform can be designed which can provide responses to similar PQ asked earlier, suggest probable reply and indicate different departments having similar programs and information. This will be helpful in preparing proper reply to PQ. Uttar is an A.I. based NLP model which helps to effectively search questions from the archive and provide approximate correct response. It is one of the most robust and effective mechanism for the parliament, because it will reduce time taken by officials to search through archive's and question answer hours will become more productive with reduction in backlogs..

Key Words: searching mechanism, Parliament Questions, approximate, productive

1.INTRODUCTION

Uttar is an A.I. based NLP model which is an effective search mechanism for suggestive response to parliament questions. It is one of the most robust and effective mechanism for the parliament. During parliament session, each Department receives number of Parliament Questions (PQ) on varied topics raised by MPs. These PQ are to be handled in a very time bound manner on top priority. Each reply is generally prepared by seeking inputs from all the other relevant departments which requires lot of efforts and is also time consuming. Uttar is less time consuming model which answer the questions by finding the most relevant answer for that question of the member of parliaments through the speech.

Objectives:

- Impact of Product will reduce time taken by officials to search through the archive's.
- Question Answer hour will become more productive with reduction in backlogs.

• People can search question asked by their parliamentarian hence enhancing trust between people and representative. This helps in building vibrant democracy.

2. REQUIREMENTS COLLECTIONS

Requirements analysis focuses on the tasks that determine the needs or conditions to meet the new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders, analyzing, documenting, validating, and managing software or system requirements.

A. Hardware Requirements:

The development of this application needs some specific hardware requirements given below:

- Operating System: Windows, Linux, Mac.
- RAM: 4GB or more recommended.
- Processor: Intel i3 or above
- HDD/SDD: SSD preferred
- Tools: Pycharm
- Running Device: Laptop

B. Software Requirements :

Software Requirement deal with denying software requirement and prerequisites that need to be installed on a computer to provide optimal functioning of an application. These Requirements or pre-requisites are generally included in the software installation package and need to be installed separately before the software is installed.

- Programming language used: Python
- GUI Application

C. Functional requirements:

Functional requirements along with requirement analysis help identify missing requirements. They help clearly define the expected system service and behavior.

Functional requirements are as follows:

1. It should meet the functional requirements as mentioned in Objectives.

2. It should be able to take text or voice from using microphone access search approximate correct response.
3. Functional requirements in software engineering help you to capture the intended behaviour of the system.

3. SYSTEM ARCHITECTURE

An architecture description is a formal description and representation of a system, organize in a way that supports reasoning about the structures and behaviors of the system. It can consist of system components and the subsystems developed, that will work together to implement the overall system.

1. User gives queries.
2. Searching the given query in repository.
3. Displays most relevant answer.

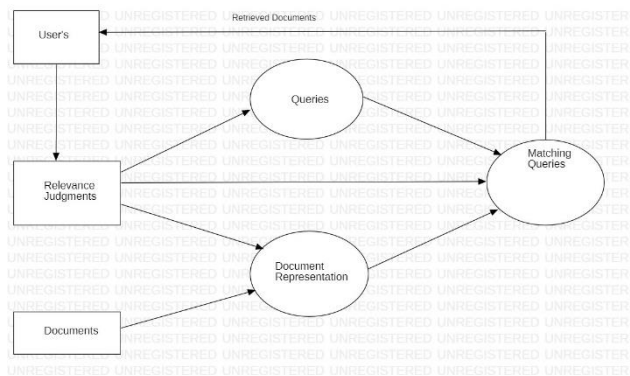


Fig. System Architecture

4. DATAFLOW DIAGRAMS

A data flow diagram (DFD) is a graphical representation of the 'flow' of data through an information system, modeling its process aspects. A DFD is often used as a preliminary step to create an overview of the system, which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design).

A DFD shows what kind of information will be input into and output from the system, where the data will come from and go to.

1. Level 0 Data Flow Diagram

At level 0, shown the short introduction about how data will flow in the software.

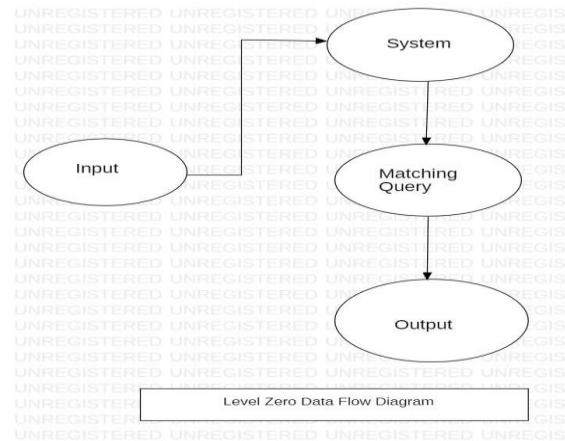


Fig. Level 0 Data Flow Diagram

2. Level 1 Data Flow Diagram

At level 1, the diagram elaborates on how the process will be carried out in the application while flowing data.

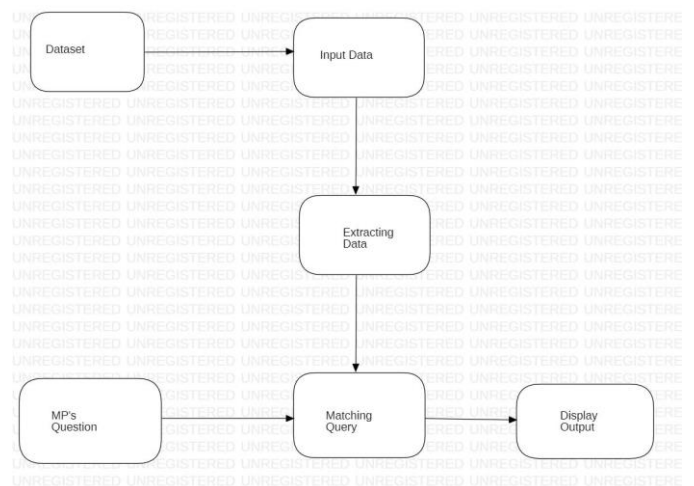


Fig. Level 1 Data Flow Diagram

5. USE CASE DIAGRAM

Use case diagrams consist of actors, use cases, and their relationships. The diagram is used to model the system/subsystem of the website. A single-use case diagram captures a particular functionality of a system. Hence to model the entire system, a number of use case diagrams are used.

A Use Case diagram shows the interaction between the system and entities external to the system. These entities are called actors which have a specific role in the system. The figure shows the use case diagram for the proposed system. The purpose of a Use Case Diagram is to know or show the functionality of the system.

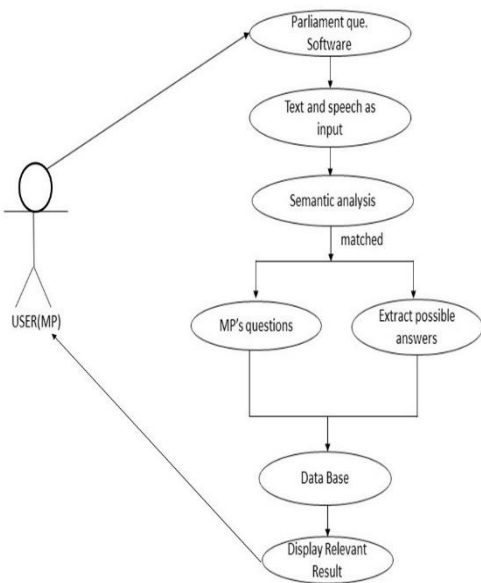
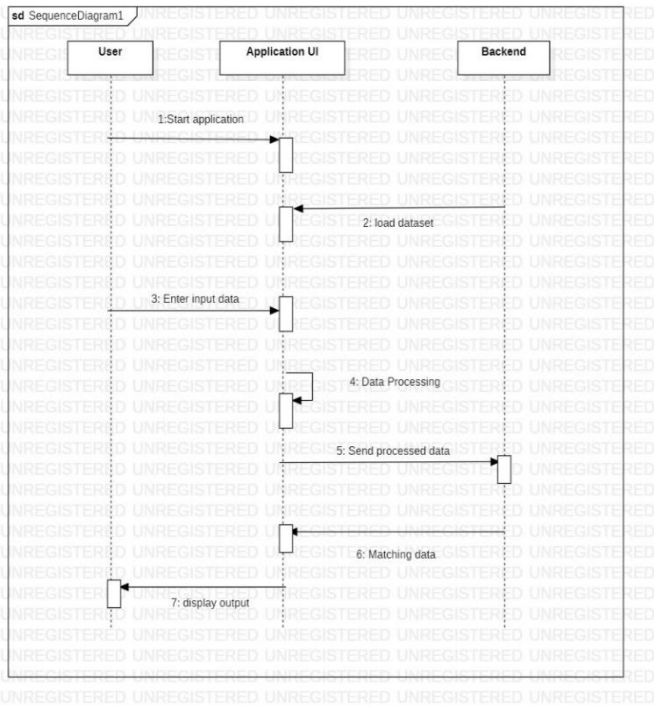


Fig. Use Case Diagram

6. SEQUENCE DIAGRAM

A diagram that shows the existence of Objects over time, and the Messages that pass between those Objects over time to carry out some behavior. A sequence diagram simply depicts the interaction between objects in sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram.

7. CONCLUSION

It concludes that “Effective Search Mechanism for Suggestive Response to Parliament Questions” is most efficient system for the parliament It saves the public money and also increase. the efficiency of parliament during the question-hours session.

8. FUTURE SCOPE

Apart from the users in parliament, this is an expert system which may help different ministries especially the public division to give prompt reply to public questions. This is possible if the system is trained on relevant dataset. It will also used in smart cities , Ministry’s public affair division , places requiring expert systems and it can work as an assistant to visually impaired.

9. REFERENCES

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