Dissertation / Project / Project Work Title:

(Insert Dissertation / Project / Project Work Title)

**Course No. : (Insert Course No.)**

**Course Title: Dissertation / Project / Project Work**

**Dissertation / Project /Project Work Done by:**

**Student Name: (Insert Student Name)**

**BITS ID: (Insert Student ID)**

**Degree Program: (Insert Degree Name)**

**Research Area: (Insert Dissertation / Project / Project Work Research Area)**

**Dissertation / Project Work carried out at:**

**(Insert Organization Name & Location)**



**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI**

## VIDYA VIHAR, PILANI, RAJASTHAN - 333031.

**(Insert Month and Year)**

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# Broad Area of Work

Conversational agent and chat bots are new research areas in current era of Information Science. The broad range of our project include current Artificial intelligence, Information retrieval and extractions techniques. The current research project focus in the following application areas:

* + - Natural language processing: To extract the right information
    - Knowledge representation: To store information during the interrogation
    - Automated reasoning: To use both new and stored information and to draw new conclusions and reasons
    - Machine learning: To adapt and detect new patterns

# Background

Technologies are getting smart day by day. These smart technologies have become an essential part of human lives. In today’s era people are more dependent on web search to seek information. Searching for information on web could also be stressful for the user and increase the cognitive load. A smart search agent is in high demand.

A conversational agent (intelligent agent) would act as an intermediary between the user and the web search engine. The conversational search agent helps the user in order to get the desired seeking information by reducing the cognitive load and increase the effectiveness of search.

# Objectives

The objectives of my project are as follows:

* + - Understand the current scenario with respect to the chat bot and need of smart search.
    - Designing an agent that act as a human intermediary between human and web search engine.
    - Building a conversational search agent (intelligent agent) to assist human in searching their queries on web engine.
    - Validation of the prototype is the key component of our project. As per the research plan for the current project is to do the user evaluation of the current prototype.

# Scope of Work

Scope of this dissertation is to design a conversational search agent (dialogue based) which searches the searcher queries on web search engine and provide the desired information to the user.

# Plan of Work

| **Phases** | **Start Date-End Date** | **Work to be done** |
| --- | --- | --- |
| Dissertation Outline | 13 Jan 2019 – 21 Jan 2019 | Literature Review and prepare Dissertation Outline |
| Design & Development | 22 Jan 2019 – 15 Feb 2019 | Design & Development Activity |
| Testing | 16 Feb 2019 – 13 Mar 2019 | Software Testing, User Evaluation & Conclusion |
| Dissertation Review | 14 Mar 2019-25 Mar 2019 | Submit Dissertation to Supervisor & Additional Examiner for review and feedback |
| Submission | 26 Mar 2019-30 Mar 2019 | Final Review and submission of Dissertation |

# Literature References

The state art is the base for any successful research project. In current project, the literature inclined towards the new domain of conversational information retrieval is considered. The following are referred journals from the preliminary literature review.

1. *S. Avula, G. Chadwick, J. Arguello, and R. Capra. Searchbots: User engagement with chatbots during collaborative search. In Proceedings of the 2018 Conference on Human Information Interaction & Retrieval, pages 52–61. ACM, 2018.*
2. *N. Belkin. Anomalous states of knowledge as a basis for information retrieval. The Canadian Journal of Information Science, 5:133–143, 1980.*
3. *P. J. Daniels, H. M. Brooks, and N. J. Belkin. Using problem structures for driving human-computer dialogues. In Proceedings of RIAO 1985, 1985.*
4. *P.Dewan. Words versus pictures: Leveraging the research on visual communication.*

*Partnership: the Canadian Journal of Library and Information Practice and Research, 10(1), 2015.*

1. *A. Kaushik and G. J. F. Jones. Exploring current user web search behaviours in analysis tasks to be supported in conversational search. In Second International Workshop on Conversational Approaches to Information Retrieval (CAIR’18), July 12, 2018, Ann Arbor Michigan, USA, 2018.*
2. *J. R. Trippas, D. Spina, L. Cavedon, H. Joho, and M. Sanderson. Informing the design of spoken conversational search: Perspective paper. In Proceedings of the 2018 Conference on Human Information Interaction & Retrieval, CHIIR ’18, pages 32–41, New York, NY, USA, 2018. ACM.*
3. *J. R. Trippas, D. Spina, L. Cavedon, and M. Sanderson. How do people interact in conversational speech-only search tasks: A preliminary analysis. In Proceedings of the 2017 Conference on Conference Human Information*Interaction and Retrieval, CHIIR ’17, pages 325–328, New York, NY, USA, 2017. ACM.

# Particulars of the Supervisor and Examiner

|  | **Supervisor** | **Additional Examiner** |
| --- | --- | --- |
| Name |  |  |
| Qualification |  |  |
| Designation |  |  |
| Employing Organization and Location |  |  |
| Phone No.(with STD Code) |  |  |
| Email Address |  |  |

# Remarks of the Supervisor

The study and project seem to very promising. The student had covered all the relevant literature review. The project is holding the current domain of research and justified the level of dissertation for master studies. The outcome covered by the project seems very interesting and include all the state of arts in today’s era of information science. The project also includes the user study on the working prototype. This activity completely validates the research project. This project also contains the prospect of publication in future. After the initial meeting with the student, I got an impression that she is hard working student and have the skills to implement the experiment in standard research paradigm. I approved the following project as the supervisor.

**Information about the Supervisor:**

**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI**

**WORK INTEGRATED LEARNING PROGRAMMES (WILP) DIVISION**

**SECOND SEMESTER OF ACADEMIC YEAR 2021-2022**

**(INSERT COURSE NUMBER HERE) : (INSERT COURSE TITLE HERE) OUTLINE**

| **STUDENT ID No.** |  |
| --- | --- |
| **NAME OF THE STUDENT** |  |
| **STUDENT'S EMAIL ADDRESS** |  |
| **STUDENT’S EMPLOYING ORGANIZATION & LOCATION** |  |
| **SUPERVISOR’S NAME** |  |
| **SUPERVISOR’S EMPLOYING ORGANIZATION & LOCATION** |  |
| **SUPERVISOR’S EMAIL ADDRESS** |  |
| **ADDITIONAL EXAMINAER’S NAME** |  |
| **ADDITIONAL EXAMINER’S EMPLOYING ORGANIZATION & LOCATION** |  |
| **ADDITIONAL EXAMINER’S EMAIL ADDRESS** |  |
| **DISSERTATION / PROJECT / PROJECT WORK TITLE** |  |

Please prepare the outline as a separate document with the following sections along with the above identification information.

1. Cover Page with Student ID No., Name, Course Number, Course Title and Dissertation / Project / Project Work Title, Broad Academic Area of Work.

2. Background (Relevance of the Project to the current work environment in the employing organization)

3. Objectives

4. Scope of Work (To be done by the student independently)

5. Plan of Work (Work to be done during the semester)

6. Literature References

7. Particulars of the Supervisor and Additional Examiner

8. Remarks of the Supervisor

|  |  |  |
| --- | --- | --- |
| **Signature of Student** | **Signature of Supervisor** | **Signature of Additional Examiner** |
| **Name:** | **Name:** | **Name:** |