Name **Roll no.**	**Kanika Wadhwa** **10101172021**
Topic	**9 TO 5 ALLY [**THEME: ARTIFICIAL INTELLIGENCE]
Introduction	Natural language processing involves the reading and understanding of spoken or written language through the medium of a computer. Through natural language processing, computers learn to accurately manage and apply overall linguistic meaning to text excerpts like phrases or sentences. Unstructured data such as documents, emails, and research results are difficult for computers to process. With NLP technology, large amounts of text-based information can be processed and analyzed. Repetitive tasks such as collating surveyor processing forms can be completed with more accuracy using NLP. In this project, I have made one model where NLP is also used. this model would be a great initiative for the betterment of employee's well-being and ensures optimum working condition. If the employee is happy, healthy and comfortable in his work space then it will positively reflect in his work as well. At the base level, this model is supposed to have 3 modules. These three modules are: □ MODULE 1: Voice input, analysis and output □ MODULE 2: Complaint mechanism □ MODULE 3: Grievance questionnaire Let us look at each of these modules in detail one by one. **Voice Input, Analysis and Output** □ In this module, I will deal with taking verbal inputs and analysing the inputs as well. □ Here, I will be using the NLPU which has been explained already in the document. □ The model will prompt the user with some questions that will urge the user to give verbal inputs. □ These questions will be used to assess the well-being of the user. In addition to verbal inputs, I will also provide a Likert scale-based questionnaire.

	□ Through assessing the inputs in these two forms, I will generate an output of the general well-being status of user. Along with this, the model will also prompt the user with some general well-being practices like hydration, stretching, meditation, walk etc, and depending on the severity of the situation, might also recommend the user to go to relevant authorities who may help in resolving the situation. **Complaint Mechanism** □ In the second module of our model, i will deal with complaint lodging and accessing mechanism. □ Here, any user in an enterprise can file a complaint against any individual or any group of people. Both the complainant and accused will remain anonymous for the rest of the organization. □ These complaints would need to be addressed by higher authorities directly. □ The higher authorities will also need to maintain a progress report which only the complainant will have access to. Once the processing of the complaint has been completed, only the complainant may close the complaint progress report. □ The users remain anonymous so they can freely lodge complaints. □ As such, the higher authorities may address the complaints free of internal bias. **Grievance Questionnaires** □ In the last basic module of this model, i am dealing with grievance questionnaires. Here too, i will prompt some verbal questions as well as provide Likert scale-based questionnaires, but here, the issues for the questionnaires would be topic specific like 'does this identify as sexual harassment' or cyber bullying or any other such malpractice that may be prevalent in the association. □ The inputs would be analysed through our trained models in order to determine the most likely happening of events. □ Depending on the output, the user may come out of his dilemma regarding the situation and decided what further steps he could take. □ Here too, the machine will prompt some suggestions, that would indicate what possible course of action the user can take.

Problem

The hectic lifestyle of an employee can affect his well-being and may show negative results on the work as well. Sooner or later, the whole enterprise might get affected therefore i needed a device which can monitor employee’s well-being.

This well-being monitor tool will check whether an employee is satisfied with his work conditions, is not facing any issues in the company and examines well-being status of employees.

I aim at building a complete package for assessing, managing and tracking internal company affairs for each employee in the organization.

Solution

 In an enterprise, the day to day events can affect the well-being of the employees, and hence can affect the health of the enterprise as a whole.

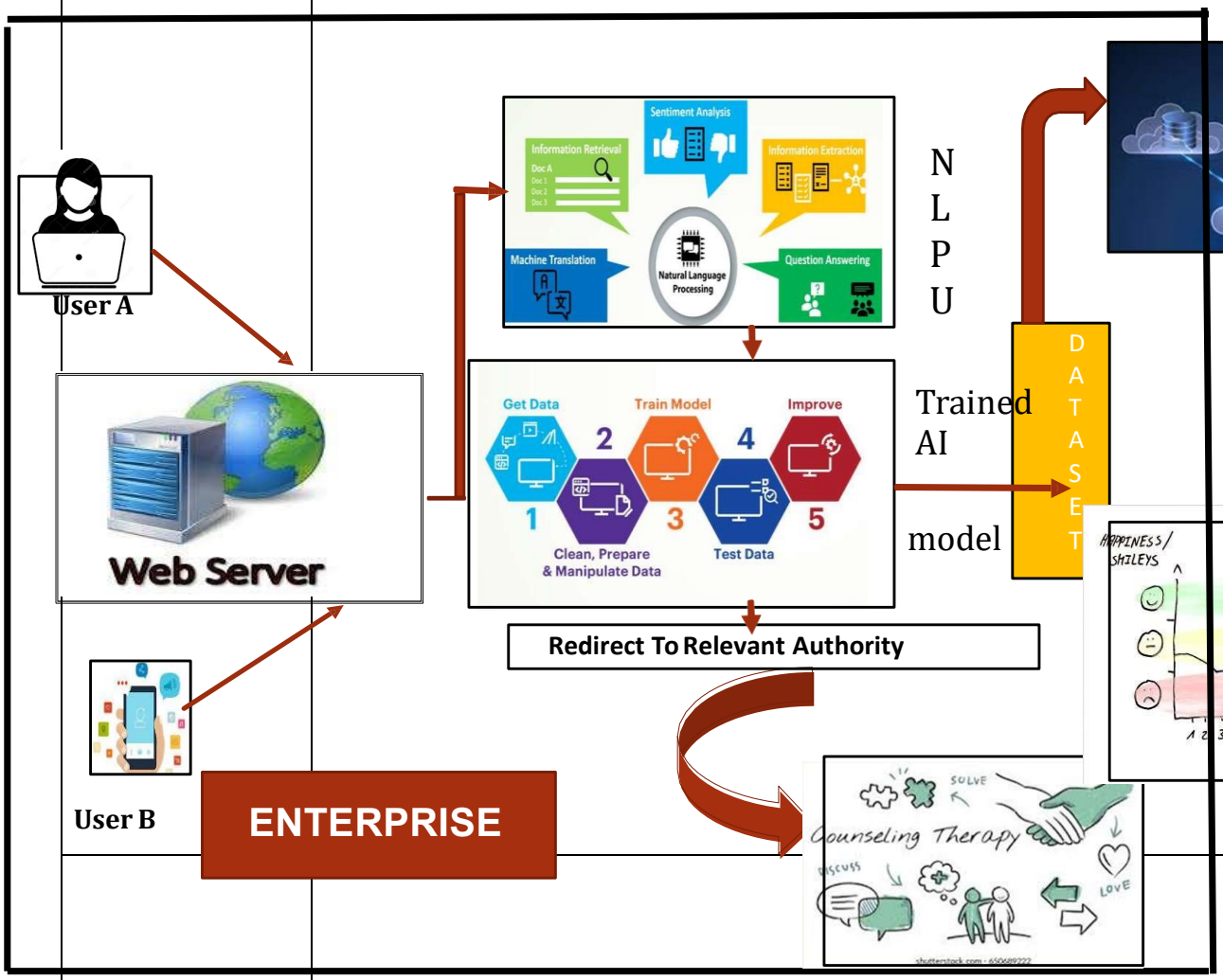
 This project aims to assess and ensure well-being of the employees by checking in on them on regular intervals to identify their well-being through the below listed means, and take appropriate actions, through voice inputs and outputs.

 Well-being check up

 Complain lodging and accessing

 Grievance questionnaires

Architectural details of the proposed Implementation



Phased Plan

Project	Evaluation Standard
Description of project	• Clarity of problem statement: i needed a device which can monitor employee's well-being. • Usability/ Motivation.[problems in office will get resolved] • Challenges. There is a need to scrutinize the words in a sentence so as to uncover the grammatical structure of the

		sentence.; . Syntax conveys meaning in most languages because order and dependency contribute to connotation. For example, the two sentences: 'The cat chased the mouse.' and 'The mouse chased the cat.' differ only in terms of syntax, yet convey quite different meanings.] • Milestones to be achieved.{using architectural details of proposed implementation] • End User Details.[employees of the organization]	
	Requirement analysis and methodology.	• Clarity in goals to be achieved. • Use case diagrams/Flow chart. • Architecture Diagram.[given] • Clarity in Methodology outline.[given] • System Design.[hardware and software requirements e.g Python to be used]	
	Evaluation setup & timeline	• Clarity in metrics to be used. • Pert Chart. What kind of solution is developed? □ Well-being check up □ Complain lodging and accessing □ Grievance questionnaires All work done with the help of AI	
	Relevance with Indian scenario.	• In our Model it will execute the following tasks : • Natural Language Processing (NLP) will take voice inputs and will translate it in such a	

			way that is understandable by the machines and then it will analyze the inputs and provide the desired outputs in the form of voice only. • It will also ask certain questions from the employees who will answer them.	
Data Source	A participant may be required to take permission to use this data-set (in case permission is required) and give due credits to the community hosting it.			
Resources	Use collab for google credit points or any other available free cloud resources.			
Any controls and restrictions	This problem statement is open to all participants.			
Specification/ Paper references(in Indian context)	Ancheta, J. R., Gorro, K. D., & Uy, M. A. D. (2020). # Walangpasok on Twitter: Natural language processing as a method for analyzing tweets on class suspensions in the Philippines. In *2020 12th International Conference on Knowledge and Smart Technology (KST)* (pp. 103-108). IEEE. Chowdhury, G. G. (2003). Natural language processing. *Annual review of information science and technology*, *37*(1), 51-89. Church, K. W., & Rau, L. F. (1995). Commercial applications of natural language processing. *Communications of the ACM*, *38*(11), 71-79. Khurana, D., Koli, A., Khatter, K., & Singh, S. (2017). Natural language processing: State of the art, current trends and challenges. *arXiv preprint arXiv:1708.05148*.			
Contact	**Email Id: kanika101btcsai21@igdtuw.ac.in**			