UPES
UNIVERSITY OF TOMORROW

School Of Computer Science
University Of Petroleum and Energy Studies
P.O.Bidholi, Via-Prem Nagar DEHRADUN-248007

Issue Date: 22/01/2026

Bachelors of Technolgy in Computer Science & Engineering

Minor ✓ Major

Project Title	An AI-Driven System for Automated Requirements Engineering from Unstructured Stakeholder Communication	Project Number	Mentor Name	Dr.Mitali Chugh

S.No	Rollnumber	Branch	Name	Role	Signature
1.	R2142230269	B.Tech CSE DevOps	Shivang Mangal	CI/CD & Deployment	
2.	R2142230278	B.Tech CSE DevOps	Devanshi Jain	NLP & Machine Learning	
3.	R2142231555	B.Tech CSE DevOps	Shreyash Shivhare	Frontend & Data Collection	
4.	R2142230271	B.Tech CSE DevOps	Sreyas Sharma	Backend & Data Collection	

Mitali 22/01/26

Project Mentor | **Cluster Head**

Date R.No	Understanding of Project 25 Marks	Project Working 35 Marks	Soft Skills 10 Marks	Report 15 MARKS	Mentor Marks 85 MARKS	Total Marks 100 MARKS	Project Status Activity Coordinator

Synopsis Evaluation

Rollno	Theoretical Understanding: Problem(4 Marks)	Algorithm(4 Marks)	Data/Data structure(4 Marks)	SWOT Analysis(4 Marks)	Area of Application(4 Marks)	Total Marks(20)

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

Mid- Term Evaluation

Rollno	DESIGN & DEVELOPMENT: Technical Diagram(5 Marks)	Programming Concepts(5 Marks)	IPC(5 Marks)	Libraries(5 Marks)	SRS(10)	Total(20 Marks

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

End-Term Evaluation

Rollno	Testing & Implementation: Theoretical Knowledge(5)	Computational Knowledge(5)	TestCase (10)	Soft Skills (10)	Report(5)	Core Computational Skills(15)	Total (50)

Panel Remark

Reviewer 1	Reviewer 2	Reviewer 3	Reviewer 4	Reviewer 5

School Of Computer Science
University Of Petroleum and Energy Studies
P.O. Bidholi, Via-Prem Nagar DEHRADUN-248007

Bachelors of Technology in Computer Science Engineering

Minor ✓ Major

Project Title	An AI-Driven System for Automated Requirements Engineering from Unstructured Stakeholder Communication	Mentor Name	Dr.Mitali Chugh

Abstract

Modern software projects face challenges in managing requirements due to their dispersion across unstructured communication sources such as emails, chats, and documents, making manual requirements engineering inefficient and error-prone. This project proposes an AI-driven automated requirements engineering system that applies natural language processing and machine learning techniques to extract, classify, cluster, prioritize, and summarize stakeholder requirements, enabling accurate and scalable requirement analysis.

Objective

To design and develop an AI-driven system that automatically extracts, classifies, clusters, prioritizes, and summarizes software requirements from unstructured stakeholder communication, thereby reducing manual effort and improving accuracy in the requirements engineering process.

Methodology

The system follows an Agile-based modular approach. Unstructured stakeholder data is collected and preprocessed by the backend, then analyzed using NLP and machine learning techniques for requirement extraction, classification, clustering, prioritization, and summarization. The processed results are delivered through a cross-platform desktop

Progress 1

Mentor Remark

	Roll Number	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Internal
Marks		10	10	10	10	10	10	10	15
	Date/Mentor Signature								

Progress 2

Mentor Remark

	Roll Number	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Internal
Marks		10	10	10	10	10	10	10	15
	Date/Mentor Signature								

Guideline: 1) A project group can be of maximum 4 members and no alteration in the group member will be entertained later.

Guideline: 2) Methodology should have following steps Step1: Literature Review; Step2: Identification Of Requirement (Type Of Data source, Amount Of Data, & Format of Data); Step3: Identification of Algorithm; Step4 : Comparative study; Step5: Design and Development of System/Architecture; Step 6: Implementation; Step7: Results

Guideline:3) Student should upload softcopies of all the documents (reports and power point presentations) in "Project Directory", 24 hrs prior to evaluation.

Guideline:4) Panel member will give feedback to individual on the scale of 1 to 5 and this scale will change for defaulter i.e. 1 to 3 scale.

1: Poor 2: Average 3: Good 4: Excellent 5: Outstanding