





## KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru

Telephone: 080 -23600978, 23341652 || Email: spp@kscst.org.in Website: www.kscst.org.in/spp.html or https://kscst.karnataka.gov.in/en

# FORMAT FOR STUDENT PROJECT PROPOSAL FOR THE 48th SERIES OF STUDENT PROJECT PROGRAMME

(Handwritten proposals will not be accepted, please fill all the details in this MS word file, insert images / diagrams wherever necessary. Convert to pdf file, get it approved from the project guide / head of the department and principal of your institution. Keep ready the scanned pdf file of 1) Declaration and Endorsement 2) details of processing fees made and fill-up the Google Form.

## https://forms.gle/ks2WxWB4ei1hgv9D9

	ittps://ioims.gie/kszwxwb4eimgvaDa
1.	Name of the College: S.J.C Institute of Technology
2.	Project Title: AI Legal Assistant for Law Enforcement
3.	Branch: Information Science and Engineering
4.	Theme (as per KSCST poster): Artificial Intelligence (The project proposals shall mandatorily be from one of the broad themes / areas. Visit website www.kscst.org.in/spp.html) SIH1786
5.	Name(s) of project guide(s):  Name: Dr. Nagesh R  Email id: nageshr@sjcit.ac.in  Contact No.: 8050320340
6.	Name of Team Members (Strictly not more than four students in a batch): (Type names in Capital Letters as provided in your college) (Please paste the latest passport size photograph adjacent to your respective names)  Name: BABUREDDY B N USN No.: 1SJ21IS009 Email id: babureddy2603@gmail.com
	Mobile No: 9019875905

KSCST: Student Project Programme: 48th series: 2024-2025

Name: IRFAN KHAN I USN No.: 1SJ21IS034

Email id: irfankhanmail16@gmail.com

Mobile No.: 8310892678

Name: MOHAMMED MAZZ

USN No.: 1SJ21IS059

Email id: mohammedmazz484@gmail.com

Mobile No.: 9148430304

Name: SRIDHARA M USN No.: 1SJ22IS401

Email id: sridharm1436@gmail.com

Mobile No.: 7411521436







## 7. Team Leader of the Project:

Name: MOHAMMED MAZZ

USN No.: 1SJ21IS059

Email id: mohammedmazz484@gmail.com

Mobile No.: 9148430304

# 8. Processing Fee Details (Through Online Payment only):

(processing fee of Rs. 1180/-)

Please furnish the payment details in the format provided in the last page of the proposal.

- 9. Date of commencement of the Project: 04/10/2024
- 10. Probable date of completion of the project: 30/04/2025

## 11. Scope / Objectives of the project:

- 1. User Authentication
- 2. Crime Reporting and Input
- 3. Clarification and Crime Classification
- 4. Legal Section Assignment
- 5. Web-Based Interface

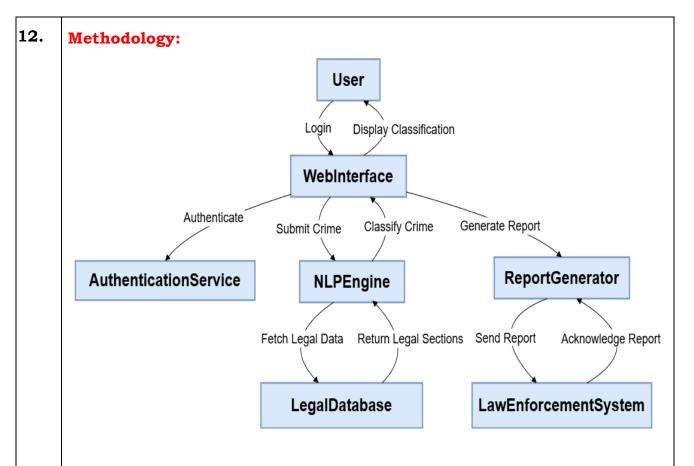


Figure 1: Data Flow Diagram

The methodology for developing the law enforcement chatbot begins with comprehensive data collection, focusing on gathering crime categories and legal sections from the Indian Penal Code (IPC) and similar reliable legal sources. This data is structured in a database, which will be accessed by the chatbot to assign appropriate legal sections based on user inputs. The system architecture is designed to include a secure, user-friendly web interface with a login system to restrict access to authorized personnel.

The core functionality relies on natural language processing (NLP) using Rasa, trained on datasets that include various ways of describing common crimes. The chatbot uses this data to understand and categorize crime descriptions accurately. Dialog flows are structured to allow follow-up questions for clarification, improving the accuracy of crime classification. Once ready, the bot undergoes iterative testing and refinement based on feedback from law enforcement professionals. After deployment, the system is monitored and maintained to ensure data security, compliance with privacy standards, and timely updates based on any changes to legal statutes or user needs.

**Note:** In case of fabrication work in the project, an engineering drawing with dimensions / detailed design should be attached to the proposal.

## 13. Expected Outcome of the project:

The expected outcome of this project is a web-based chatbot that effectively assists law enforcement in crime classification and legal section assignment. The chatbot will guide users through a structured reporting process, asking follow-up questions to ensure accurate classification of crime types. By analyzing crime descriptions, it will identify relevant legal sections and suggest appropriate penalties based on the data in the Indian Penal Code. The chatbot will be accessible to a diverse audience, increasing usability. This tool will streamline initial case assessments, providing law enforcement with a reliable, efficient, and secure solution for categorizing and handling crime-related inquiries.

# 14. Is the project proposed relevant to the Industry / Society or Institution?

Yes

Yes / No:

If yes, please provide details of the industry / institution and contact details:

#### Law Forum

This project is highly relevant, leveraging AI for efficient crime classification and legal section assignment. It enhances law enforcement workflows, empowers citizens with inclusive reporting, and supports institutional efficiency. With applications in LegalTech, public safety, and academia, it streamlines processes, fosters trust, and promotes innovation in crime management and legal compliance.

(**Note:** Preference will be given to those projects relevant to the industry / institution. Hence be specific in giving detailed information). Is the industry extending support - technology / funds / use the final product, please specify.

# 15. Can the product or process developed in the project be taken up for filing a Patent?

Yes / No:

NO

Prior Art search done?

Yes/No:

NO

**Note:** If your answer is "Yes", you may contact Patent Information Centre of KSCST. For more details, email: pic@kscst.org.in

## 16. Budget details (break-up details should be given):

Note: KSCST will provide nominal grant support for carrying out the project by students if selected by the project selection committee.

Budget	Amount
a) Materials / Consumables (Please specify)	3500.00
b) Labor (Describe)	3000.00
c) Travel (Describe)	2500.00
e) Miscellaneous (Please specify)	1500.00
Total	10500.00

# 17. Any other technical details (Please specify):

- 1. Integration of Indian Penal Code (IPC) Database
- 2. Advanced Natural Language Processing (NLP)
- 3. User-Friendly Interface
- 4. Scalability and Reliability
- 5. Feedback Loop for Continuous Improvement
- 6. Security and Data Privacy
- 7. Error Handling and Customization
- 8. Real-Time Crime Reporting

## 18. SPP Coordinator (Identified by the college):

**Note:** To be identified by the principal of the institution. The project proposals must be submitted to KSCST through SPP coordinator designated by the principal.

Name: Prof. E N Srivani, Assistant professor, ECE

Email id: srivani1598.ece@sjcit.ac.in

Contact No.: 8639902870

Name of the Project Guide: Dr. Nagesh R

Email id: nageshr@sjcit.ac.in Contact No.: 8050320340 \$. Bhanunatte 23/11/24

Name of the HOD: Dr. Bhanumathi S

Email id: hodise@sjcit.ac.in Contact No.: 9740991643

#### DECLARATION

### (From Project Students)

(To scan this page and enclose in the project proposal)

We, the project team hereby declare that the details enclosed in the project proposal (Title of the Project: AI Legal Assistant for Law Enforcement, Branch: Information Science and Engineering, College: S.J.C Institute of Technology, Chickaballapur) are true and correct to the best of our knowledge and belief. We undertake to inform the Karnataka State Council for Science and Technology (KSCST) of any changes to the project title or team members' names immediately through our project guide or the SPP Coordinator of our institution.

Additionally, we declare that the project work is original and not a result of copying or purchasing. We are committed to completing the project independently, with support from our faculty and project guide, while utilizing the facilities provided by the college. We will not engage in plagiarism and pledge to be sincere and dedicated in executing and completing the project as proposed.

We understand that if any of the above information is found to be false, untrue, or misleading, we may be held liable. We authorize the sharing of the project information contained in this proposal with KSCST, Bengaluru.

We acknowledge that the project team must exhibit and demonstrate the project, participate in the mid-term evaluation of sanctioned projects, and engage with experts. Additionally, we must exhibit the project at the Annual State-Level Poster Presentation and Exhibition, if selected. Should our team fail to participate in the mid-term evaluation or the Annual Exhibition (if selected), we understand that the supported project funds will be returned to KSCST.

We also enclose the endorsement form for KSCST, Bengaluru.

#### Name of the students with USN No.

- 1. Babureddy B N (1SJ21IS009)
- 2. Irfan Khan I (1SJ21IS034)
- 3. Mohammed Mazz (1SJ21IS059)
- 4. Sridhara M (1SJ22IS401)

Signature with date

Babuleddy B.N 23/11/2024

Erfanklianz 23/11/2024

Mohammed Mazz 23/11/2024

Sidhou.M

23/11/2024

Dr. Nagesh. R (Name & Signature of Project Guide with Seal)

Email id: nageshr@sjcit.ac.in Contact No.: 8050320340 \$. Bhanneatte 23/11/24

(Name & Signature of HOD with Seal)

Email id: hodise@sjcit.ac.in Contact No.: 9740991643

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#### **ENDORSEMENT**

(From College, endorsement to be taken in the institution / Department Letter head)

(To scan this page and enclose in the project proposal)

This is to certify that 1) Mr. Babureddy B N, 2) Mr. Irfan Khan I, 3) Mr. Mohammed Mazz, 4) Mr. Sridhara M, are bonafide student(s) of Department of Information Science and Engineering, in the degree program of our institution. If the project proposal submitted by these students under the 48th series of Student Project Programme is selected by KSCST, we will provide the requisite laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the mid-term evaluation of project and in the Annual State-Level Poster Presentation and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in mid-term evaluation of sanctioned projects or fails to attend the Annual State-Level Poster Presentation and Exhibition (if selected), the supported project amount will be returned to KSCST.

Project Guide with Seal)

Dr. Nagesh. R Nagesh. R Nagesh. R. Shanunatte (Signature of HOD with Seal)

(Signature of the Principal

with Seal)

Email id: nageshr@sjcit.ac.in

Email id: hodise@sjcit.ac.in

Email id: principal@sjcit.ac.in

Contact No.: 9731292555

Contact No.: 8050320340

Contact No.: 9740991643 Frui & Head Available of Technology SJC Institute of Technology SJC institute of Technology .

PRINCIPAL

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## DETAILS OF PROCESSING FEES MADE THROUGH NEFT / UPI PAYMENT

(Note: Include this page in the softcopy of the student project proposal. The student team shall furnish the details in the Google Form. It is informed to the students to 1) keep ready the softcopy of the project proposal and other documents and 2) Furnish the payment made details as processing fees and 3) update the details in the Google Form on the same day of payment made to KSCST by NEFT / UPI payment).

1. TITLE OF THE PROJECT	:	AI Legal Assistant for Law Enforcement
2. NAME OF THE TEAM LEADER	:	Mohammed Mazz
3. EMAIL ID	:	mohammedmazz484@gmail.com
4. CONTACT MOBILE NO.	:	9148430304

#### **PAYMENT MADE DETAILS**

5. BANK REF. NO. / UTR NO. / UPI No. (12 digits)	:	289749008647
6. TRANSACTION ID	:	T2411231209253478391236
7. NAME OF THE SENDER / ACCOUNT HOLDER and CONTACT NUMBER	:	Mohammed Mazz 9148430304
8. NAME OF THE BANK	:	State Bank of India
9. PROCESSING FEES	:	Rs. 1,180/- (Inclusive of 18% GST)
10. DATE OF PAYMENT MADE	:	23/11/2024
11.TIME		12:09 PM
12.MODE OF PAYMENT MADE (NEFT / UPI, PLEASE SPECIFY)		Phone Pay

Mohammed Mazz
Mohammed Mazz
(Name & Signature of
the team leader)

of Bhanmatte 23/11/24

(Name & Signature of Project Guide or HOD with Seal)

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## KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

Indian Institute of Science campus, Bengaluru

## 48th SERIES OF STUDENT PROJECT PROGRAMME (SPP)

(Note: This page is for information about bank details of KSCST to the student team and college / institution and not to include this page in the project proposal softcopy)

## **BANK ACCOUNT DETAILS OF KSCST**

Name and address of the Institution	Karnataka State Council for Science and Technology, IISc Campus, Bangalore -560012
Account holder's name / Designation	Secretary, Karnataka State Council for Science and Technology
Bank Account No. & Name of the bank	Current A/C No. 0683201000024 Canara Bank, IISc Campus Branch, Bangalore-560012
IFSC Code	CNRB0000683
MICR Code	560015023
Bank Branch Address	Canara Bank, Indian Institute of Science, Bangalore-560012

#### BANK DETAILS

Name of the Agency	Karnataka State Council for Science and Technology IISc Campus, Bangalore - 560012
Account holder's name / Designation	Secretary , Karnataka State Council for Science and Technology
Bank Account No. &	Current A/C No. 0683201000024 Canara Bank IISc Campus Branch
Name of the bank	Bangalore-560012
IFSC Code	CNRB0000683
MICR Code	560015023
Bank Branch Address	Canara Bank
	Indian Institute of Science
	Bangalore-560012

KSCST: Student Project Programme: 48th series: 2024-2025





KARNATAKA STATE COUNCIL FOR SCIENCE



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