



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING  
(ARTIFICIAL INTELLIGENCE & MACHINE LEARNING)

Academic Year: 2024 - 2025

Class: SE-B

Sem: IV

Project Title: Code Converter using NLP

Team Member 1: (Team Leader)

Name: Mayank Kant Tiwari

College ID: 23106037 Email: tiwarimayankkant@gmail.com

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Team Member 2:

Name: Sumit Thakur

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Mobile No: 7887647604

Team Member 3:

Name: Tejas Thorat

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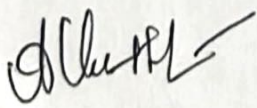
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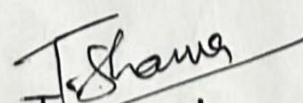
Team Member 4:


Name: Reva Tol

College ID: 23106083 Email: 23106083@apsit.edu.in

Mobile No: 9930937260

  
Prof. Vijaya Bharathi  
Project Guide

  
Prof. Taruna Sharma  
Mini- Project Coordinator

  
Dr. Jaya Gupta  
Head of Department





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Academic Year: 2024 - 2025

Class: S. E

Sem: IV

Date: From 13/01/25 to 27/01/25

Progress Planned	Progress Achieved
Collected all the research papers related to code conversion.	Understanding the challenges faced in code conversion mentioned in papers.

Guides Review: Research on the pre-trained models related to code conversion.

**Signature**

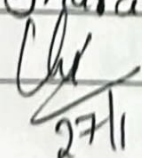
Name and Signature of Team Member 1: Mayank Kant Tiwari

Name and Signature of Team Member 2: Sumit Thakur

Name and Signature of Team Member 3: Reva Tol

Name and Signature of Team Member 4: Tejas Thorat

Name of Project guide: Vijaya Bharathi

Signature of guide with Date: 



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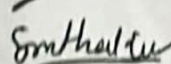
Date: From 27/01/25 to 31/01/25


Progress Planned	Progress Achieved
Researching about the technique and methods can be used for our project.	Came to know about various pretrained model like CodeT5, GPT-2.5-Converter, CodeT5 etc.

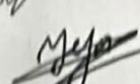
Guides Review: Identify good dataset

**Signature**

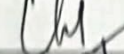
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Name of Project guide: Vijaya Bhargathi

Signature of guide with Date:   
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Academic Year: 2024 - 2025

Class: SE

Sem: IV

Date: From 31/01/25 to 05/02/25

Progress Planned	Progress Achieved
Planned all the overall process for project also divide the task for everyone.	Started the work by collecting Dataset and deciding the model to train.

Guides Review: Explore more on finetuning the pretrained models.

Signature

Name and Signature of Team Member 1: Mayank Kant Tiwari

Name and Signature of Team Member 2: Sumit Thakur

Name and Signature of Team Member 3: Rava Tol

Name and Signature of Team Member 4: Tejas Thorat

Name of Project guide: Vijaya Bharathi

Signature of guide with Date: [Signature]  
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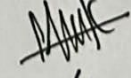
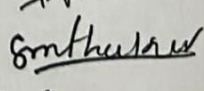
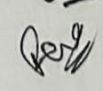
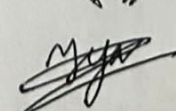
Sem: IV

Date: From 05/02/25 to 12/02/25

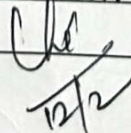
Progress Planned	Progress Achieved
Prepare Everything For training the pre-trained model i.e CodeT5.	Fine-tune the CodeT5 model and evaluate the result where we found the accuracy was low.

Guides Review: OK. Good

**Signature**

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Name and Signature of Team Member 2: Sumit Thakur   
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Name and Signature of Team Member 4: Tejas Thorat 

Name of Project guide: Vijaya Bharathi

Signature of guide with Date: 





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Academic Year: 2024 - 2025

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Sem: IV

Date: From 12/02/25 to 19/02/25

Progress Planned	Progress Achieved
Evaluation of all the process to find what went wrong while Fine-tuning model.	Found out that CodeBERT wasn't pre-trained on 'C' language code Snippet also the dataset used in fine-tuning was not efficient.

Guides Review: Explore the evaluation metrics.

Signature

Name and Signature of Team Member 1: Mayank Kant Tiwari

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Name and Signature of Team Member 3: Riya Tol

Name and Signature of Team Member 4: Tejas Thorat

Name of Project guide: Vijaya Bharathi

Signature of guide with Date:   
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Academic Year: 2024 - 2025

Class: SE

Sem: IV

Date: From 19/02/25 to 26/02/25

Progress Planned	Progress Achieved
Preparing Of the Dataset and Chosing the Correct model.	Prepared own dataset by ourself and with the help of AI-tools for our Source (C language) and Target (Python language).

Guides Review: Create a synthetic dataset-  
as per requirements -

**Signature**

Name and Signature of Team Member 1: Mayank Kant Tiwari

Name and Signature of Team Member 2: Sumit Thakur

Name and Signature of Team Member 3: Ravi Tol

Name and Signature of Team Member 4: Tejas Thorat

Name of Project guide: Vijaya Bharathi

Signature of guide with Date: [Signature]  
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Academic Year: 2024 - 2025

Class: SE

Sem: IV

Date: From 26/02/25 to 05/03/25

Progress Planned	Progress Achieved
Fine-tune the CodeTS model and Evaluate it.	CodeTS performed well on our Custom dataset.

Guides Review: Prepare the report

**Signature**

Name and Signature of Team Member 1: Mayank Kant Tiwari

Name and Signature of Team Member 2: Sumit Thakur

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Name of Project guide: Vijaya Bharathi

Signature of guide with Date: Ud  
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Academic Year: 2024 - 2025

Class: S.E

Sem: IV

Date: From 05/03/25 to 12/03/25

Progress Planned	Progress Achieved
Aim For increase the performance of the model	Increase the dataset size and again Fine-tune the model.

Guides Review: Increase the size of the dataset

Signature

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Name of Project guide: Vijaya Bharathi

Signature of guide with Date: [Signature]  
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Academic Year: 2024 - 2025

Class: SE

Sem: IV

Date: From 12/03/25 to 02/04/25

Progress Planned	Progress Achieved
Backend For the model.	Used Flask For the Backend.

Guides Review: Improve the dataset

Signature

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Name and Signature of Team Member 2: Sumit Thakur

Name and Signature of Team Member 3: Rewa Tol

Name and Signature of Team Member 4: Tejas Thorat

Name of Project guide: Vijaya Bhavathi

Signature of guide with Date: [Signature]  
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Academic Year: 2024 - 2025

Class: SF

Date: From 02/04/25 to 08/04/25

Sem: IV

Progress Planned	Progress Achieved
Developing GUI For the User interaction.	Made GUI For user to upload their C code and will automatically convert it into python.

Guides Review: Complete the report as per changes suggested.

Signature

Name and Signature of Team Member 1: Mayank Kant Tiwari

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Name and Signature of Team Member 3: Reva Tol

Name and Signature of Team Member 4: Tejas Thorat.

Name of Project guide: Vijaya Bharathi J

Signature of guide with Date: [Signature]  
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