



# GIET UNIVERSITY, GUNUPUR

## DEPARTMENT OF CSE

### Minor Project-I Review Report -1

PROJECT TITLE	Predictive Modeling for Heart Failure		Group Number	13
Team Leader Name and Roll No	Team Members Name and Roll No	Minor Project-II Status Till Date	Tentative Date of Submission of Project	
Soumya Ranjan Mohapatra 22CSE215	Abinash Bharat Jyoti Ratha 22CSE080 Rajat Kumar Dash 22CSE130	2 <sup>nd</sup> July 2024 to 15 <sup>th</sup> Aug 2024	7 <sup>th</sup> to 9 <sup>th</sup> Nov 2024	

#### PROJECT SUMMARY: -

Predictive model for heart failure using machine learning techniques to identify high-risk patients and facilitate early intervention. The model used a number of algorithms by using anonymized patient data, such as demographics, medical histories, and clinical assessments. Of these algorithms, the Random Forest method performed the best, with an AUC-ROC score of 0.89. The application of the model can help medical professionals identify individuals who are at-risk early, provide individualized treatment strategies, and lower the number of episodes of severe heart failure. To improve the model's accuracy and practicality in clinical settings, further efforts will entail growing the dataset and including real-time data from different hospitals.

#### PROJECT OVERVIEW:-

CATEGORY*	PRESENT STATUS OF PROJECT	PERCENTAGE OF WORK COMPLETED	PENDING WORK
ML	Under Development	60%	40% Neural network implementation and frontend utilizing flask.

\*(Research Based/App Development (system/mobile/cloud/iot, etc.)/Web Application/Data Science Application)

Comments of the Supervisor: -

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Signature of Supervisor

Signature of Class Teacher

Signature of Project Coordinator