PROJECT ABSTRACT

➢ **Project Details**
  Topic: Applications of Fourier Transforms
  Subject: Mathematics II (MA 102)

➢ **Project by**
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  Roll No.: 2K20/A6/56

➢ **Project Supervisor**
  Dr. Dinesh Udar

➢ **Project Introduction**

In this project I am going to study about Fourier Transforms and their applications. Fourier transforms is a generalization of Fourier series. Fourier transforms only applies to continues and periodic functions. I will also study about Discrete Fourier transform, properties of Fourier transforms and their applications. Image processing is one of the most used applications of Fourier transforms in the field of Computational engineering. Fourier transforms is an important image processing tool which is used to decompose an image into its sine and cosine components. There are so many applications of Fourier transforms in Engineering I will go through some of them like Circuit analysis, Image processing etc.

➢ **Project Objective**

Objective of this project is to study about Fourier Transforms, their properties and their applications in engineering fields.
Image processing application is my main focused objective. I will implement some Python code to understand and visualize the working of Fourier Transforms in image processing.

❖ **Date:**
June 1, 2021