

# Guru Jambheshwar University Science & Technology

## Electronics & Biomedical Engineering

### Phase I (Project Scope, Planning and Task Definition)

Date: 09/10/2020

#### Project Title

**Flex Lens**

#### Project Team

| Team Designation | Name        | Roll No       |
|------------------|-------------|---------------|
| Name             | Rohan Ghosh | 3180700554102 |

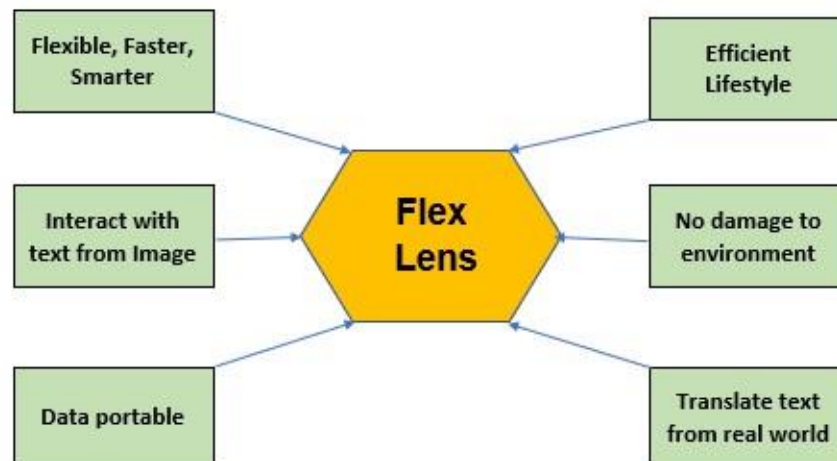
#### Project Scope

The project, **Flex Lens** is based on Deep Learning. I have introduced the concept of Convolutional Neural Network (CNN) to make an AI system which can recognize handwriting and detect object, since it automatically detects the important features without any human supervision and has very high accuracy in image recognition problems. Using Jupyter Notebook we have recorded our datasets and used Tensorflow for storing image data and object detection.

The system is capable of identifying objects based on pre-stored image sets. Moreover, it is capable of capturing, storing new image sets and identifying them. Since, it is a self-learning system which will gather the experience for its self-development.

#### Project Planning and Task Definition

##### Project Planning:



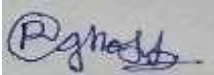
##### TASK DEFINITION:

The Aim of the project is to recognize handwritten stuffs and digitize them for use in various purpose in this superfast evolving environment, where Metaverse is pep talk. And object detection and recognition for faster processing of intermediary tasks. It has a widefield application in security cameras, for developing systems for physically disabled peoples, etc.

Conclusively, "**Flex Lens**" is a smarter, faster and better system for the flexibility in our day-to-day life. Hence, making the earth a better place.

Project ID (If selected from project basket)

N/A

|                                   |                           |        |             |               |           |             |   |                   |   |       |  |
|-----------------------------------|---------------------------|--------|-------------|---------------|-----------|-------------|---|-------------------|---|-------|--|
| Project Outcome (Tick the Column) |                           | Patent |             | Journal Paper |           | S/W Project |   | H/W + S/W Project | ✓ | Other |  |
| Remark of Supervisor              |                           |        |             |               |           |             |   |                   |   |       |  |
|                                   |                           |        |             |               |           |             |   |                   |   |       |  |
| Name of Supervisor                |                           |        |             |               | Signature |             |   |                   |   |       |  |
| Name of Co-Supervisor             |                           |        |             |               | Signature |             |   |                   |   |       |  |
| S.No.                             | Signature of the Students |        | Contact No. |               |           |             | Signature   |                   |   |       |  |
| 1.                                | Rohan Ghosh               |        | 9339089926  |               |           |             |  |                   |   |       |  |

Signature

(Project Teacher)