

MES COLLEGE OF ENGINEERING, KUTTIPPURAM  
DEPARTMENT OF COMPUTER APPLICATIONS  
20MCA245 – MINI PROJECT

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**PRO FORMA FOR THE APPROVAL OF THE THIRD SEMESTER MINI PROJECT**

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*(Note: All entries of the pro forma for approval should be filled up with appropriate and complete information. Incomplete Pro forma of approval in any respect will be rejected.)*

Mini Project Proposal No : \_\_\_\_\_  
(Filled by the Department)

Academic Year : 2020-2021

Year of Admission : 2020

1. Title of the Project : Public Complaint Sorting

2. Name of the Guide : Mr.Balachandran K P

3. Number of the Student: \_\_\_\_\_

4. Student Details (in BLOCK LETTERS)

Name ASWATHY V

Roll Number 12



Signature

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1. \_\_\_\_\_

Date: 15-12-2021

**Approval Status :** Approved / Not Approved

Signature of  
Committee Members }

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**Comments of The Mini Project Guide**

Dated Signature

Initial Submission :

First Review :

Second Review :

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**Comments of The Project Coordinator**

Dated Signature

Initial Submission:

First Review

Second Review

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Final Comments :

# PUBLIC COMPLAINT SORTING

ASWATHY V

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**Introduction and Objectives :** This system is used to resolve problem in less time and to keep track on all process which will going on after registering particular complaints. Municipal authorities and users both will get notifications from each other. To develop this system, we use machine learning and image processing

System is providing platform for citizens where they can report problems, share ideas and suggestions. It will be helpful to collect valuable source as feedback from citizens about progress improvement of city through the different posts or images posted by citizens. It will be helpful to resolve posted problems in limited time.

The main purpose of the system to resolve problem in less time and to keep track on all process which will going on after registering particular complaints. Municipal authorities and users both will get notifications from each other. System is using the hierarchy of different level of authority like user level then departments and their authorities and finally higher authority, this will be more effective to keep the track on each and every work related to civic issues posted by citizens. To develop this system, we use machine leaning and image processing This system focuses on flexible communication between citizen to citizen and citizen to respective authority. An implementation of web application in which there will be the flexible communication so that each citizen can raise their voice against various civic issues with the least manual interference

## PROBLEM DEFINITION AND INITIAL REQUIREMENTS

### EXISTING SYSTEM

We can consider that citizens giving complaint in municipality office as an existing system but most of the complaints are not even opened by officers and will not get any reply from the authority. The real problem of this system is citizens don't know the procedures of giving a complaint and also they have to follow a long procedure and formalities to register their problems or to report such problems like street damages, garbage management problems (garbage bin over owing), Electricity problem, Water problem etc.

## **PROPOSED SYSTEM**

In this project we are going to implement a machine learning online web application that will provide a platform for citizens to raise their voice against civic issues and report their daily life problems with infrastructure in their city to relevant municipal department. Citizens can share their ideas, suggestions with each other and they can also view the problems posted by other citizens.

### **Basic functionalities:**

#### **FUNCTIONAL MODULE**

- Image Processing

Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with that image. In this system we can sort the complaint using image processing and send it to the corresponding authority

#### **MODULE DESCRIPTION**

- Admin
- Officer

- User

## **ADMIN**

- Add and manage officers.
- Add and manage dataset.
- Add work to officer.
- view work status.
- view feedback.

## **OFFICER**

- Login
- view works and update status
- view complaints and sent reply
- send notifications

## **USERS**

- Registration
- send complaint and view reply
- send feedback

- view department notifications

### FUNCTIONAL MODULES:

#### COMPLAINT SORTING USING IMAGE PROCESSING:

Image processing is a method to perform some operations on an image, in order to get an enhanced image or to extract some useful information from it. It is a type of signal processing in which input is an image and output may be image or characteristics/features associated with that image. Image classification is the process of categorizing and labeling groups of pixels or vectors within an image based on specific rules. The categorization law can be devised using one or more spectral or textural characteristics. When any citizen posts complaints regarding any civic issue than that complaint goes to the particular department using machine learning and image processing

## **HARDWARE & SOFTWARE REQUIREMENT**

### **HARDWARE REQUIREMENTS**

The selection of hardware is very important in the existence and proper working of any software. Then selection hardware, the size and capacity requirements are also important.

- Processor : Intel Pentium Core i3 and above, 64 bits
- RAM : Min 3GB RAM
- HARD DISK: 10 GB

### **SOFTWARE REQUIREMENTS**

One of the most difficult task is selecting software for the system, once the system requirements is found out then we have to determine whether a particular software package fits for those system requirements. The application requirement:

- OPERATING SYSTEM: WINDOWS 10
- FRONT END: HTML, CSS, JAVASCRIPT
- BACK END: Mysql
- IDE USED: JetBrains Pycharm, Android studio
- TECHNOLOGY USED: PYTHON JAVA
- FRAME WORK USED: Flask