DAY1:- (23/06/2023)

1. DISCUSSION OF MY PREVIOUS EDUCATION, EXPERIENCES, AND PERSONAL PROJECTS IN ELECTRONICS.
2. DISCUSSION OF THE PROJECT ( BAGGAGE SCANNER) ON WHICH I HAVE TO WORK.
3. LEARN WORKING ON UBUNTU OPERATING SYSTEM.
4. READ THE CODE WRITTEN FOR DIFFERENT COLOR CONVERSIONS OF IMAGE SELECTED IN THE GUI.
5. SIMULATE THE GUI OF COLOR CONVERSION AND UNDERSTAND THE WORKING.

DAY :- (24/06/2023)

1. SATURDAY IS HOLIDAY.

DAY :- (25/06/2023)

1. SUNDAY IS HOLIDAY.

DAY :- (26/06/2023)

1. LEARN ABOUT PYTHON AND PYQT5 WITH QT DESIGNER ENVIRONMENT.
2. READ ABOUT THE DIFFERENT LAYOUTS IN QT DESIGNER i.e. HORIZONTAL, VERTICAL, GRID, AND FORM LAYOUT.
3. LEARN ABOUT THE STYLESHEET PROPERTY OF LABEL, BUTTONS, AND FRAME IN GUI WINDOW AND IMPLEMENT IT.
4. ADD A LABEL IN GUI FOR SHOWING IMAGE AND 20 PLUS BUTTONS FOR PERFORMING FUNCTIONS LIKE STOP, START, LEFT ROTATE, RIGHT ROTATE, RGB COLOR CONVERSION, ETC.
5. MADE THE GUI WINDOW RESPONSIVE BY SETTING MINIMUM AND MAXIMUM SIZE OF COMPONENTS INSIDE IT.
6. SET THE TLTLE AND ICON OF GUI WINDOW.

DAY3:- (27/06/2023)

1. ADD TWO BUTTONS IN GUI. ONE BUTTON FOR SELECTING THE IMAGE FILE AND OTHER FOR SELECTING NO OBJECT FILE.
2. ADD THREE BUTTONS AT THE TOP RIGHT CORNER OF GUI FOR PERFORMING OPERATIONS – ZOOM, NN AND MS.
3. LEARN ABOUT “ HOW TO SELECT TEXT FILE AND NPY FILE FROM GUI INTERFACE”.
4. CREATE A NEW .PY FILE. THEN ADD THE LIBRARIES REQUIRED FOR LOADING GUI AND PERFORMING FUNCTIONS IN GUI.
5. LOAD THE SAVED DESIGN.UI FILE IN PYTHON DESIGN.PY FILE.
6. WRITE CODE FOR SELECTING IMAGE AND NO OBJECT FILE, WHENEVER THESE TWO BUTTONS ARE PRESSED.

DAY :- (28/06/2023)

DAY :- (29/06/2023)

1. holiday

DAY :- (30/06/2023)

DAY :- (01/07/2023)

1. SATURDAY IS HOLIDAY.

DAY :- (02/07/2023)

1. SUNDAY IS HOLIDAY.

DAY :- (03/07/2023)

1. MADE A NEW GUI FOR CONFIGURATION AND TCP CONNECTION ESTABLISHMENT.
2. INCLUDE FOUR FIELDS – IP, PORT, TINT, GAIN AND TWO BUTTONS- INITIALIZE , RESET IN OUR CONFIGURATION WINDOW GUI.
3. SET DEFAULT VALUE OF LABELS WHICH APPEARS WHEN CONFIGURATION\_WINDOW.PY FILE IS RUN.
4. PROVIDE COMBOBOX WIDGET FOR GAIN FIELD WHICH TAKES ONLY FOUR VALUES – 12.5, 50, 100 & 150.
5. SAVED AND LOAD THE GUI IN CONFIGURATION\_WINDOW.PY FILE. THEN WRITE CODE FOR GETTING THE VALUES IN LABELS AND COMBOBOX WIDGET, WHICH CAN BE FURTHER APPLIED FOR THE TCP CONNECTION, UDP CONNECTION AND CONFIGURATION.
6. WRITE CODE FOR INITIALIZE AND RESET BUTTON.
7. RUN THE FILE AND CHECK THE WORKING OF TCP CONNECTION BETWEEN CLIENT & SERVER BY USING IP AND PORT VALUE.

DAY :- (04/07/2023)

DAY :- (05/07/2023)

DAY :- (06/07/2023)

DAY :- (07/07/2023)

1. TAKEN SICK LEAVE.

DAY :- (08/07/2023)

1. SATURDAY IS HOLIDAY.

DAY :- (09/07/2023)

1. SUNDAY IS HOLIDAY.

DAY :- (10/07/2023)

DAY :- (11/07/2023)

DAY :- (12/07/2023)

1. TAKEN LEAVE DUE TO A PROBLEM WITH THE HARDWARE DEVICE.

DAY :- (13/07/2023)

DAY :- (14/07/2023)

DAY :- (15/07/2023)

1. SATURDAY IS HOLIDAY.

DAY :- (16/07/2023)

1. SUNDAY IS HOLIDAY.

DAY :- (17/07/2023)

DAY :- (18/07/2023)

DAY :- (19/07/2023)

DAY :- (20/07/2023)

1. TAKEN LEAVE DUE TO HEAVY RAIN ALERT.

DAY :- (21/07/2023)

1. TAKEN LEAVE OF ONE DAY FOR COLLECTING SEM- VI MARKSHEET FROM COLLEGE.

DAY :- (22/07/2023)

1. SATURDAY IS HOLIDAY.

DAY :- (23/07/2023)

1. SUNDAY IS HOLIDAY.

DAY :- (24/07/2023)

1. ADD HORIZONTAL SLIDER IN THE GUI INTERFACE FOR TAKING THE VALUE OF GAMMA.
2. ADD TWO LABELS ON BOTH ENDS OF ABOVE HORIZONTAL SLIDER FOR VG- AND VG+.
3. ADD TWO LABELS AND TWO LINE EDIT WIDGETS FOR TAKING VALUES OF MAXIMUM LIMIT AND MINIMUM LIMIT OF PIXEL VALUE I.E. PIXEL RANGE.
4. SET THE MAXIMUM LIMIT AND MINIMUM LIMIT TO 65535 AND 0 RESPECTIVELY.
5. LEARN ABOUT GAMMA CORRECTION AND ITS EQUATION FOR CHANGING PIXEL VALUE.
6. CREATE A FUNCTION FOR SELECTING PIXEL VALUE IN PARTICULAR RANGE AND PERFORM GAMMA CORRECTION UPON IT.

DAY :- (25/07/2023)

1. SET QABSTRACTSLIDER AND QSLIDER OPTION FOR HORIZONTAL SLIDER.
2. ADD A SET BUTTON TO GUI WHICH HELPS IN TAKING NEW MIN AND MAX LIMIT ENTERED BY THE USER.
3. CREATE A FUNCTION FOR SET BUTTON.
4. PROVIDE A CONDITIONAL STATEMENT IN ABOVE FUNCTION TO CHECK EVERY VALUE OF MIN AND MAX LIMIT.
5. ADD GAMMA CORRECTION STEPS INSIDE DATA GRABBING FUNCTION.
6. MINIMIZE TIME COMPLEXITY OF GAMMA CORRECTION CODE SO THAT IT TAKES LESS TIME FOR EXECUTION.

DAY :- (26/07/2023)

1. LEARN ABOUT SPECTRUM OF CS 137 AND STEPS INVOLVED IN OBTAINING SPECTRUM OF CS 137.
2. STUDY ABOUT WORKING OF GAMMA SPECTROMETER AND SCINTILLATION DETECTOR.
3. READ RESEARCH PAPER FOR DETECTING PROMINENT PEAKS OF SPECTRUM.
4. LEARN ABOUT DIFFERENT PEAK DETECTION ALGORITHMS.
5. LEARN ABOUT SAVITZKY-GOLAY FILTER.

DAY :- (27/07/2023)

1. STUDY ABOUT THE WORKING AND EQUATION OF SAVITZKY-GOLAY FILTER.
2. COMPARE BETWEEN SGOLAYFILT FUNCTION FROM MATLAB AND SAVGOL\_FILTER FUNCTION FROM SCIPY LIBRARY IN PYTHON.
3. LEARN ABOUT THE WORKING OF WINDOW\_LENGTH PARAMETER.
4. FIND METHODS TO DECIDE THE VALUE OF WINDOW\_LENGTH AND POLYORDER FOR BETTER DATA FILTERING AND SMOOTHING.
5. PERFORM SAVGOL\_FILTER ON DATA GENERATED THROUGH RANDOM MODULE IN PYTHON AND FIND PROMINENT PEAKS IN THEM.
6. FINALLY, PLOTTED ORIGINAL DATA, SMOOTHED INTENSITY DATA AND PROMINENT PEAK ON A SINGLE PLOT WITH THE HELP OF MATPLOTLIB LIBRARY.

DAY :- (28/07/2023)