

LAMPIRAN

1. Skrip Program *Create Account (Proses Sign-Up)*

```
from PyQt4 import QtCore, QtGui
import sqlite3
import numpy as np
import cv2
import os
from PIL import Image
try:
    _fromUtf8 = QtCore.QString.fromUtf8
except AttributeError:
    def _fromUtf8(s):
        return s
try:
    _encoding = QtGui.QApplication.UnicodeUTF8
    def _translate(context, text, disambig):
        return QtGui.QApplication.translate(context, text, disambig, _encoding)
except AttributeError:
    def _translate(context, text, disambig):
        return QtGui.QApplication.translate(context, text, disambig)

class Ui_Dialog(object):
    def insertData(self):
        nopassport = self.nopassport_lineEdit.text()
        nama = self.uname_lineEdit.text()
        email = self.email_lineEdit.text()
        ttl = self.ttl_lineEdit.text()
        noktp = self.noktp_lineEdit.text()
```

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alamat = self.alamat_lineEdit.text()
connection = sqlite3.connect("data.db")
format_str = """INSERT INTO USERS (nopassport, nama, ttl, email, noktp, alamat)
VALUES ("{0}", "{1}", "{2}", "{3}", "{4}", "{5}");"""
sql = format_str.format(nopassport, nama, ttl, email, noktp, alamat)
connection.execute(sql)
connection.commit()
connection.close()

def active_camera(self):
    cam=cv2.VideoCapture(0)
    faceDetect=cv2.CascadeClassifier("D:\Software
TA\opencv\sources\data\haarcascades\haarcascade_frontalface_default.xml")
    sampleNum=0;
    nopassport = self.nopassport_lineEdit.text()
    nama = self.username_lineEdit.text()
    while(True):
        ret,img=cam.read();
        gray=cv2.cvtColor(img, cv2.COLOR_BGR2GRAY)
        faces=faceDetect.detectMultiScale(gray,1.3,5);
        x=0
        y=0
        for(x,y,w,h) in faces:
            sampleNum=sampleNum+1;
            cv2.rectangle(img,(x,y),(x+w,y+h),(0,0,255),2)

cv2.imwrite("dataSet/user."+str(nopassport)+ "."+str(nama)+str(sampleNum)+".jpg",gray[y:y+h,
x:x+w])

cv2.imshow("face",img);

```

```

cv2.waitKey(1000)& 0xff
if sampleNum>2:
    connection = sqlite3.connect("data.db")
    namaFile="dataSet/user."+str(nopassport)+"."+str(nama)+str(sampleNum)+".jpg"
    foto = "UPDATE USERS SET FOTO='{0}' WHERE
NOPASSPORT='{1}'".format(namaFile,nopassport)
    cv2.imwrite(namaFile,gray[y:y+h,x:x+w])
    connection.execute(foto)
    connection.commit()
    connection.close()
    break
cam.release()
cv2.destroyAllWindows()

```

```

def setupUi(self, Dialog):
    Dialog.setObjectName(_fromUtf8("Dialog"))
    Dialog.resize(529, 396)
    self.nopassport_lineEdit = QtGui.QLineEdit(Dialog)
    self.nopassport_lineEdit.setGeometry(QtCore.QRect(120, 90, 113, 20))
    self.nopassport_lineEdit.setObjectName(_fromUtf8("nopassport_lineEdit"))
    self.uname_lineEdit = QtGui.QLineEdit(Dialog)
    self.uname_lineEdit.setGeometry(QtCore.QRect(120, 140, 113, 20))
    self.uname_lineEdit.setObjectName(_fromUtf8("uname_lineEdit"))
    self.ttl_lineEdit = QtGui.QLineEdit(Dialog)
    self.ttl_lineEdit.setGeometry(QtCore.QRect(120, 190, 113, 20))
    self.ttl_lineEdit.setObjectName(_fromUtf8("ttl_lineEdit"))
    self.email_lineEdit = QtGui.QLineEdit(Dialog)
    self.email_lineEdit.setGeometry(QtCore.QRect(120, 240, 113, 20))
    self.email_lineEdit.setObjectName(_fromUtf8("email_lineEdit"))

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```
self.noktp_lineEdit = QtGui.QLineEdit(Dialog)
self.noktp_lineEdit.setGeometry(QtCore.QRect(380, 90, 113, 20))
self.noktp_lineEdit.setObjectName(_fromUtf8("noktp_lineEdit"))
self.alamat_lineEdit = QtGui.QLineEdit(Dialog)
self.alamat_lineEdit.setGeometry(QtCore.QRect(380, 140, 113, 20))
self.alamat_lineEdit.setObjectName(_fromUtf8("alamat_lineEdit"))
self.email_label = QtGui.QLabel(Dialog)
self.email_label.setGeometry(QtCore.QRect(10, 240, 46, 13))
self.email_label.setObjectName(_fromUtf8("email_label"))
self.alamat_label = QtGui.QLabel(Dialog)
self.alamat_label.setGeometry(QtCore.QRect(280, 140, 61, 16))
self.alamat_label.setObjectName(_fromUtf8("alamat_label"))
self.nopassport_label = QtGui.QLabel(Dialog)
self.nopassport_label.setGeometry(QtCore.QRect(10, 90, 71, 16))
self.nopassport_label.setObjectName(_fromUtf8("nopassport_label"))
self.label_4 = QtGui.QLabel(Dialog)
self.label_4.setGeometry(QtCore.QRect(190, 0, 161, 51))
font = QtGui.QFont()
font.setPointSize(15)
self.label_4.setFont(font)
self.label_4.setObjectName(_fromUtf8("label_4"))
self.uname_label = QtGui.QLabel(Dialog)
self.uname_label.setGeometry(QtCore.QRect(10, 140, 61, 16))
self.uname_label.setObjectName(_fromUtf8("uname_label"))
self.signup_btn = QtGui.QPushButton(Dialog)
self.signup_btn.setGeometry(QtCore.QRect(350, 240, 161, 23))
self.signup_btn.setObjectName(_fromUtf8("signup_btn"))
self.signup_btn.clicked.connect(self.insertData)
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```
self.signup_btn.clicked.connect(self.active_camera)
self.ttl_label = QtGui.QLabel(Dialog)
self.ttl_label.setGeometry(QtCore.QRect(10, 190, 61, 16))
self.ttl_label.setObjectName(_fromUtf8("ttl_label"))
self.noktp_label = QtGui.QLabel(Dialog)
self.noktp_label.setGeometry(QtCore.QRect(280, 90, 61, 16))
self.noktp_label.setObjectName(_fromUtf8("noktp_label"))
self.retranslateUi(Dialog)
QtCore.QMetaObject.connectSlotsByName(Dialog)
```

```
def retranslateUi(self, Dialog):
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```
    Dialog.setWindowTitle(_translate("Dialog", "Sign-Up", None))
    self.email_label.setText(_translate("Dialog", "EMAIL", None))
    self.alamat_label.setText(_translate("Dialog", "ALAMAT", None))
    self.nopassport_label.setText(_translate("Dialog", "No. PASSPORT", None))
    self.label_4.setText(_translate("Dialog", "Create Account", None))
    self.uname_label.setText(_translate("Dialog", "NAMA", None))
    self.signup_btn.setText(_translate("Dialog", "Sign Up", None))
    self.ttl_label.setText(_translate("Dialog", "TTL", None))
    self.noktp_label.setText(_translate("Dialog", "No. KTP", None))
```

```
if __name__ == "__main__":
```

```
    import sys
    app = QtGui.QApplication(sys.argv)
    Dialog = QtGui.QDialog()
    ui = Ui_Dialog()
    ui.setupUi(Dialog)
    Dialog.show()
```

```
sys.exit(app.exec_())
```

2. Skrip Program Login

```
from PyQt4 import QtCore, QtGui
from welcome import Ui_MainWindow
import login as Ui_login
import sys
import sqlite3
import numpy as np
import cv2,os
from PIL import Image
import pickle
try:
    _fromUtf8 = QtCore.QString.fromUtf8
except AttributeError:
    def _fromUtf8(s):
        return s
try:
    _encoding = QtGui.QApplication.UnicodeUTF8
    def _translate(context, text, disambig):
        return QtGui.QApplication.translate(context, text, disambig, _encoding)
except AttributeError:
    def _translate(context, text, disambig):
        return QtGui.QApplication.translate(context, text, disambig)

class Ui_login(object):
    def loginCheck(self):
        nopassport= self.nopass_lineEdit.text()
        connection = sqlite3.connect("data.db")
        sql="SELECT * FROM USERS WHERE NOPASSPORT='{0}'".format(nopassport)
        result = connection.execute(sql)
        if len(result.fetchall()) > 0:
            print("User Found!")
            nopassport= self.nopass_lineEdit.text()
            namapenerbangan = self.namapener_lineEdit.text()
            conn=sqlite3.connect("data.db")
            cmd="SELECT * FROM USERS WHERE nopassport='{0}'".format(nopassport)
            cursor=conn.execute(cmd)
            profile =None
            for row in cursor:
                profile=row
```

```

connection.close()
faceDetect=cv2.CascadeClassifier("D:\Software
TA\opencv\sources\data\haarcascades\haarcascade_frontalface_default.xml");
rec=cv2.createLBPHFaceRecognizer()
rec.load("recognizer\\trainingData.yml")
path="dataSet"
cam=cv2.VideoCapture(0)
font=cv2.cv.InitFont(cv2.cv.CV_FONT_HERSHEY_COMPLEX_SMALL,1,1,0,2)
while(True):
    ret,img=cam.read();
    gray=cv2.cvtColor(img,cv2.COLOR_BGR2GRAY)
    faces=faceDetect.detectMultiScale(gray, scaleFactor=1.2, minNeighbors=5,
minSize=(100, 100), flags=cv2.CASCADE_SCALE_IMAGE);
    x=0
    y=0
    for (x,y,w,h) in faces:
        cv2.rectangle(img,(x,y),(x+w,y+h),(0,0,255),2)
        nopassport,conf=rec.predict(gray[y:y+h,x:x+w])
        cv2.cv.PutText(cv2.cv.fromarray(img),"Nama:"+str(profile[1]),(x,y+h+20),font,(0,
0, 255))
        cv2.imshow("Face",img)
        cv2.waitKey(1000)& 0xff
        if 120<x<500 and 100<y<380 :
            nopassport= self.nopass_lineEdit.text()
            namapenerbangan = self.namapener_lineEdit.text()
            cv2.imwrite("datalogin/user."+str(nopassport)+ "."+str(namapenerbangan)+".jpg",gray[y:y
+h,x:x+w])
            #break;

        self.showMessageBox('wajah cocok')
    else :
        print("User not Found!")
        self.showMessageBox('Warning','Nomor Passport Salah atau Anda Belum
Terdaftar')
connection.close()
def showMessageBox(self, title, message):
    msgBox =QtGui.QMessageBox()
    msgBox.setIcon(QtGui.QMessageBox.Warning)
    msgBox.setWindowTitle(title)
    msgBox.setText(message)
    msgBox.setStandardButtons(QtGui.QMessageBox.Ok)
    msgBox.exec_()
def insertData(self):

```

```

nopassport= self.nopass_lineEdit.text()
namapenerbangan = self.namapener_lineEdit.text()
connection = sqlite3.connect("login.db")
login = """INSERT INTO USERS (nopassport, namapenerbangan, foto) VALUES
({0}", "{1}", "{2}");"""
foto = "datalogin/user."+str(nopassport)+". "+str(namapenerbangan)+".jpg"
sql =login.format(nopassport, namapenerbangan,foto)
connection.execute(sql)
connection.commit()
connection.close()

```

```

def setupUi(self, Dialog):

```

```

    Dialog.setObjectName(_fromUtf8("Dialog"))
    Dialog.resize(400, 300)
    self.label = QtGui.QLabel(Dialog)
    self.label.setGeometry(QtCore.QRect(140, 20, 161, 41))
    font = QtGui.QFont()
    font.setPointSize(15)
    self.label.setFont(font)
    self.label.setObjectName(_fromUtf8("label"))

```

```

    self.nopass_lineEdit = QtGui.QLineEdit(Dialog)
    self.nopass_lineEdit.setGeometry(QtCore.QRect(180, 100, 113, 20))
    self.nopass_lineEdit.setObjectName(_fromUtf8("nopass_lineEdit"))

```

```

    self.namapener_lineEdit = QtGui.QLineEdit(Dialog)
    self.namapener_lineEdit.setGeometry(QtCore.QRect(180, 150, 113, 20))
    self.namapener_lineEdit.setObjectName(_fromUtf8("namapener_lineEdit"))

```

```

    self.login_btn = QtGui.QPushButton(Dialog)
    self.login_btn.setGeometry(QtCore.QRect(200, 190, 61, 23))
    self.login_btn.setObjectName(_fromUtf8("login_btn"))
    self.login_btn.clicked.connect(self.insertData)
    self.login_btn.clicked.connect(self.loginCheck)

```

```

    self.namapener_label = QtGui.QLabel(Dialog)
    self.namapener_label.setGeometry(QtCore.QRect(40, 150, 111, 16))
    self.namapener_label.setObjectName(_fromUtf8("namapener_label"))

```

```

    self.nopass_label = QtGui.QLabel(Dialog)
    self.nopass_label.setGeometry(QtCore.QRect(40, 100, 81, 16))
    self.nopass_label.setObjectName(_fromUtf8("nopass_label"))

```



```
self.retranslateUi(Dialog)
QtCore.QMetaObject.connectSlotsByName(Dialog)
```

```
def retranslateUi(self, Dialog):
```

```
    Dialog.setWindowTitle(_translate("Dialog", "Login", None))
    self.label.setText(_translate("Dialog", "Login Form", None))
    self.login_btn.setText(_translate("Dialog", "Login", None))
    self.namapener_label.setText(_translate("Dialog", "NAMA PENERBANGAN",
None))
    self.nopass_label.setText(_translate("Dialog", "NO. PASSPORT", None))
```

```
if __name__ == "__main__":
```

```
    import sys
    app = QtGui.QApplication(sys.argv)
    Dialog = QtGui.QDialog()
    ui = Ui_login()
    ui.setupUi(Dialog)
    Dialog.show()
    sys.exit(app.exec_())
```