```python
#from cProfile import run
from kivy.core.window import Window
#from kivy.properties import StringProperty
from kivy.app import App
from kivy.uix.image import Image
from kivymd.uix.textfield import MDTextFieldRound
from kivy.uix.button import Button
from kivy.metrics import dp
from kivymd.app import MDApp
from kivymd.uix.card import MDCard
from kivymd.uix.label import MDLabel
from datetime import datetime
from kivy.uix.widget import Widget
from kivy.uix.screenmanager import Screen, NoTransition, CardTransition,
ScreenManager
from kivy.lang import Builder
from kivy.uix.boxlayout import BoxLayout
from kivy.uix.floatlayout import FloatLayout
from kivymd.uix.gridlayout import MDGridLayout
from kivymd.uix.floatlayout import MDFloatLayout
#from kivymd.uix.behaviors import RoundedRectangularElevationBehavior
from kivymd.uix.button import MDRectangleFlatIconButton
from kivymd.uix.textfield import MDTextFieldRect
from kivy.properties import ObjectProperty
from kivy.uix.screenmanager import ScreenManager, Screen
from kivy.input.providers.mouse import MouseMotionEvent
from kivymd.uix.menu import MDDropdownMenu
#from kivymd.uix.behaviors.toggle_behavior import MDToggleButton
from kivymd.uix.button import MDRoundFlatButton
# from gardennotification import Notification
from plyer import notification, accelerometer
from kivymd.uix.dialog import MDDialog
from kivymd.uix.button import MDFlatButton
import pync
import time
import numpy as np
import random
from kivy.clock import Clock


################### SQL imports  ############################
import sqlite3
from sqlalchemy import create_engine, ForeignKey
from sqlalchemy import Column, Date, Integer, String
from sqlalchemy.ext.declarative import declarative_base
from sqlalchemy.orm import sessionmaker
import os

# os.remove('trainer.db')
engine = create_engine('sqlite:///LoginDetails.db', echo=True)
Base = declarative_base()

Session = sessionmaker(bind=engine)
session = Session()
############################### SQL  ###################################
```

```python
54 ################################  SQL  ##########################################
55
56 ##### AI #####
57 import tensorflow as tf
58 #import keras
59
60 ACTIVITIES = {
61     0: 'sitting',
62     1: 'walking',
63     2: 'running',
64 }
65
66 def load_model():
67     model = tf.keras.models.load_model('model')
68     return model
69
70 def predict(model, data):
71     k = model.predict([data])
72     predict_value = ACTIVITIES[np.argmax(k)]
73     return predict_value
74 ### AI ####
75 Sensor_values = []
76 m = load_model()
77
78 g_sensor_reachable = False
79
80
81 class User(Base):
82     __tablename__ = "user"
83     email = Column(String, primary_key=True)
84     password = Column(String, nullable=False)
85     name = Column(String)
86     age = Column(String)
87     weight = Column(String)
88     uheight = Column(String)
89     gender = Column(String)
90     jp = Column(String)
91
92     def __init__(self, email, password, name='', age='', weight='', uheight =
'' ,gender='', jp=''):
93         self.email = email
94         self.password = password
95         self.name = name
96         self.age = age
97         self.weight = weight
98         self.uheight = uheight
99         self.gender = gender
100        self.jp = jp
101
102
103 class MovementAnalysis(Base):
104     __tablename__ = "movement"
105
106     email = Column(String, ForeignKey(User.email), primary_key=True,
nullable=False)
107     timestamp = Column(String, nullable=False, primary_key=True)
```

```python
    timestamp = Column(String, nullable=False, primary_key=True)
    mvmntprofile = Column(Integer)


    def __init__(self, email, timestamp, mvmntprofile):
        self.email = email
        self.timestamp = timestamp
        self.mvmntprofile = mvmntprofile

Base.metadata.create_all(engine)

##############################################################################


##############################################################################
#


logged_in_user = None



class LoginScreen(Screen):

    def login(self):
        email = ObjectProperty(None)
        password = ObjectProperty(None)
        email_input = self.email.text
        password_input = self.password.text
        print(email_input)
        print(password_input)
        valid = session.query(User).filter(
            User.email == email_input, User.password ==
password_input).count()
        if valid == 0 or (email_input == '' or password_input == ''):
            # if valid == 0:
            print("Invalid email or password")
        else:
            result = session.query(User).filter(
                User.email == email_input, User.password == password_input)
            for user in result:
                print(f"Welcome {user.name}!")
                global logged_in_user
                logged_in_user = user.email
                self.manager.current = "main"

        # self.manager.current="main"
        #result = session.query(User).filter(User.email == email_input).all()


class SignUpScreen(Screen):
    def registerBtn(self):
        email_input = self.email.text
        password_input = self.password.text
        password_confirmation_input = self.password_confirmation.text
        username_input = self.username.text
```

```python
            username_input = self.username.text
            age_input = self.age.text
            weight_input = self.weight.text
            uheight_input = self.uheight.text
            gender_input = self.gender.text
            jp_input = self.jp.text

            if password_confirmation_input != password_input:
                print("Password unmatch!!")
            else:
                data = User(email_input, password_input, username_input,
                            age_input, weight_input, uheight_input, gender_input,
jp_input)
                session.add(data)
                session.commit()

class AcknowledgeScreen(Screen):
    pass

class MainScreen(Screen):
    # def switch_click(self, switchObject, switchValue):
    #     if (switchValue):
    #         self.ids.my_label.text = "You are now checked-in"
    #     else:
    #         self.ids.my_label.text = "You are now checked-out"
    show_notif = True
    motiv_task_list = []
    movement_profile = ObjectProperty(None)
    actual_movement = ''
    def notif_switch_click(self, switchObject, switchValue):
        # show_notif = True
        if(switchValue):
            self.ids.notification_switch_label.text = "Notification ON"
            self.show_notif = True
            self.ids.motiv_checkbox_1.disabled = False
            self.ids.motiv_checkbox_2.disabled = False
            self.ids.motiv_checkbox_3.disabled = False
            self.ids.motiv_checkbox_4.disabled = False
            self.ids.motiv_checkbox_5.disabled = False
        else:
            self.ids.notification_switch_label.text = "Notification OFF"
            self.show_notif = False
            self.motiv_task_list = []
            self.ids.motiv_checkbox_1.active = False
            self.ids.motiv_checkbox_2.active = False
            self.ids.motiv_checkbox_3.active = False
            self.ids.motiv_checkbox_4.active = False
            self.ids.motiv_checkbox_5.active = False
            self.ids.motiv_checkbox_1.disabled = True
            self.ids.motiv_checkbox_2.disabled = True
            self.ids.motiv_checkbox_3.disabled = True
            self.ids.motiv_checkbox_4.disabled = True
            self.ids.motiv_checkbox_5.disabled = True
    def get_info(self):
        global logged_in_user
```

```python
            global logged_in_user
            result = session.query(User).filter(User.email == logged_in_user)
            u_age = ''
            u_gender = ''
            for user in result:
                #self.email_label.text = user.email
                #self.username_label.text = user.name
                #self.age.text = user.age

                u_age = user.age
                #self.weight_label.text = user.weight
                #self.gender.text = user.gender
                u_gender = user.gender
                u_jp = user.jp
            # u_age = user.age
            # u_gender = user.gender
            u_age = int(u_age)
            u_jp = str(u_jp)

    #def check_body_info(self, u_age, job, u_gender,
    actual_movement_profile):
            # motivation_task = []
            # motiv_task1 = []
            # motiv_task2 = []
            # motiv_task3 = []
            # motiv_task4 = []
            # motiv_task5 = []
            if u_jp == "software engineer":
                if u_gender == "Male":
                    if (u_age) > 18 and (u_age) < 40:
                        motivation_task = [
                            "software 18-40: male run1",
                            "software 18-40: male run2",
                            "software 18-40: male run3",
                            "software 18-40: male run4",
                            "software 18-40: male run5"
                        ]
                    else:
                        motivation_task = [
                            "software 40+: male run1",
                            "software 40+: male run2",
                            "software 40+: male run3",
                            "software 40+: male run4",
                            "software 40+: male run5"
                        ]
                elif u_gender == "Female":
                    if (u_age) > 18 and (u_age) < 40:
                        motivation_task = [
                            "software 18-40: female run1",
                            "software 18-40: female run2",
                            "software 18-40: female run3",
                            "software 18-40: female run4",
                            "software 18-40: female run5"
                        ]
                    else:
```

```python
                    motivation_task = [
                        "software 40+: female run1",
                        "software 40+: female run2",
                        "software 40+: female run3",
                        "software 40+: female run4",
                        "software 40+: female run5"
                    ]
            else:
                if u_gender == "Male":
                    if (u_age) > 18 and (u_age) < 40:
                        motivation_task = [
                            "not software 18-40: male run1",
                            "not software 18-40: male run2",
                            "not software 18-40: male run3",
                            "not software 18-40: male run4",
                            "not software 18-40: male run5"
                        ]
                    else:
                        motivation_task = [
                            "not software 40+: male run1",
                            "not software 40+: male run2",
                            "not software 40+: male run3",
                            "not software 40+: male run4",
                            "not software 40+: male run5"
                        ]
                elif u_gender == "Female":
                    if (u_age) > 18 and (u_age) < 40:
                        motivation_task = [
                            "not software 18-40: female run1",
                            "not software 18-40: female run2",
                            "not software 18-40: female run3",
                            "not software 18-40: female run4",
                            "not software 18-40: female run5"
                        ]
                    else:
                        motivation_task = [
                            "not software 40+: female run1",
                            "not software 40+: female run2",
                            "not software 40+: female run3",
                            "not software 40+: female run4",
                            "not software 40+: female run5"
                        ]


        self.motiv_task1.text = motivation_task[0]
        self.motiv_task2.text = motivation_task[1]
        self.motiv_task3.text = motivation_task[2]
        self.motiv_task4.text = motivation_task[3]
        self.motiv_task5.text = motivation_task[4]
        #print(motiv_task1, motiv_task2, motiv_task3, motiv_task4,
motiv_task5)

    def close_dialog(self, obj):
        self.dialog.dismiss()
```

```python
    def show_notification_alert_dialog(self):
        # if not self.dialog:
        #     self.dialog = MDDialog()

        self.dialog = MDDialog(
            title = "Error",
            text = "Your Operating System doesn't support notification,
sorry.",
            buttons = [MDFlatButton(text = "OK",
            # text_color = (1,1,1,1),
            on_release = self.close_dialog)]
        )

        self.dialog.open()

    def notification_text(self, value, instance):
        if self.show_notif == True:
            if value== True:
                self.motiv_task_list.append(instance)
            else:
                self.motiv_task_list.remove(instance)
        else:
            pass
        print(self.motiv_task_list)
    def pop_up_notification(self):
        str_motiv_task_list = "Please don't forget to do: "
        for notifications in self.motiv_task_list:
            str_motiv_task_list = str_motiv_task_list + notifications + "
,and "

        str_motiv_task_list = str_motiv_task_list[:-6]
        if self.show_notif == True:
            try:
                notification.notify(title='test',
message=str_motiv_task_list, timeout=3)
                # time.sleep(10)
            except:
                pass
            try:
                pync.notify(str_motiv_task_list, title='Title')
                # time.sleep(10)
            except:
                self.show_notification_alert_dialog()
        elif self.show_notif == False:
            pass
            # self.ids.motiv_checkbox_1.active = False
            # self.ids.motiv_checkbox_2.active = False
            # self.ids.motiv_checkbox_3.active = False
            # self.ids.motiv_checkbox_4.active = False
            # self.ids.motiv_checkbox_5.active = False


    def check_in_deactivate(self, value):
        if value == False:
            self.ids.check_in_button.disabled = True
```

```python
            self.ids.check_out_button.disabled = False
            self.start_movement_analysis()

    def check_out_deactivate(self, value):
        if value == False:
            self.ids.check_in_button.disabled = False
            self.ids.check_out_button.disabled = True
            self.event.cancel()

    def callback_get_movement_data(self,dt):

    #global g_time_in_movement


        if g_sensor_reachable:

 Sensor_values.append([accelerometer.accelerometer[0],accelerometer.accelerom
eter[1],accelerometer.accelerometer[2]])
        else:

 Sensor_values.append([random.random(),random.random(),random.random()])
        print(self.movement_profile)
        if self.movement_profile not in ACTIVITIES.keys():
            self.movement_profile = "calculating"

        if (len(Sensor_values) == 5):

            print(predict(m,Sensor_values))
            print(Sensor_values)
            last_movement_profile = self.movement_profile
            mp = predict(m,Sensor_values)
            self.movement_profile = mp
            # write_movement_data(get_user_data_with_email(self.email)
["user_id"],datetime.now().replace(microsecond=0),ACTIVITIES[mp])
            buffer  = MovementAnalysis(logged_in_user, datetime.now(),
list(ACTIVITIES.values()).index(mp))
            print(list(ACTIVITIES.values()).index(mp))
            self.actual_movement.text = "You are now: " +
str(self.movement_profile)
            session.add(buffer)
            session.commit()
            Sensor_values.clear()

            if last_movement_profile == self.movement_profile:
                g_time_in_movement += 1
            else:
                g_time_in_movement = 0

            if g_time_in_movement == 3:
                if self.notification:
                    notification.notify(title='test', message='You have
stayed in the same movement for 2 hours')
                    g_time_in_movement = 0

    def start_movement_analysis(self):
```

```python
        self.event = Clock.schedule_interval(self.callback_get_movement_data,
    1/5.)
        # age = date.today().year - datetime.strptime(g_user_birthdate,
    '%d.%m.%Y').year

        if self.movement_profile not in ['sitting','walking','running']:
            sql_movement_profile = 0
        else:
            sql_movement_profile = ACTIVITIES[self.movement_profile]
class SettingsScreen(Screen):
    pass


class GraphScreen(Screen):
    pass



class NotificationScreen(Screen):
    pass



class UserProfileScreen(Screen):

    # we need to get the user value from the database
    # current_user= session.query(User).filter()

    def on_pre_enter(self):
        self.callback()

    def callback(self):
        global logged_in_user
        result = session.query(User).filter(User.email == logged_in_user)
        for user in result:
            self.email_label.text = user.email
            self.username_label.text = user.name
            self.age_label.text = user.age
            self.weight_label.text = user.weight
            self.uheight_label.text = user.uheight
            self.gender_label.text = user.gender
            self.jp_label.text = user.jp


class EditUserProfileScreen(Screen):

    def on_pre_enter(self):
        self.callback()

    def callback(self):
        global logged_in_user
        result = session.query(User).filter(User.email == logged_in_user)
        for user in result:
            self.chg_username.text = user.name
            self.chg_age.text = user.age
```

```python
                    self.chg_weight.text = user.weight
                    self.chg_uheight.text = user.uheight
                    self.chg_gender.text = user.gender
                    self.chg_jp.text = user.jp

    def savechanges(self):
        username_input = self.chg_username.text
        age_input = self.chg_age.text
        weight_input = self.chg_weight.text
        uheight_input = self.chg_uheight.text
        gender_input = self.chg_gender.text
        jp_input = self.chg_jp.text
        session.query(User).filter(User.email == logged_in_user).update(
            {'name': username_input, 'age': age_input, 'weight':
weight_input, 'uheight': uheight_input, 'gender': gender_input, 'jp':
jp_input})
        session.commit()
        self.manager.current = "settings"


sm = ScreenManager()
# sm.add_widget(MDScreen(name="md"))
sm.add_widget(LoginScreen(name="login"))
sm.add_widget(SignUpScreen(name="signup"))
sm.add_widget(MainScreen(name="main"))
sm.add_widget(SettingsScreen(name="settings"))
sm.add_widget(GraphScreen(name="graph"))
sm.add_widget(NotificationScreen(name="notify"))
sm.add_widget(UserProfileScreen(name="userprofile"))
sm.add_widget(EditUserProfileScreen(name="edituserprofile"))
# class ScreenManager(ScreenManager):
#     pass


# class ProfileCard(FloatLayout, FakeRectangleElevationBehaviour):
#     pass

# class MovementAnalysis(ProfileCard):
#     pass


Window.size = (320, 550)

# GUI= Builder.load_file("main.kv") #Make Sure this is after all clas
definitions!


import pkg_resources
import prettytable

def get_pkg_license(pkg):
    try:
        lines = pkg.get_metadata_lines('METADATA')
    except:
        lines = pkg.get_metadata_lines('PKG-INFO')
```

```python
        lines = pkg.get_metadata_lines('PKG-INFO')

    for line in lines:
        if line.startswith('License:'):
            return line[9:]
    return '(Licence not found)'

def print_packages_and_licenses():
    t = prettytable.PrettyTable(['Package', 'License'])
    for pkg in sorted(pkg_resources.working_set, key=lambda x:
str(x).lower()):
        t.add_row((str(pkg), get_pkg_license(pkg)))
    print(t)


if __name__ == "__main__":
    print_packages_and_licenses()

class MainApp(MDApp):

    def build(self):
        #builder = builder.load_file("main.kv")
        # return #builder
        pass


if __name__ == '__main__':
    MainApp().run()
```

```kv
ScreenManager:
    #MDscreen:
    LoginScreen:
    SignUpScreen:
    AcknowledgeScreen:
    MainScreen:
    SettingsScreen:
    GraphScreen:
    NotificationScreen:
    UserProfileScreen:
    EditUserProfileScreen:
##############################

<LoginScreen>:

    name: "login"
    email: email
    password: password
    MDCard:
        radius: [20]
        size_hint: 0.95, 0.98
        pos_hint: {"center_x":0.5,"center_y":0.5}   #pos of our card
        elevation: 20
        md_bg_color: [0.3,0.3,0.6,1]
        spacing: 30
        padding: 20
        orientation: "vertical"



        MDLabel:
            id: welcome_label
            text: "Welcome to the Fitness Application"
            color: "white"
            halign: 'center'
            #size_hint_y: None
            #height: self.texture_size[1]
            font_name:
            pos_hint: {"center_x": 0.5, "top": 0.99}
            #padding_y: 15
            font_size: 50

        Widget:
            size_hint_y: None
            height: 400

        #MDFloatLayout:
        #orientation: "vertical"
        #cols: 1

    MDTextFieldRound:
        id: email
        hint_text: "Email"
        icon_right: 'account'
        size hint x: None
```

```kv
55            size_hint_x: None
56            width: 300
57            font_size: 16
58            pos_hint: {"center_x":.5, "top": 0.55}   ###############
59            #max_text_length: 201
60            helper_text: "enter your email"
61            #icon_right_color_focus: 0, 1, 0, 1
62            #color_active: [0,8,3,1]

64        MDTextFieldRound:
65            id: password
66            hint_text: "Password"
67            icon_right: 'eye-off'
68            size_hint_x: None
69            width: 300
70            font_size: 16
71            pos_hint: {"center_x":.5, "top": 0.48}
72            #max_text_length: 20
73            helper_text: "enter your password"
74            password: True
75            #icon_right_color_focus: 0, 1, 0, 1
76            color_active: [0,8,3,1]
77            required: True

79        MDChip:
80            text: 'Login'
81            icon: ''
82            pos_hint: {"center_x":.5, "top": 0.40}
83            on_release:
84                root.login()
85                #app.root.current="loginBtn"

87        MDChip:
88            text: 'Sign Up'
89            icon: ''
90            pos_hint: {"center_x":.5, "top": 0.34}
91            on_release:
92                app.root.current= "signup"
93                root.manager.transition.direction= "left"


96  <SignUpScreen>:
97        name: "signup"
98        email:email
99        password: password
100       password_confirmation:password_confirmation
101       username:username
102       age:age
103       weight:weight
104       uheight: uheight
105       gender:gender
106       jp:jp

108       MDLabel:
109           text: "Sign Up Now!"
110           font_size: "20dp"
```

```
110    font_size:   20dp
111        theme_text_color: "Secondary"
112        size_hint_y: None
113        pos_hint: {"center_x": 0.8, "center_y": 0.95  }
114        line_color: (0, 1, 1, 0)
115
116    # MDCard:
117    #      padding: 10
118    #      radius: [20]
119    #      size_hint: None, None
120    #      size: 500, 780
121    #      pos_hint: {"center_x": .5, "center_y": 0.47}   #pos of our card
122    #      elevation: 15
123    #      padding: 10
124    #      spacing: 5
125    #      orientation: "vertical"
126
127    MDTextField:
128        id: email
129        hint_text: "Enter Your Email"
130        mode: "rectangle"
131        halign: "center"
132        #required: True
133        #size: "20dp", "10dp"
134        size_hint_x: 0.8
135        pos_hint: {"center_x":.5, "top": 0.88}   #pos of our card
136        height: 0.5
137        font_size: 15
138        max_text_length: None
139        color_active: [1,1,1,1]
140        helper_text: "enter your email"
141        icon_right_color_focus: 0, 1, 0, 1
142
143    MDSeparator:
144        height: "2dp"
145
146    MDTextField:
147        id:password
148        hint_text: "Enter Your New Password!"
149        mode: "rectangle"
150        password: True
151        icon_right: 'eye-off'
152        icon_left: "key-variant"
153        # required: True
154        size_hint_x: 0.8
155        font_size: 15
156        height: 0.3
157        pos_hint: {"center_x":.5, "top": 0.80}   #pos of our card
158        max_text_length: 20
159        color_active: [1,1,1,1]
160        helper_text: "enter your password"
161        icon_right_color_focus: 1, 0, 0, 1
162
163    MDSeparator:
164        height: "2dp"
```

```
166    MDTextField:
167        id:password_confirmation
168        hint_text: "Re-enter Your New Password!"
169        mode: "rectangle"
170        password: True
171        icon_right: 'eye-off'
172        # required: True
173        size_hint_x: 0.8
174        font_size: 15
175        height: 0.5
176        pos_hint: {"center_x":.5, "top": 0.72}    #pos of our card
177        max_text_length: 20
178        color_active: [1,1,1,1]
179        helper_text: "enter your password"
180        #icon_right_color_focus: 1, 0, 0, 1
181
182    MDSeparator:
183        height: "2dp"
184
185    MDTextField:
186        id: username
187        hint_text: "Name"
188        mode: "rectangle"
189        halign: "center"
190        #required: True
191        #size: "20dp", "10dp"
192        size_hint_x: 0.8
193        pos_hint: {"center_x":.5, "top": 0.64}    #pos of our card
194        height: 0.5
195        font_size: 15
196        max_text_length: 20
197        color_active: [1,1,1,1]
198        helper_text: "enter your email"
199        icon_right_color_focus: 0, 1, 0, 1
200
201    MDSeparator:
202        height: "2dp"
203    MDTextField:
204        id:age
205        hint_text: "Age"
206        mode: "rectangle"
207        halign: "center"
208        #required: True
209        #size: "20dp", "10dp"
210        size_hint_x: 0.8
211        pos_hint: {"center_x":.5, "top": 0.56}    #pos of our card
212        height: 0.5
213        font_size: 15
214        max_text_length: 20
215        color_active: [1,1,1,1]
216        helper_text: "enter your email"
217        icon_right_color_focus: 0, 1, 0, 1
218    MDTextField:
219        id:weight
```

```kv
220         hint_text: "weight (in kg)"
221         mode: "rectangle"
222         halign: "center"
223         #required: True
224         #size: "20dp", "10dp"
225         size_hint_x: 0.8
226         pos_hint: {"center_x":.5, "top": 0.48}    #pos of our card
227         height: 0.5
228         font_size: 15
229         max_text_length: 20
230         color_active: [1,1,1,1]
231         helper_text: "in kg"
232         icon_right_color_focus: 0, 1, 0, 1
233
234     MDSeparator:
235         height: "2dp"
236     MDTextField:
237         id: uheight
238         hint_text: "Height (in cm)"
239         mode: "rectangle"
240         halign: "center"
241         #required: True
242         #size: "20dp", "10dp"
243         size_hint_x: 0.8
244         pos_hint: {"center_x":.5, "top": 0.40}    #pos of our card
245         height: 0.5
246         font_size: 15
247         max_text_length: 20
248         color_active: [1,1,1,1]
249         helper_text: "in cm"
250         icon_right_color_focus: 0, 1, 0, 1
251
252     MDSeparator:
253         height: "2dp"
254
255     MDTextField:
256         id: gender
257         hint_text: "Gender (Male/Female)"
258         mode: "rectangle"
259         halign: "center"
260         #required: True
261         #size: "20dp", "10dp"
262         size_hint_x: 0.8
263         pos_hint: {"center_x":.5, "top": 0.32}    #pos of our card
264         height: 0.5
265         font_size: 15
266         max_text_length: 20
267         color_active: [1,1,1,1]
268         helper_text: "Male/Female"
269         icon_right_color_focus: 0, 1, 0, 1
270     MDSeparator:
271         height: "2dp"
272     MDTextField:
273         id:jp
274         hint_text: "Job Position"
```

```
275            mode: "rectangle"
276            halign: "center"
277            #required: True
278            #size: "20dp", "10dp"
279            size_hint_x: 0.8
280            pos_hint: {"center_x":.5, "top": 0.24}    #pos of our card
281            height: 0.5
282            font_size: 15
283            max_text_length: 20
284            color_active: [1,1,1,1]
285            icon_right_color_focus: 0, 1, 0, 1
286        MDSeparator:
287            height: "2dp"
288
289        MDRectangleFlatIconButton:
290            text: "Register"
291            line_color: (0, 1, 1, 0)
292            pos_hint: {"center_x": .25, "top": 0.16}
293            on_release:
294                root.registerBtn()
295                root.manager.current="acknowledge"
296
297        MDRectangleFlatIconButton:
298            text: "Back"
299            line_color: (0, 1, 1, 0)
300            pos_hint: {"center_x": .75, "top": 0.16}
301            on_release:
302                app.root.current= "login"
303                root.manager.transition.direction= "up"
304
305 <AcknowledgeScreen>
306     name: "acknowledge"
307     MDCard:
308         radius: [20]
309         size_hint: 0.95, 0.98
310         pos_hint: {"center_x":0.5,"center_y":0.5}   #pos of our card
311         elevation: 20
312         md_bg_color: [1,1,1, 1]
313         spacing: 30
314         padding: 20
315         orientation: "vertical"
316
317
318
319         MDLabel:
320             id: acknowledge_label
321             text: "Acknowledgement"
322             color: "black"
323             halign: 'center'
324             #size_hint_y: None
325             #height: self.texture_size[1]
326             font_name:
327             pos_hint: {"center_x":.5, "top": 1}
328             #padding_y: 15
329             font_size: 30
```

```
330
331            # Widget:
332            #      size_hint_y: None
333            #      height: 100
334
335            MDSeparator:
336                height: "2dp"
337
338            MDLabel:
339                id: ack1_label
340                text: 'ack1'
341
342            MDSeparator:
343                height: "2dp"
344            MDLabel:
345                id: ack2_label
346                text: "ack2"
347            MDSeparator:
348                height: "2dp"
349            MDLabel:
350                id: ack3_label
351                text: "ack3"
352            MDSeparator:
353                height: "2dp"
354
355            # MDLabel:
356            #      id: weight_label
357            #      text: "Weight"
358            # MDLabel:
359            #      id: height_label
360            #      text: "Height"
361            # MDLabel:
362            #      id: gender_label
363            #      text: "Gender"
364            # MDLabel:
365            #      id: jp_label
366            #      text: "Job Position"
367            MDFillRoundFlatButton:
368                text: "I agree"
369                on_release:
370                    app.root.current= "login"
371                    root.manager.transition.direction= "right"
372            MDFillRoundFlatButton:
373                text: "I disagree"
374                on_release:
375                    app.root.current= "signup"
376                    root.manager.transition.direction= "right"
377
378  <MainScreen>:
379      actual_movement:actual_movement
380      on_pre_enter: root.get_info()
381      name: "main"
382      # u_age:u_age
383      # u_gender:u_gender
384      # motivation_task1: motiv_task1
```

```
385        # motivation_task2: motiv_task2
386        # motivation_task3: motiv_task3
387        # motivation_task4: motiv_task4
388        # motivation_task5: motiv_task5
389        # motiv_task1 : motivation_task1
390        # motiv_task2 : motivation_task2
391        # motiv_task3 : motivation_task3
392        # motiv_task4 : motivation_task4
393        # motiv_task5 : motivation_task5
394        motiv_task1 : motiv_task1
395        motiv_task2 : motiv_task2
396        motiv_task3 : motiv_task3
397        motiv_task4 : motiv_task4
398        motiv_task5 : motiv_task5
399
400
401        ScrollView:
402            #do_scroll_y: True
403            #orientation: "vertical"
404            #halign: 'center'
405            #padding: 16
406            BoxLayout:
407                orientation: 'vertical'
408                padding: "10dp"
409                spacing: "15dp"
410                size_hint_y: None
411                height: self.minimum_height
412                MDCard:
413                    orientation: "vertical"
414                    padding: "10dp"
415                    spacing: "5dp"
416                    size_hint: None, None
417                    size: "280dp",  self.minimum_height
418                    pos_hint: {"center_x": .5}
419                    line_color: 0.2, 0.2, 0.2, 1
420
421                    MDLabel:
422                        text: "Movement Analysis"
423                        font_size: "20dp"
424                        theme_text_color: "Secondary"
425                        size_hint_y: None
426                        height: self.texture_size[1]
427                        line_color: (0, 1, 1, 0)
428
429                    MDSeparator:
430                        height: "2dp"
431
432                    MDLabel:
433                        id: actual_movement
434                        text: ""
435                        size_hint_y: None
436                        height: "20dp"
437                        font_size: "12dp"
438                        markup: True
439
```

```
440                         MDGridLayout:
441                             cols: 3
442                             orientation: "tb-lr"
443                             size_hint_y: None
444                             height: self.minimum_height
445                             padding: "5dp"
446                             spacing: "5dp"
447                             adaptive_height: True
448
449                             #md_bg_color: app.theme_cls.primary_color
450
451
452                             # MDIconButton:
453                             #     icon: 'location-enter'
454                             #     # halign: 'center'
455                             # MDLabel:
456                             #     text: "Check-in"
457                             #     font_size: "12dp"
458                             #     # halign: 'center'
459
460                             # MDIconButton:
461                             #     icon: 'location-exit'
462                             #     # halign: 'center'
463                             # MDLabel:
464                             #     text: "Check-out"
465                             #     font_size: "12dp"
466                             #     # halign: 'center'
467
468                             MDLabel:
469                                 id: check_in_label
470                                 font_size: 20
471                                 text: "Click to check-in"
472
473                             MDIconButton:
474                                 id: check_in_button
475                                 icon: 'location-enter'
476                                 on_release: root.check_in_deactivate(self.disabled)
477
478
479                             MDLabel:
480                                 id: check_out_label
481                                 font_size: 20
482                                 text: "Click to check-out"
483
484                             MDIconButton:
485                                 id: check_out_button
486                                 icon: 'location-exit'
487                                 on_release: root.check_out_deactivate(self.disabled)
488
489
490                             # MDSwitch:
491                             #     id: my_switch
492                             #     active: True
493                             #     disabled: False
494                             #     font size: 20
```

```
                                    _
495             #       on_active: root.switch_click(self, self.active)
496
497
498                         # MDIconButton:
499                         #     icon: 'alarm'
500                         #     # halign: 'center'
501                         # MDLabel:
502                         #     text: "Notifications on"
503                         #     font_size: "12dp"
504                         #     #halign: 'center'
505
506                         MDLabel:
507                             id: notification_switch_label
508                             font_size: 20
509                             text: "Notification ON"
510
511                         MDSwitch:
512                             id: notification_switch
513                             active: True
514                             disabled: False
515                             font_size: 20
516                             on_active: root.notif_switch_click(self,
        self.active)
517
518
519                     Widget:
520                         size_hint_y: None
521                         height: 10
522
523                     MDSeparator:
524                         height: "2dp"
525
526                     GridLayout:
527                         cols: 2
528                         orientation: "lr-tb"
529                         size_hint_y: None
530                         height: self.minimum_height
531
532
533                         MDCheckbox:
534                             id: motiv_checkbox_1
535                             size_hint: None, None
536                             size: "30dp", motiv_task1.height
537                             pos_hint: {'center_x': .5, 'center_y': .5}
538                             spacing: "15dp"
539                             active:
540                             on_active: root.notification_text(self.active,
        motiv_task1.text)
541                         MDLabel:
542                             id: motiv_task1
543                             text: "123"#str(motivation_task[0])
544                             font_size: "12dp"
545                             size: self.texture_size
546                             spacing: "15dp"
```

```
547                             MDCheckbox:
548                                 id: motiv_checkbox_2
549                                 size_hint: None, None
550                                 size: "30dp", motiv_task2.height
551                                 pos_hint: {'center_x': .5, 'center_y': .5}
552                                 spacing: "15dp"
553                                 active:
554                                 on_active: root.notification_text(self.active,
     motiv_task2.text)
555                             MDLabel:
556                                 id: motiv_task2
557                                 text: "123"#str(motivation_task[1])
558                                 font_size: "12dp"
559                                 size: self.texture_size
560                                 spacing: "15dp"
561                             MDCheckbox:
562                                 id: motiv_checkbox_3
563                                 size_hint: None, None
564                                 size: "30dp", motiv_task3.height
565                                 pos_hint: {'center_x': .5, 'center_y': .5}
566                                 spacing: "15dp"
567                                 active:
568                                 on_active: root.notification_text(self.active,
     motiv_task3.text)
569                             MDLabel:
570                                 id: motiv_task3
571                                 text: "123"#str(motivation_task[2])
572                                 font_size: "12dp"
573                                 size: self.texture_size
574                                 spacing: "15dp"
575                             MDCheckbox:
576                                 id: motiv_checkbox_4
577                                 size_hint: None, None
578                                 size: "30dp", motiv_task4.height
579                                 pos_hint: {'center_x': .5, 'center_y': .5}
580                                 spacing: "15dp"
581                                 active:
582                                 on_active: root.notification_text(self.active,
     motiv_task4.text)
583                             MDLabel:
584                                 id: motiv_task4
585                                 text: "wt"#str(motivation_task[3])
586                                 font_size: "12dp"
587                                 size: self.texture_size
588                                 spacing: "15dp"
589                             MDCheckbox:
590                                 id: motiv_checkbox_5
591                                 size_hint: None, None
592                                 size: "30dp", motiv_task5.height
593                                 pos_hint: {'center_x': .5, 'center_y': .5}
594                                 spacing: "15dp"
595                                 active:
596                                 on_active: root.notification_text(self.active,
     motiv_task5.text)
597                             MDLabel:
```

```kv
                        MDLabel:
                            id: motiv_task5
                            text: "sex"#str(motivation_task[4])
                            font_size: "12dp"
                            size: self.texture_size
                            spacing: "15dp"

                    MDFillRoundFlatButton:
                        text: "Remind Me"
                        line_color: (1, 1, 1, 1)
                        halign: 'center'
                        pos_hint: {"center_x":.5}
                        size_hint_y: None
                        #on_active: root.notification_text()

                        #pos_hint: {"center_x": .5, "center_y": .4}
                        on_release:
                            #root.notification_text(instance, value)
                            root.pop_up_notification()
                            # except:
                            #      show_notification_alert_dialog()

                            #root.manager.transition.direction= "left"
                MDCard:
                    orientation: "vertical"
                    padding: "10dp"
                    spacing: "15dp"
                    size_hint: None, None
                    size: "280dp",  self.minimum_height
                    pos_hint: {"center_x": .5} #, 'top': 0.55
                    line_color: 0.2, 0.2, 0.2, 1

                    MDSeparator:
                        height: "2dp"

                    MDLabel:
                        text: "Display Analysis"
                        font_size: "20dp"
                        #theme_text_color: "Secondary"
                        size_hint_y: None
                        height: self.texture_size[1]
                        line_color: (0, 1, 1, 0)

                    MDFillRoundFlatButton:
                        text: "Graph"
                        line_color: (1, 1, 1, 1)
                        pos_hint: {"center_x": .5, "center_y": .1}
                        on_release:
                            app.root.current= "graph"
                            root.manager.transition.direction= "left"

                    MDSeparator:
                        height: "2dp"

            MDRoundFlatIconButton:
                #icon: "settings"
```

```
652              #icon:  settings
653              text: "Settings"
654              line_color: (0, 1, 1, 1)
655              # set_size: (100, 100)
656              pos_hint: {"center_x": .5, "center_y": 0.5}
657              on_release:
658                  app.root.current= "settings"
659                  root.manager.transition.direction= "left"
660
661          MDRoundFlatIconButton:
662              text: "Back"
663              icon: "android"
664              line_color: (0, 1, 1, 1)
665              pos_hint: {"center_x": .5} #, "center_y": 0.1
666              on_release:
667                  app.root.current= "login"
668                  root.manager.transition.direction= "left"
669
670  <GraphScreen>:
671      name:'graph'
672
673      MDCard:
674          radius: [20]
675          size_hint: 0.95, 0.98
676          pos_hint: {"center_x":0.5,"center_y":0.5}   #pos of our card
677          elevation: 20
678          md_bg_color: [0.3,0.3,0.6,1]
679          spacing: 30
680          padding: 20
681          orientation: "vertical"
682
683
684          MDLabel:
685              text: "Graphical Display of the Data"
686              font_size: "20dp"
687              theme_text_color: "Secondary"
688              size_hint_y: None
689              pos_hint: {"center_x": 0.5}
690              height: self.texture_size[1]
691              line_color: (0, 1, 1, 0)
692              color: "white"
693          Widget:
694              size_hint_y: None
695              height: 20
696
697          MDRectangleFlatButton:
698              text: "Daily"
699              theme_text_color: "Custom"
700              text_color: 0, 0, 0, 1
701              line_color: 0, 0, 1, 1
702              pos_hint: {"center_x": .5}
703
704          MDRectangleFlatButton:
705              text: "Weekly"
706              theme_text_color: "Custom"
707              text_color: 0, 0, 0, 1
```

```
707          text_color: 0, 0, 0, 1
708          line_color: 0, 0, 1, 1
709          pos_hint: {"center_x": .5}
710      MDRectangleFlatButton:
711          text: "Monthly"
712          theme_text_color: "Custom"
713          text_color: 0, 0, 0, 1
714          line_color: 0, 0, 1, 1
715          pos_hint: {"center_x": .5}
716
717      MDRoundFlatButton:
718          text: "Back"
719          theme_text_color: "Custom"
720          text_color: 0, 0, 0, 1
721          line_color: 0, 0, 1, 1
722          pos_hint: {"center_x": .5}
723          on_release:
724              app.root.current= "main"
725              root.manager.transition.direction= "right"
726
727
728      Widget:
729          size_hint_y: None
730          height: 20
731
732
733 <SettingsScreen>:
734
735      name: "settings"
736      MDCard:
737          radius: [20]
738          size_hint: 0.95, 0.98
739          pos_hint: {"center_x":0.5,"center_y":0.5}    #pos of our card
740          elevation: 20
741          md_bg_color: [1,1,1,1]
742          spacing: 10
743          padding: 10
744          orientation: "vertical"
745      BoxLayout:
746          orientation: 'vertical'
747          padding: "10dp"
748          spacing: "15dp"
749          size_hint_y: None
750          height: self.minimum_height
751          MDLabel:
752              text: "Settings"
753              color: "black"
754              font_name:
755              font_size: 60
756              height: self.texture_size[1]
757              pos_hint: {"center_x": 0.80}
758
759          Widget:
760              size_hint_y: None
761              height: 150
762          MDRoundFlatButton:
```

```kv
        MDRoundFlatButton:
            text: "Notification Settings"
            icon_right: 'account'
            size_hint_x: None
            width: 250
            font_size: 30
            pos_hint: {"center_x":.5}   ###############
            #max_text_length: 201
            helper_text: "enter your email"
            on_release:
                app.root.current= "notify"
                root.manager.transition.direction= "left"
        MDRoundFlatButton:
            text: "User Profile"
            icon_right: 'account'
            size_hint_x: None
            width: 250
            font_size: 30
            pos_hint: {"center_x":.5}   ###############
            #max_text_length: 201
            helper_text: "enter your email"
            on_release:
                app.root.current= "userprofile"
                root.manager.transition.direction= "left"
        MDRoundFlatButton:
            text: "Edit User Profile"
            icon_right: 'account'
            size_hint_x: None
            width: 250
            font_size: 30
            pos_hint: {"center_x":.5}   ###############
            #max_text_length: 201
            helper_text: "Edit Profile"
            on_release:
                app.root.current= "edituserprofile"
                root.manager.transition.direction= "left"

        Widget:
            size_hint_y: None
            height: 30

        MDRoundFlatButton:
            text: "Return To Main Screen"
            icon: ''
            pos_hint: {"center_x":.5}
            on_release:
                app.root.current= "main"
                root.manager.transition.direction= "right"
        Widget:
            size_hint_y: None
            height: 30


<NotificationScreen>:
    name:'notify'
```

```
817
818      MDCard:
819          orientation: "vertical"
820          radius: [20]
821          padding: "10dp"
822          spacing: "5dp"
823          size_hint: 0.95, 0.98
824
825          pos_hint: {"center_x": .5, 'center_y': 0.5}
826          line_color: 0.2, 0, 1, 1
827
828      BoxLayout:
829          orientation: 'vertical'
830          padding: "10dp"
831          spacing: "15dp"
832          size_hint_y: None
833          height: self.minimum_height
834          MDLabel:
835              text: "Notification Settings"
836              color: "black"
837              font_name:
838              font_size: 28
839              height: self.texture_size[1]
840              pos_hint: {"center_x": 0.7}
841          Widget:
842              size_hint_y: None
843              height: 20
844          MDSeparator:
845              height: "2dp"
846
847          MDGridLayout:
848
849              size_hint: None, None
850              size: dp(120), dp(48)
851              pos_hint: {"center_x": 0.6}
852              cols: 2
853
854              MDTextField:
855                  text: "1 Hour"
856                  #pos_hint: {'center_x': .1, 'center_y': .5}
857              MDCheckbox:
858                  active: True
859                  group: 'noti'
860                  #pos_hint: {'center_x': .1, 'center_y': .5}
861              MDTextField:
862                  text: "2 Hours"
863                  #pos_hint: {'center_x': .1, 'center_y': .7}
864              MDCheckbox:
865                  group: 'noti'
866                  #pos_hint: {'center_x': .1, 'center_y': .7}
867          Widget:
868              size_hint_y: None
869              height: 250
870
871          MDFillRoundFlatButton:
```

```
872                     text:"Back"
873                     on_release:
874                         app.root.current= "settings"
875                         root.manager.transition.direction= "right"
876         #BoxLayout:
877          #    orientation: 'vertical'
878           #  padding: "10dp"
879           #  spacing: "15dp"
880           #  size_hint_y: None
881           #  height: self.minimum_height
882
883             #GridLayout:
884              #    cols: 2
885
886               #  padding: "10dp"
887                # spacing: "15dp"
888          #      size_hint_y: None
889            #    height: self.minimum_height
890             #    MDLabel:
891             #        text: "Notification/hour"
892              #        color: "black"
893               #        font_name: "fonts/Lcd.ttf"
894               #        font_size: 40
895
896                # MDDropDownItem:
897                 #    id:notify_time
898                  #    text: "Hour"
899                   #  on_release: app.menu.open()
900
901
902 <UserProfileScreen>:
903     name:"userprofile"
904     on_pre_enter: root.callback()
905     email_label: email_label
906     username_label:username_label
907     age_label: age_label
908     weight_label:weight_label
909     uheight_label:uheight_label
910     gender_label:gender_label
911     jp_label:jp_label
912
913     MDCard:
914         radius: [20]
915         size_hint: 0.95, 0.98
916         pos_hint: {"center_x":0.5,"center_y":0.5}   #pos of our card
917         elevation: 20
918         md_bg_color: [1,1,1, 1]
919         spacing: 30
920         padding: 20
921         orientation: "vertical"
922
923
924
925         MDLabel:
926             id: welcome_label
```

```
927            text: "User Profile"
928            color: "black"
929            halign: 'center'
930            #size_hint_y: None
931            #height: self.texture_size[1]
932            font_name:
933            pos_hint: {"center_x":.5, "top": 1}
934            #padding_y: 15
935            font_size: 30
936
937        Widget:
938            size_hint_y: None
939            height: 100
940
941
942        MDLabel:
943            id: username_label
944            text: 'UserName'
945
946
947        # MDRoundFlatButton:
948        #     text: "Testing"
949        #     on_release:
950        #         root.userdataname()
951
952        MDLabel:
953            id: email_label
954            text: "Email"
955        MDLabel:
956            id: age_label
957            text: "Age"
958        MDLabel:
959            id: weight_label
960            text: "Weight"
961        MDLabel:
962            id: uheight_label
963            text: "Height"
964        MDLabel:
965            id: gender_label
966            text: "Gender"
967        MDLabel:
968            id: jp_label
969            text: "Job Position"
970        MDFillRoundFlatButton:
971            text: "Back"
972            on_release:
973                app.root.current= "settings"
974                root.manager.transition.direction= "right"
975
976        #MDFloatLayout:
977        #orientation: "vertical"
978        #cols: 1
979
980 <EditUserProfileScreen>:
981     name:"edituserprofile"
```

```
982        chg_username:chg_username
983        chg_age:chg_age
984        chg_weight:chg_weight
985        chg_uheight:chg_uheight
986        chg_gender: chg_gender
987        chg_jp:chg_jp
988
989      MDCard:
990          radius: [20]
991          size_hint: 0.95, 0.98
992          pos_hint: {"center_x":0.5,"center_y":0.5}    #pos of our card
993          elevation: 20
994          md_bg_color: [1,1,1, 1]
995          spacing: 30
996          padding: 20
997          orientation: "vertical"
998
999          MDBoxLayout:
1000             orientation: "vertical"
1001             padding: 5
1002             spacing: 5
1003
1004
1005             MDLabel:
1006
1007                 text: "Edit User Profile"
1008                 color: "black"
1009                 halign: 'center'
1010                 #size_hint_y: None
1011                 #height: self.texture_size[1]
1012                 font_name:
1013                 pos_hint: {"center_x":.5, "top": 1}
1014                 #padding_y: 15
1015                 font_size: 30
1016
1017             Widget:
1018                 size_hint_y: None
1019                 height: 20
1020
1021             MDGridLayout:
1022                 cols:2
1023                 MDLabel:
1024                     text: "User Name"
1025                 MDTextField:
1026                     id:chg_username
1027                     hint_text: "Change UserName"
1028             Widget:
1029                 size_hint_y: None
1030                 height: 20
1031             MDGridLayout:
1032                 cols:2
1033                 MDLabel:
1034                     text: "Age"
1035                 MDTextField:
1036                     id: chg_age
```

```
                        hint_text: "Change Age"
                Widget:
                    size_hint_y: None
                    height: 20
                MDGridLayout:
                    cols:2
                    MDLabel:
                        text: "Weight"
                    MDTextField:
                        id: chg_weight
                        hint_text: "Change Weight"
                Widget:
                    size_hint_y: None
                    height: 20
                MDGridLayout:
                    cols:2
                    MDLabel:
                        text: "Height"
                    MDTextField:
                        id: chg_uheight
                        hint_text: "Change Height"
                Widget:
                    size_hint_y: None
                    height: 20
                MDGridLayout:
                    cols:2
                    MDLabel:
                        text: "Gender"
                    MDTextField:
                        id:chg_gender
                        hint_text: "Change Gender"
                Widget:
                    size_hint_y: None
                    height: 20

                MDGridLayout:
                    cols:2
                    MDLabel:
                        text: "Job Position"
                    MDTextField:
                        id: chg_jp
                        hint_text: "Change Job Position"
                Widget:
                    size_hint_y: None
                    height: 20
            MDChip:
                text: "Save Changes"
                on_release:
                    root.savechanges()
                    # app.root.current= "settings"
                    # root.manager.transition.direction= "right"
            MDChip:
                text: "Back"
                on_release:
                    app.root.current= "settings"
```

```
                        app.root.current = settings
                        root.manager.transition.direction= "right"
```