

## КП.АС-56.190258 - 02 12 00

## ПРИЛОЖЕНИЕ Г. ТЕКСТ ПРОГРАММЫ

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from sqlite3 import Error
import tkinter as tk
from tkinter import messagebox
import tkinter.ttk as ttk
import time
import mysql.connector
from ctypes import *

window = tk.Tk()
widgets_list = []
screen_width = windll.user32.GetSystemMetrics(0)
screen_height = windll.user32.GetSystemMetrics(1)
window.maxsize(screen_width, screen_height)

window_bg = '#555'
buttons_bg = '#777'
tree_font_size = 13

try:
    connection = mysql.connector.connect(host='localhost',
                                         port=3306,
                                         user='root',
                                         passwd='ff33039f',
                                         database='dymar')

    cursor = connection.cursor()
except Error as e:
    print("Error while connecting to MySQL", e)

def destroy_widgets():
    for widget in widgets_list:
        widget.destroy()

def view(table_name, table_columns, meta_table_columns, del_args, title,
prev_screen):
    destroy_widgets()
    window.title(str(title))

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2], minsize=0, weight=0)

    window.rowconfigure(0, weight=1)
    window.rowconfigure(1, weight=8)
    window.rowconfigure(2, weight=1)
    window.columnconfigure([0, 1, 2, 3, 4], weight=1)

    frame1 = tk.Frame(window, bg=window_bg)
    frame1.grid(row=0, column=0, columnspan=5, sticky='nsew')
    frame2 = tk.Frame(window, bg='#579')
    frame2.grid(row=1, column=0, columnspan=5, sticky='nsew')
    frame31 = tk.Frame(window, bg=window_bg)
    frame31.grid(row=2, column=0, sticky='nsew')
    frame32 = tk.Frame(window, bg=window_bg)
    frame32.grid(row=2, column=1, sticky='nsew')
    frame33 = tk.Frame(window, bg=window_bg)
    frame33.grid(row=2, column=2, sticky='nsew')
    frame34 = tk.Frame(window, bg=window_bg)
    frame34.grid(row=2, column=3, sticky='nsew')

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## КП.AC-56.190258 - 02 12 00

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frame35 = tk.Frame(window, bg=window_bg)
frame35.grid(row=2, column=4, sticky='nsew')

widgets_list.append(frame1)
widgets_list.append(frame2)
widgets_list.append(frame31)
widgets_list.append(frame32)
widgets_list.append(frame33)
widgets_list.append(frame34)
widgets_list.append(frame35)

title_label = tk.Label(frame1, text=title, bg=window_bg, font='Arial 24')
title_label.pack(expand=1)

cursor.execute("""SELECT * FROM """ + str(table_name))
records = cursor.fetchall()

columns = []

for i in range(1, len(table_columns) + 1):
    columns.append('#' + str(i))
window.tree = ttk.Treeview(frame2, show='headings', columns=columns)
ttk.Style().configure('Treeview', rowheight=tree_font_size * 2)
ttk.Style().configure("Treeview.Heading", font=('Arial', tree_font_size))
ttk.Style().configure("Treeview", font=('Arial', tree_font_size))
for i in range(0, len(columns)):
    window.tree.heading(columns[i], text=meta_table_columns[i])

ysb = ttk.Scrollbar(frame2, orient=tk.VERTICAL,
command=window.tree.yview)
xsb = ttk.Scrollbar(frame2, orient=tk.HORIZONTAL,
command=window.tree.xview)
window.tree.configure(yscroll=ysb.set)
window.tree.configure(xscroll=xsb.set)

for row in records:
    window.tree.insert('', tk.END, values=row)
ysb.pack(side=tk.RIGHT, fill=tk.Y)
window.tree.pack(side=tk.TOP, expand=1, fill=tk.BOTH)
xsb.pack(side=tk.BOTTOM, fill=tk.X)

def add():
    add_window = tk.Toplevel()
    add_screen_height = (len(table_columns) + 1) * 50
    add_screen_width = 400
    add_window.maxsize(screen_width, screen_height)
    if add_screen_height > screen_height - 100:
        add_screen_height = screen_height - 100
    add_window.geometry(str(add_screen_width) + 'x' +
str(add_screen_height))
    add_window.title('Добавление записи')

    rows = []
    for i in range(0, len(meta_table_columns) + 1):
        rows.append(i + 1)
    add_window.columnconfigure([0, 1], weight=1)
    add_window.rowconfigure(rows, weight=1)

    labels = []
    entrys = []

    for i in range(0, len(table_columns)):

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## КП.AC-56.190258 - 02 12 00

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        labels.append(tk.Label(add_window,
text=str(meta_table_columns[i])))
        labels[i].grid(row=i, column=0)
        entrys.append(tk.Entry(add_window, width=30))
        entrys[i].grid(row=i, column=1)

def insert_data():
    ins_columns = []
    for i in range(0, len(table_columns)):
        ins_columns.append(entrys[i].get())

    sql_command = 'INSERT INTO '
    sql_command += str(table_name)
    sql_command += ' ('
    for i in range(0, len(table_columns)):
        sql_command += '`'
        sql_command += str(table_columns[i])
        sql_command += '`'
        if i != len(table_columns) - 1: sql_command += ', '
    sql_command += ') VALUES ('
    for i in range(0, len(ins_columns)):
        sql_command += "'"
        sql_command += ins_columns[i]
        sql_command += "'"
        if i != len(ins_columns) - 1: sql_command += ', '
    sql_command += ')'

    try:
        cursor.execute(sql_command)
        connection.commit()
        view(table_name, table_columns, meta_table_columns, del_args,
title, prev_screen)
    except:
        messagebox.showerror(title='Ошибка', message='Не удалось
добавить запись в базу данных')

    add_frame = tk.Frame(add_window, bg=window_bg)
    add_frame.grid(row=len(meta_table_columns) + 1, column=0,
columnspan=2, sticky='nsew')

    add_btn = tk.Button(add_frame, text='Добавить', command=insert_data,
width=20, background=buttons_bg, font='Arial 12')
    cancel_btn = tk.Button(add_frame, text='Отмена',
command=add_window.destroy,
width=20, background=buttons_bg, font='Arial
12')

    add_btn.pack(expand=1, side='left')
    cancel_btn.pack(expand=1, side='right')

def delete():
    sql_command = 'DELETE FROM '
    sql_command += str(table_name)
    sql_command += ' WHERE '
    for i in range(0, len(del_args)):
        sql_command += '`'
        sql_command += str(del_args[i])
        sql_command += '`'
        if i != len(del_args) - 1: sql_command += ' AND '

    del_value = []
    for selected_item in window.tree.selection():

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## КП.AC-56.190258 - 02 12 00

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        print(selected_item)
        for i in range(0, len(del_args)):
            del_value.append(window.tree.set(selected_item, '#' +
str(table_columns.index(str(del_args[i])) + 1)))
            sql_command += '='
            sql_command += del_value[0]
            sql_command += '""'

        cursor.execute(sql_command)
        del_value = []

        connection.commit()
        view(table_name, table_columns, meta_table_columns, del_args, title,
prev_screen)

def edit():
    edit_window = tk.Toplevel()
    edit_screen_height = (len(table_columns) + 1) * 50
    edit_screen_width = 400
    edit_window.maxsize(screen_width, screen_height)
    if edit_screen_height > screen_height - 100:
        edit_screen_height = screen_height - 100
    edit_window.geometry(str(edit_screen_width) + 'x' +
str(edit_screen_height))
    edit_window.title('Редактирование записи')

    edit_value = []
    rows = []
    for i in range(0, len(table_columns) + 1):
        rows.append(i + 1)
    edit_window.columnconfigure([0, 1], weight=1)
    edit_window.rowconfigure(rows, weight=1)

    labels = []
    entrys = []

    for i in range(0, len(table_columns)):
        labels.append(tk.Label(edit_window,
text=str(meta_table_columns[i])))
        labels[i].grid(row=i, column=0)
        entrys.append(tk.Entry(edit_window, width=30))
        entrys[i].grid(row=i, column=1)

    try:
        entrys[0].insert(0, window.tree.set(window.tree.selection()[0],
'#1'))
    except:
        messagebox.showerror(title='Ошибка', message='Запись не выбрана')
        edit_window.destroy()
        return None
    for i in range(1, len(table_columns)):
        entrys[i].insert(0, window.tree.set(window.tree.selection()[0],
columns[i]))
    print(columns)

def update_data():
    upd_columns = []
    for i in range(0, len(table_columns)):
        upd_columns.append(entrys[i].get())

    sql_command = 'UPDATE '

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## КП.AC-56.190258 - 02 12 00

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sql_command += str(table_name)
sql_command += ' SET '

for i in range(0, len(table_columns)):
    sql_command += "`"
    sql_command += str(table_columns[i])
    sql_command += "`"
    sql_command += "="
    sql_command += "'"
    sql_command += upd_columns[i]
    sql_command += "'"
    if i != len(table_columns) - 1: sql_command += ', '

sql_command += ' WHERE '
for i in range(0, len(del_args)):
    sql_command += "`"
    sql_command += str(del_args[i])
    sql_command += "`"
    sql_command += "="
    sql_command += "'"
    sql_command += upd_columns[0]
    sql_command += "'"
    if i != len(del_args) - 1: sql_command += ' AND '
    upd_columns.append(
        window.tree.set(window.tree.selection()[0], '#' +
str(table_columns.index(str(del_args[i])) + 1)))
    print(sql_command)

try:
    cursor.execute(sql_command)
    connection.commit()
    view(table_name, table_columns, meta_table_columns, del_args,
title, prev_screen)
except:
    messagebox.showerror(title='Ошибка', message='Не удалось
редактировать запись базы данных')
    edit_window.destroy()

edit_frame = tk.Frame(edit_window, bg=window_bg)
edit_frame.grid(row=len(meta_table_columns) + 1, column=0,
columnspan=2, sticky='nsew')

add_btn = tk.Button(edit_frame, text='Сохранить',
command=update_data,
width=20, background=buttons_bg, font='Arial 12')
cancel_btn = tk.Button(edit_frame, text='Отмена',
command=edit_window.destroy,
width=20, background=buttons_bg, font='Arial
12')

add_btn.pack(expand=1, side='left')
cancel_btn.pack(expand=1, side='right')

btn_add = tk.Button(frame31, text='Добавить', command=add,
width=10, background=buttons_bg, font='Arial 12')
widgets_list.append(btn_add)
btn_add.pack(expand=1)

btn_edit = tk.Button(frame32, text='Изменить', command=edit,
width=10, background=buttons_bg, font='Arial 12')
widgets_list.append(btn_edit)
btn_edit.pack(expand=1)

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## КП.АС-56.190258 - 02 12 00

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btn_del = tk.Button(frame33, text='Удалить', command=delete,
                    width=10, background=buttons_bg, font='Arial 12')
widgets_list.append(btn_del)
btn_del.pack(expand=1)

btn_back = tk.Button(frame34, text='Назад', command=prev_screen,
                    width=10, background=buttons_bg, font='Arial 12')
widgets_list.append(btn_back)
btn_back.pack(expand=1)

btn_exit = tk.Button(frame35, text='Выход', command=exit_window,
                    width=10, background=buttons_bg, font='Arial 12')
widgets_list.append(btn_exit)
btn_exit.pack(expand=1)

def docs_list():
    destroy_widgets()

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0,
weight=0)

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=1)
    window.columnconfigure([0, 1, 2], minsize=0, weight=1)

    def view_wp10():
        view("дymar.`наряд задание`",
            ['Номер НЗ', 'Номер договора', 'Код игрушки', 'Количество
изделий',
            'Стоимость единицы', 'Время производства единицы'],
            ['Номер НЗ', 'Номер договора', 'Код игрушки', 'Количество
изделий',
            'Стоимость единицы', 'Время производства единицы'],
            ['Номер НЗ'], 'Наряд-задание', docs_list)

    def view_wp11():
        view("дymar.`карточка складского учета`",
            ['Номер складского учета', 'Код игрушки', 'Стоимость игрушки',
'Количество выпущенных игрушек',
            'Количество отправленных игрушек', 'Количество игрушек в
наличии', 'Номер договора', 'Номер бригады'],
            ['Номер складского учета', 'Код игрушки', 'Стоимость игрушки',
'Количество выпущенных игрушек',
            'Количество отправленных игрушек', 'Количество игрушек в
наличии', 'Номер договора', 'Номер бригады'],
            ['Номер складского учета'], 'Карточка складского учета',
docs_list)

    btn_tabel = tk.Button(window, text='Наряд-задание', command=view_wp10,
                        width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_tabel)
    btn_tabel.grid(row=0, column=0)

    btn_departments = tk.Button(window, text='Карточка складского учета',
command=view_wp11,
                        width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_departments)
    btn_departments.grid(row=1, column=0)

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## КП.AC-56.190258 - 02 12 00

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        btn_back = tk.Button(window, text='Назад', command=start_screen,
                               width=20, height=2, background=buttons_bg,
font='Arial 12')
        widgets_list.append(btn_back)
        btn_back.grid(row=2, column=0)

        btn_exit = tk.Button(window, text='Выход', command=exit_window,
                               width=20, height=2, background=buttons_bg,
font='Arial 12')
        widgets_list.append(btn_exit)
        btn_exit.grid(row=2, column=1)

def reports_list():
    destroy_widgets()

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0,
weight=0)

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=1)
    window.columnconfigure([0, 1, 2], minsize=0, weight=1)

    btn_positions = tk.Button(window, text='Отчет по договорам на покупку
игрушек',
                               width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_positions)
    btn_positions.grid(row=0, column=0)

    btn_departments = tk.Button(window, text='Отчет по движению игрушек на
складе',
                               width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_departments)
    btn_departments.grid(row=1, column=0)

    btn_tariff = tk.Button(window, text='Отчет по работе бригады',
                               width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_tariff)
    btn_tariff.grid(row=2, column=0)

    btn_working_conditions = tk.Button(window, text='Отчет о деятельности
предприятия',
                               width=40, height=2,
background=buttons_bg, font='Arial 12')
    widgets_list.append(btn_working_conditions)
    btn_working_conditions.grid(row=3, column=0)

    btn_back = tk.Button(window, text='Назад', command=start_screen,
                               width=20, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_back)
    btn_back.grid(row=4, column=0)

    btn_exit = tk.Button(window, text='Выход', command=exit_window,
                               width=20, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_exit)
    btn_exit.grid(row=4, column=1)

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## КП.АС-56.190258 - 02 12 00

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def catalog_list():
    destroy_widgets()

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0,
weight=0)

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=1)
    window.columnconfigure([0, 1, 2], minsize=0, weight=1)

    def view_stl():
        view("дymar.\`справочник «каталог игрушек»`",
            ['Код игрушки', 'Название игрушки', 'Стоимость игрушки'],
            ['Код игрушки', 'Название игрушки', 'Стоимость игрушки'],
            ['Код игрушки'], 'Справочник «Каталог игрушек»', catalog_list)

    def view_scl():
        view("дymar.\`справочник «работники бригад»`",
            ['Учетный номер сотрудника', 'ФИО сотрудника', 'Код профессии',
'Разряд',
            'Сетка оплаты', 'Фактически отработанное время', 'Коэффициент
трудового учета'],
            ['Учетный номер сотрудника', 'ФИО сотрудника', 'Код профессии',
'Разряд',
            'Сетка оплаты', 'Фактически отработанное время', 'Коэффициент
трудового учета'],
            ['Учетный номер сотрудника'], 'Справочник «Работники бригад»',
catalog_list)

    def view_krl():
        view("дymar.\`справочник «Бригады»`",
            ['Номер бригады', 'ФИО бригадира', 'Количество работников'],
            ['Номер бригады', 'ФИО бригадира', 'Количество работников'],
            ['Номер бригады'], 'Справочник «Бригады»', catalog_list)

    btn_positions = tk.Button(window, text='Справочник «Каталог игрушек»',
command=view_stl,
                                width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_positions)
    btn_positions.grid(row=0, column=0)

    btn_departments = tk.Button(window, text='Справочник «Работники бригад»',
command=view_scl,
                                width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_departments)
    btn_departments.grid(row=1, column=0)

    btn_tariff = tk.Button(window, text='Справочник «Бригады»',
command=view_krl,
                                width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_tariff)
    btn_tariff.grid(row=2, column=0)

    btn_back = tk.Button(window, text='Назад', command=start_screen,
                                width=20, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_back)
    btn_back.grid(row=3, column=0)

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## КП.АС-56.190258 - 02 12 00

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        btn_exit = tk.Button(window, text='Выход', command=exit_window,
                               width=20, height=2, background=buttons_bg,
font='Arial 12')
        widgets_list.append(btn_exit)
        btn_exit.grid(row=3, column=1)

def exits():
    window.destroy()

def exit_window():
    destroy_widgets()
    window.geometry('350x150')
    window.title('Выход')

    window.rowconfigure([0, 1, 2, 3, 4], minsize=50, weight=1)
    window.columnconfigure([0, 1, 2, 3], minsize=50, weight=1)

    labell1 = tk.Label(window, text='Выйти из программы?',
                        font=("Arial Bold", 12))
    widgets_list.append(labell1)
    labell1.grid(row=0, column=0)

    btn_1 = tk.Button(window, text='Да', command=exits,
                       width=10, height=1, background=buttons_bg,
font='Arial 11')
    widgets_list.append(btn_1)
    btn_1.grid(row=1, column=0)

    btn_2 = tk.Button(window, text='Нет', command=start_screen,
                       width=10, height=1, background=buttons_bg,
font='Arial 11')
    widgets_list.append(btn_2)
    btn_2.grid(row=1, column=1)

def vosst():
    message = tk.messagebox.showwarning(message='Восстановление базы данных
прошло успешно!')

def spravka():
    destroy_widgets()
    window.geometry('555x350')
    window.title('Справка')

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0,
weight=0)

    window.rowconfigure([0, 1, 2, 3, 4], minsize=50, weight=1)
    window.columnconfigure([0, 1, 2, 3], minsize=50, weight=1)

    labell1 = tk.Label(window, text='Название АРМ:', font=("Arial Bold", 11))
    widgets_list.append(labell1)
    labell1.grid(row=0, column=0)

    label2 = tk.Label(window, text='АРМ "Администратор предприятия"',
font=("Arial Bold", 11))
    widgets_list.append(label2)

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label2.grid(row=0, column=1)

label3 = tk.Label(window, text='Версия программы:', font=("Arial Bold",
11))
widgets_list.append(label3)
label3.grid(row=1, column=0)

label4 = tk.Label(window, text='1.0.0.0', font=("Arial Bold", 11))
widgets_list.append(label4)
label4.grid(row=1, column=1)

label5 = tk.Label(window, text='Информация о разработчике:', font=("Arial
Bold", 11))
widgets_list.append(label5)
label5.grid(row=2, column=0)

label6 = tk.Label(window, text='Студент БрГТУ, \nФакультет ЭИС, \n'
                               'Специальность "АСОИ", \nГруппа АС-56, 3
курс\nДымар Илья', font=("Arial Bold", 11))
widgets_list.append(label6)
label6.grid(row=2, column=1)

label7 = tk.Label(window, text='Описание:', font=("Arial Bold", 11))
widgets_list.append(label7)
label7.grid(row=3, column=0)

label8 = tk.Label(window, text='Данная АРМ разработана для\nсокращения
трудозатрат по ведению \n'
                               'информации и отчетных документов \nпри
решении комплекса задач \n'
                               'в процессе производства игрушек',
font=("Arial Bold", 11))
widgets_list.append(label8)
label8.grid(row=3, column=1)

btn_back = tk.Button(window, text='Назад', command=start_screen,
                      width=20, height=2, background=buttons_bg,
font='Arial 11')
widgets_list.append(btn_back)
btn_back.grid(row=4, column=0)

def start_screen():
    destroy_widgets()
    window.title('АРМ "Администратор предприятия"')

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8, 9], minsize=0,
weight=0)

    window.rowconfigure([0, 1, 2, 3, 4], minsize=50, weight=1)
    window.columnconfigure([0, 1, 2, 3], minsize=50, weight=1)

    btn_catalogs = tk.Button(window, text='Справочные документы',
command=catalog_list,
                               width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_catalogs)
    btn_catalogs.grid(row=0, column=0)

    btn_docs = tk.Button(window, text='Оперативные документы',
command=docs_list,

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## КП.АС-56.190258 - 02 12 00

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        width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_docs)
    btn_docs.grid(row=1, column=0)

    btn_reports = tk.Button(window, text='Отчетные документы',
command=reports_list,
        width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_reports)
    btn_reports.grid(row=2, column=0)

    btn_spravka = tk.Button(window, text='Справка', command=spravka,
        width=40, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_spravka)
    btn_spravka.grid(row=3, column=0)

    btn_vosst = tk.Button(window, text='Восстановление', command=vosst,
        width=15, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_vosst)
    btn_vosst.grid(row=4, column=0)

    btn_exit = tk.Button(window, text='Выход', command=exit_window,
        width=15, height=2, background=buttons_bg,
font='Arial 12')
    widgets_list.append(btn_exit)
    btn_exit.grid(row=4, column=1)

def pre_start():
    window.geometry('600x350')
    start_screen()

def login_screen():
    destroy_widgets()
    window.title('Аутентификация')

    window.rowconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8], minsize=0, weight=0)
    window.columnconfigure([0, 1, 2, 3, 4, 5, 6, 7, 8], minsize=0, weight=0)
    window.rowconfigure([0, 1, 2], minsize=50, weight=1)
    window.columnconfigure([0, 1], minsize=50, weight=1)

    login_text = tk.Label(window, text='Логин: ', font='Arial 12')
    login_text.grid(row=0, column=0)
    widgets_list.append(login_text)
    login_folder = tk.Entry(window, width=20)
    login_folder.grid(row=0, column=1)
    widgets_list.append(login_folder)

    password_text = tk.Label(window, text='Пароль: ', font='Arial 12')
    password_text.grid(row=1, column=0)
    widgets_list.append(password_text)
    password_folder = tk.Entry(window, width=20)
    password_folder.grid(row=1, column=1)
    widgets_list.append(password_folder)

def user_check():
    login = login_folder.get()
    password = password_folder.get()

```

## КП.АС-56.190258 - 02 12 00

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    if (login == '' and password == ''):
        pre_start()
    else:
        message = tk.messagebox.showwarning(message='Неверное имя
пользователя или пароль')

    btn_sign_in = tk.Button(window, text='Войти', command=user_check,
background=buttons_bg, width=20, font='Arial 12')
    btn_sign_in.grid(row=2, column=1)
    widgets_list.append(btn_sign_in)

def splash_screen():
    window.geometry('300x150')
    window.title(' ')

    labell1 = tk.Label(window, text='Автоматизированное рабочее
место\n"Администратор предприятия"', font=("Arial Bold", 12))
    widgets_list.append(labell1)
    labell1.pack(expand='YES', fill='both')
    window.update()
    time.sleep(5)
    login_screen()

def main():
    splash_screen()
    window.mainloop()
    cursor.close()
    connection.close()
    print('Connection with DB has been close')

if __name__ == '__main__':
    main()

```