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import tkinter as tk
from tkinter import Canvas, ttk
from tkinter import messagebox
from PIL import ImageTk, Image
from user_record import UserRecord
from task_record import TaskRecord
from database import Database
from gui_states import GUIStates
class TaskBrowser:
    def __init__(self, root, db):
        self.frame = tk.Frame(root)
        self.db = db
        self.user = UserRecord()
        self.tasks = []
        self.selected_task = 0 # index into self.tasks
        self.filename= 'src/med.jpeg'
        self.is_inserting = False # Track if we are in insert mode
        #defining the image so it can be placed later on:
        self.my_img = ImageTk.PhotoImage(Image.open(self.filename).resize((500, 550)))
    def init_resources(self):
        self.canvasMain = Canvas(self.frame, width=1000, height=1000)
        #Places the image on the canvas:
        self.canvasMain.create_image(260, 100, image=self.my_img , anchor="nw") #image
=self.my_img,
        #CREATING LABELS AND ENTIRES FOR CREATE A LOGIN SCREEN, DONE BY GABRIEL WALDNE
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        #Placing the canvas:
        # Style setup (once, in __init__ or init_resources)
        style = ttk.Style()
        style.theme_use('clam') # Options: 'clam', 'alt', 'default', 'vista'
        style.configure("TButton", font=("Segoe UI", 10), padding=6)
        # Title Label
        style.configure("TitleLabel.TLabel", font=("Segoe UI", 20, "italic"))
        style.configure("HeaderLabel.TLabel", font=("Segoe UI", 12, "italic"))
        # Field Labels
        style.configure("FieldLabel.TLabel", font=("Segoe UI", 10), foreground="#444")
        # Field Entry
        style.configure("Field.TEntry", font=("Segoe UI", 20), padding=10)
        # Info Buttons
        style.configure("Info.TButton", font=("Segoe UI", 7), padding=10)
        # Action Buttons
        style.configure("Action.TButton", font=("Segoe UI", 10), padding=10)
        # Delete Buttons
        style.configure("Delete.TButton", font=("Segoe UI", 20), padding=10, backgroun
d="#d32f2f")
        ttk.Label(self.frame, text="Task Browser", style="TitleLabel.TLabel").place(x=
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50, y = 20)
        # qui state change buttons
        ttk.Button(self.frame, text="Goto User Info", command=self.goto_user_info, sty
le="Info.TButton").place(x=500, y=20)
        ttk.Button(self.frame, text="Logout", command=self.logout, style="Info.TButton
").place(x=650, y=20)
        # entries and their respective labels
        self.task_num_lbl = tk.Label(self.frame)
        self.task_num_lbl.place(x=50, y=100)
        ttk.Label(self.frame, text="Short Name:", style="HeaderLabel.TLabel").place(x=
50, y=200)
        self.short_name_ent = ttk.Entry(self.frame, style="Field.TEntry")
        self.short_name_ent.place(x=50, y=250)
        ttk.Label(self.frame, text="Description:", style="HeaderLabel.TLabel").place(
x=50, y=350)
        self.description_ent = ttk.Entry(self.frame, style="Field.TEntry")
        self.description_ent.place(x=50, y=400)
        # CRUD buttons
        ttk.Button(self.frame, text="New", command=self.add_record, style="Info.TButto
n'').place(x=75, y=500)
        ttk.Button(self.frame, text="Update", command=self.update_record, style="Info.
TButton").place (x=75, y=600)
        ttk.Button(self.frame, text="Delete", command=self.delete_record, style="Info.
TButton").place (x=75, y=700)
        # nav buttons
        ttk.Button(self.frame, text="<", command=lambda:self.increment_selected_task(-
1), style="Info.TButton").place(x=415, y=700)
        ttk.Button(self.frame, text="<<", command=lambda:self.increment_selected_task(
-3), style="Info.TButton").place(x=335, y=700)
        ttk.Button(self.frame, text=" | <", command=lambda:self.increment_selected_task(
-1 * self.selected_task), style="Info.TButton").place(x=265, y=700)
        ttk.Button(self.frame, text=">", command=lambda:self.increment_selected_task(1
), style="Info.TButton").place(x=500, y=700)
        ttk.Button(self.frame, text=">>", command=lambda:self.increment_selected_task(
3), style="Info.TButton").place(x=575, y=700)
        ttk.Button(self.frame, text=">| ", command=lambda:self.increment_selected_task(
len(self.tasks) - 1 - self.selected_task), style="Info.TButton").place(x=655, y=700)
    def show(self, id):
        self.canvasMain.pack()
        self.user = self.db.users_get_record_by_id(id)
        self.selected_task = 0
        self.refresh()
        self.frame.place(x=0, y=0, width=1000, height=1000)
    def add_record(self):
        if not self.is_inserting:
            # Clear fields and change button text to "Insert"
            self.short_name_ent.delete(0, "end")
            self.description_ent.delete(0, "end")
            self.is_inserting = True
            self.createBtn = ttk.Button(self.frame, text="Insert", command=self.add_re
cord, style="Info.TButton").place(x=75, y=500)
            # Insert the record and refresh
            task = TaskRecord()
            task.fill(id=-1, user_id=self.user.id, short_name=self.short_name_ent.get(
), description=self.description_ent.get())
            self.db.tasks_insert(task)
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self.refresh()
            self.is_inserting = False
            self.createBtn = ttk.Button(self.frame, text="New", command=self.add_recor
d, style="Info.TButton").place(x=75, y=500)
            # Select and display the newly added task
            self.selected_task = len(self.tasks) - 1
            self.display_record()
    def update_record(self):
        if (self.selected_task == -1):
            messagebox.showerror("Can't update a nonexistent record.", "Can't update a
 nonexistent record.");
            return
        task = TaskRecord()
        task.fill(id=self.tasks[self.selected_task].id, user_id=self.tasks[self.select
ed_task].user_id, short_name=self.short_name_ent.get(), description=self.description_e
nt.get())
        result = messagebox.askquestion("Task Update Confirmation", "Are you sure that
you would like to update this task?\n\n"+self.tasks[self.selected_task].to_string()+"
\n\nTo This Task\n\n"+task.to_string())
        if (result != "yes"):
            return
        self.db.tasks_update(task)
        self.refresh()
    def delete_record(self):
        if (self.selected\_task == -1):
            messagebox.showerror("Can't delete a nonexistent record.", "Can't delete a
 nonexistent record.");
            return
        result = messagebox.askquestion("Task Delete Confirmation", "Are you sure that
 you would like to delete this task?\n\n"+self.tasks[self.selected_task].to_string())
        if (result != "yes"):
            return
        self.db.tasks_delete(self.tasks[self.selected_task].id)
        self.refresh()
    def refresh (self):
        self.tasks = self.db.tasks_qet_all_records_with_user_id(self.user.id)
        self.increment_selected_task(0) # bounds check self.selected_task
        self.display_record()
    def increment_selected_task(self, amt):
        self.selected_task += amt
        # check if there are no tasks
        if (len(self.tasks) == 0):
            self.selected task = -1
        # cap to within bounds
        if (self.selected_task >= len(self.tasks)):
            self.selected_task = len(self.tasks) - 1
        if (self.selected_task < 0):</pre>
            self.selected\_task = 0
        self.display_record()
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def display_record(self):
        self.short_name_ent.delete(0, "end")
        self.description_ent.delete(0, "end")
        task = TaskRecord()
        if (self.selected_task == -1):
            task.fill(id = -1, user_id = self.user.id, short_name = "", description =
"")
            self.task_num_lbl["text"] = "Task #: {}".format("No Tasks")
        else:
            task = self.tasks[self.selected_task]
            self.task_num_lbl["text"] = "Task #: {}".format(self.selected_task + 1)
        self.short_name_ent.insert(0, task.short_name)
        self.description_ent.insert(0, task.description)
    def logout(self):
        self.goto_login()
    def goto_login(self):
    self.hide()
        self.show_map[GUIStates.LOGIN_USER]()
    def goto_user_info(self):
        self.hide()
        self.show_map[GUIStates.USER_INFO](self.user.id)
    def hide(self):
        self.frame.place_forget()
        self.canvasMain.pack_forget()
    def assign_show_map(self, show_map):
        self.show_map = show_map
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