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from cs50 import SQL
from flask_session import Session
from flask import Flask, render_template, redirect, request, session, jsonify
from datetime import datetime
# # Instantiate Flask object named app
app = Flask(__name__)
# # Configure sessions
app.config["SESSION_PERMANENT"] = False
app.config["SESSION_TYPE"] = "filesystem"
Session(app)
# Creates a connection to the database
db = SQL ("data.db")

@app.route("/")
def index():
   shirts = db.execute("SELECT * FROM shirts ORDER BY onSalePrice")
   shirtsLen = len(shirts)
  # Initialize variables
  shoppingCart = []
  shopLen = len(shoppingCart)
  totItems, total, display = 0, 0, 0
  if 'user' in session:


hoppingCart =
db.execute("SELECT
samplename, image,
SUM(qty),
SUM(subTotal),
price, id FROM
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cart GROUP BY
samplename")
                    shopLen = len(shoppingCart)
                     for i in range(shopLen):
                     total += shoppingCart[i]["SUM(subTotal)"]
                     totItems += shoppingCart[i]["SUM(qty)"]
                      shirts = db.execute("SELECT * FROM shirts ORDER BY onSalePrice
                    ASC")
                            shirtsLen = len(shirts)
                            return render_template ("index.html",
                    shoppingCart=shoppingCart, shirts=shirts, shopLen=shopLen,
                    shirtsLen=shirtsLen, total=total, totItems=totItems,
                    display=display, session=session )
                        return render_template ( "index.html", shirts=shirts,
                    shoppingCart=shoppingCart, shirtsLen=shirtsLen, shopLen=shopLen,
                    total=total, totItems=totItems, display=display)
                    @app.route("/buy/")
                    def buy():
                        # Initialize shopping cart variables
                        shoppingCart = []
                        shopLen = len(shoppingCart)
                        totItems, total, display = 0, 0, 0
                        qty = int(request.args.get('quantity'))
                        if session:
                            # Store id of the selected shirt
                            id = int(request.args.get('id'))
                            # Select info of selected shirt from database
                            goods = db.execute("SELECT * FROM shirts WHERE id =
                    :id", id=id)
                            # Extract values from selected shirt record
                            # Check if shirt is on sale to determine price
                            if(goods[0]["onSale"] == 1):
                                price = goods[0]["onSalePrice"]
                            else:
                                price = goods[0]["price"]
                            samplename = goods[0]["samplename"]
                            image = goods[0]["image"]
                            subTotal = qty * price
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        # Insert selected shirt into shopping cart
        db.execute("INSERT INTO cart (id, qty, samplename,
image, price, subTotal) VALUES (:id, :qty, :samplename, :image,
:price, :subTotal)", id=id, qty=qty, samplename=samplename,
image=image, price=price, subTotal=subTotal)
        shoppingCart = db.execute("SELECT samplename, image,
SUM(qty), SUM(subTotal), price, id FROM cart GROUP BY
samplename")
        shopLen = len(shoppingCart)
        # Rebuild shopping cart
        for i in range(shopLen):
            total += shoppingCart[i]["SUM(subTotal)"]
            totItems += shoppingCart[i]["SUM(qty)"]
        # Select all shirts for home page view
        shirts = db.execute("SELECT * FROM shirts ORDER BY
samplename ASC")
        shirtsLen = len(shirts)
        # Go back to home page
        return render_template ("index.html",
shoppingCart=shoppingCart, shirts=shirts, shopLen=shopLen,
shirtsLen=shirtsLen, total=total, totItems=totItems,
display=display, session=session )
@app.route("/update/")
def update():
    # Initialize shopping cart variables
    shoppingCart = []
    shopLen = len(shoppingCart)
    totItems, total, display = 0, 0, 0
    qty = int(request.args.get('quantity'))
    if session:
        # Store id of the selected shirt
        id = int(request.args.get('id'))
        db.execute("DELETE FROM cart WHERE id = :id", id=id)
        # Select info of selected shirt from database
        goods = db.execute("SELECT * FROM shirts WHERE id =
:id", id=id)
        # Extract values from selected shirt record
        # Check if shirt is on sale to determine price
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        if(goods[0]["onSale"] == 1):
            price = goods[0]["onSalePrice"]
        else:
            price = goods[0]["price"]
        samplename = goods[0]["samplename"]
        image = goods[0]["image"]
        subTotal = qty * price
        # Insert selected shirt into shopping cart
        db.execute("INSERT INTO cart (id, qty, samplename,
image, price, subTotal) VALUES (:id, :qty, :samplename, :image,
:price, :subTotal)", id=id, qty=qty, samplename=samplename,
image=image, price=price, subTotal=subTotal)
        shoppingCart = db.execute("SELECT samplename, image,
SUM(qty), SUM(subTotal), price, id FROM cart GROUP BY
samplename")
        shopLen = len(shoppingCart)
        # Rebuild shopping cart
        for i in range(shopLen):
            total += shoppingCart[i]["SUM(subTotal)"]
            totItems += shoppingCart[i]["SUM(qty)"]
        # Go back to cart page
        return render_template ("cart.html",
shoppingCart=shoppingCart, shopLen=shopLen, total=total,
totItems=totItems, display=display, session=session )
@app.route("/filter/")
def filter():
    if request.args.get('typeClothes'):
        query = request.args.get('typeClothes')
        shirts = db.execute("SELECT * FROM shirts WHERE
typeClothes = :query ORDER BY samplename ASC", query=query )
    if request.args.get('sale'):
        query = request.args.get('sale')
        shirts = db.execute("SELECT * FROM shirts WHERE onSale =
:query ORDER BY samplename ASC", query=query)
    if request.args.get('id'):
        query = int(request.args.get('id'))
        shirts = db.execute("SELECT * FROM shirts WHERE id =
:query ORDER BY samplename ASC", query=query)
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    if request.args.get('kind'):
        query = request.args.get('kind')
        shirts = db.execute("SELECT * FROM shirts WHERE kind =
:query ORDER BY samplename ASC", query=query)
    if request.args.get('price'):
        query = request.args.get('price')
        shirts = db.execute("SELECT * FROM shirts ORDER BY
onSalePrice ASC")
    shirtsLen = len(shirts)
    # Initialize shopping cart variables
    shoppingCart = []
    shopLen = len(shoppingCart)
    totItems, total, display = 0, 0, 0
    if 'user' in session:
        # Rebuild shopping cart
        shoppingCart = db.execute("SELECT samplename, image,
SUM(qty), SUM(subTotal), price, id FROM cart GROUP BY
samplename")
        shopLen = len(shoppingCart)
        for i in range(shopLen):
            total += shoppingCart[i]["SUM(subTotal)"]
            totItems += shoppingCart[i]["SUM(qty)"]
        # Render filtered view
        return render_template ("index.html",
shoppingCart=shoppingCart, shirts=shirts, shopLen=shopLen,
shirtsLen=shirtsLen, total=total, totItems=totItems,
display=display, session=session )
    # Render filtered view
    return render_template ( "index.html", shirts=shirts,
shoppingCart=shoppingCart, shirtsLen=shirtsLen, shopLen=shopLen,
total=total, totItems=totItems, display=display)
@app.route("/checkout/")
def checkout():
    order = db.execute("SELECT * from cart")
    # Update purchase history of current customer
    for item in order:
        db.execute("INSERT INTO purchases (uid, id, samplename,
image, quantity) VALUES(:uid, :id, :samplename, :image,
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:quantity)", uid=session["uid"], id=item["id"],
samplename=item["samplename"], image=item["image"],
quantity=item["qty"] )
    # Clear shopping cart
    db.execute("DELETE from cart")
    shoppingCart = []
    shopLen = len(shoppingCart)
    totItems, total, display = 0, 0, 0
    # Redirect to home page
    return redirect('/')
@app.route("/remove/", methods=["GET"])
def remove():
    # Get the id of shirt selected to be removed
    out = int(request.args.get("id"))
    # Remove shirt from shopping cart
    db.execute("DELETE from cart WHERE id=:id", id=out)
    # Initialize shopping cart variables
    totItems, total, display = 0, 0, 0
    # Rebuild shopping cart
    shoppingCart = db.execute("SELECT samplename, image,
SUM(qty), SUM(subTotal), price, id FROM cart GROUP BY
samplename")
    shopLen = len(shoppingCart)
    for i in range(shopLen):
        total += shoppingCart[i]["SUM(subTotal)"]
        totItems += shoppingCart[i]["SUM(qty)"]
    # Turn on "remove success" flag
    display = 1
    # Render shopping cart
    return render_template ("cart.html",
shoppingCart=shoppingCart, shopLen=shopLen, total=total,
totItems=totItems, display=display, session=session )
@app.route("/login/", methods=["GET"])
def login():
    return render_template("login.html")
@app.route("/new/", methods=["GET"])
def new():
    # Render log in page
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    return render_template("new.html")
@app.route("/logged/", methods=["POST"] )
def logged():
    # Get log in info from log in form
    user = request.form["username"].lower()
    pwd = request.form["password"]
    #pwd = str(sha1(request.form["password"].encode('utf-
8')).hexdigest())
    # Make sure form input is not blank and re-render log in
page if blank
    if user == "" or pwd == "":
        return render_template ( "login.html" )
    # Find out if info in form matches a record in user database
    query = "SELECT * FROM users WHERE username = :user AND
password = :pwd"
    rows = db.execute ( query, user=user, pwd=pwd )
    # If username and password match a record in database, set
session variables
    if len(rows) == 1:
        session['user'] = user
        session['time'] = datetime.now( )
        session['uid'] = rows[0]["id"]
    # Redirect to Home Page
    if 'user' in session:
        return redirect ( "/" )
    # If username is not in the database return the log in page
    return render_template ( "login.html", msg="Wrong username
or password." )
@app.route("/history/")
def history():
    # Initialize shopping cart variables
    shoppingCart = []
    shopLen = len(shoppingCart)
    totItems, total, display = 0, 0, 0
    # Retrieve all shirts ever bought by current user
    myShirts = db.execute("SELECT * FROM purchases WHERE
uid=:uid", uid=session["uid"])
    myShirtsLen = len(myShirts)
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    # Render table with shopping history of current user
    return render_template("history.html",
shoppingCart=shoppingCart, shopLen=shopLen, total=total,
totItems=totItems, display=display, session=session,
myShirts=myShirts, myShirtsLen=myShirtsLen)
@app.route("/logout/")
def logout():
    # clear shopping cart
    db.execute("DELETE from cart")
    # Forget any user_id
    session.clear()
    # Redirect user to login form
    return redirect("/")
@app.route("/register/", methods=["POST"] )
def registration():
    # Get info from form
    username = request.form["username"]
    password = request.form["password"]
    confirm = request.form["confirm"]
    fname = request.form["fname"]
    lname = request.form["lname"]
    email = request.form["email"]
    # See if username already in the database
    rows = db.execute( "SELECT * FROM users WHERE username =
:username ", username = username )
    # If username already exists, alert user
    if len( rows ) > 0:
        return render_template ( "new.html", msg="Username
already exists!" )
    # If new user, upload his/her info into the users database
    new = db.execute ( "INSERT INTO users (username, password,
fname, lname, email) VALUES (:username, :password, :fname,
:lname, :email)",
                    username=username, password=password,
fname=fname, lname=lname, email=email )
    # Render login template
    return render_template ( "login.html" )
@app.route("/cart/")
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def cart():
    if 'user' in session:
        # Clear shopping cart variables
        totItems, total, display = 0, 0, 0
        # Grab info currently in database
        shoppingCart = db.execute("SELECT samplename, image,
SUM(qty), SUM(subTotal), price, id FROM cart GROUP BY
samplename")
        # Get variable values
        shopLen = len(shoppingCart)
        for i in range(shopLen):
            total += shoppingCart[i]["SUM(subTotal)"]
            totItems += shoppingCart[i]["SUM(qty)"]
    # Render shopping cart
    return render_template("cart.html",
shoppingCart=shoppingCart, shopLen=shopLen, total=total,
totItems=totItems, display=display, session=session)
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