VERNON MALONE
COLLEGE AND CAREER ACADEMY
Silver Hawks

PBL

Real World Projects That Impact Our Lives

Course: Python 1

Instructor: Mr. Meserve

Project Overview:

How Big Is Your Balance? Students will create a program that allows the user to input code that will create the inputs and outputs for balancing a checkbook. Students will have a running balance, and deposit and withdrawal transactions of funds. Students will create one of two reports: itemized or total funds.

Instructor Reflection:

*"The great concept of this project was **many different answers allowed** a solved successful project. The concepts of programming allows individuals to be successful but also **allows frustrations when communication skills are not efficient**. Programmers need to be great problem solvers, however, **programmers MUST be effective in communicating** with co workers no matter the skill levels. Prior launching this project again a review of collaboration procedures and rules will be discussed and demonstrated. The **students were able to collaborate with peers** in a situation where the knowledge was provided but the process was manipulated. The **students dealt with time constraints** and had to follow a protocol based on the development of the overall project. If the protocol was not followed, the groups were penalized with delays and major frustrations. We were able to **discuss a real world job setting** and the possible **stringent stipulations a boss would apply** to their progress to achieve their work being accomplished. **Every employee has a role** and that role has to be effectively achieved."*

Student Reflections:

*"**I grew as an individual** from this project because I realized that you can't 'wing' it in Python. You have to carefully think about each and every step, which is not something I've had to apply to in other classes."*

*"This project has **made me more accepting** of other people's ideas."*

*"Our project's **success was from putting our ideas together** and working each one out and mixing opinions to see what works best."*

*"Our project's failure was the next day when I got onto the project some **stuff was deleted**."*

*"Even though this project was a programming project, it **taught us patience** and how to efficiently research stuff beforehand."*

*"This PBL projected **provided me a new method of coding**, as well as a combination of the methods I have already used in the past."*

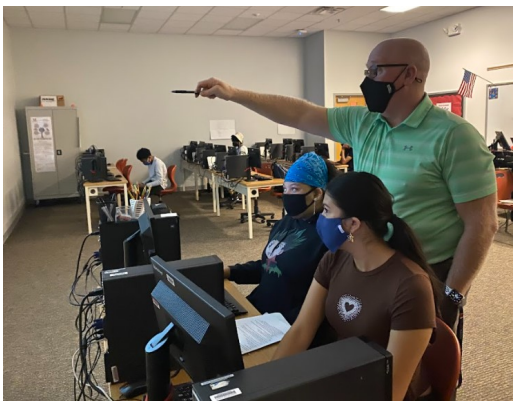
*"This project **made me realize that "failure" is something that happens in life** and it is **always best to plan** for each and every step."*

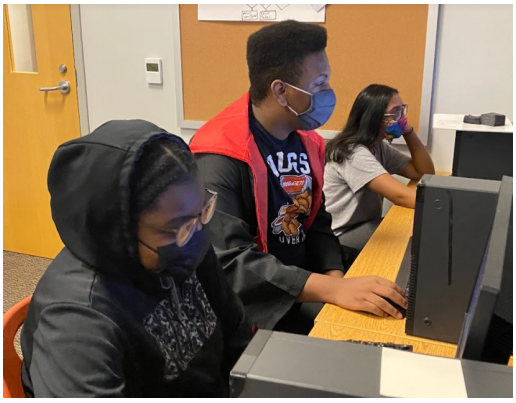
*"The first time we did the code some **parts did not save** and that was a failure."*

*"I would think **me and my partner working together** and thinking about it together contributed to our success."*

Driving Question:

How do we code a bank statement?





Student Code Sample #1:

```
while counter < 15: #will continue loop if counter is less than 15
  UI = input("Enter an integer or \"Q\": ")
  if UI.lstrip('-').isdigit(): #checks if it's a digit
    counter = counter + 1
    total = total + float(UI)
    alist = alist + "\n" + str(UI)
  elif UI.upper().startswith("Q"): #checks if the input is "Q"
    break #if user enters "Q"
  else:
    print("Input is invalid.")

#lines 19- were done by Caleb/Me
```

Student Code Sample #2:

```
  global T #can use total at anytime in the code
  global count  #you can use count at any time in the code
  global A   #you can use A at any time in the code
  global Entry
  if i.lstrip('-').isdigit():  #checking of user input is a digit
    print("adding ", i)  #diplaying adding and user input
    T += int(i)  #makeing the user input an intiger so that it can add it to the total
    count += 1  #saying count + 1
    A += i + '\t\t\t\n'  #list of numbers + the user input

  elif i.lower() == "total":    #if user input is total...
    print('\nYour total is')  #it will print "your total is"
    count += 15    #and also saying counter is 15
  elif i.lower() == "quit":  #saying if user input is quit...
    print('Quited') #it will print out "quited"
    count += 15
  elif i.lower() == 'one dollar':   #if user input is one dollar or onedollar then it will
```