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| **SKILL TEST** | |
| **Course Code: CPE-201** | **Program: COMPUTER ENGINEERING** |
| **Course Title:** | **Date Performed: 8/30/2025** |
| **Section: BSCPE-2B** | **Date Submitted: 8/30/2025** |
| **Name: Jester Aquino** | **Instructor:** Maria Rizette H. Sayo |
| 1. **Objectives** | |
| * The code defines a Queue class with enqueue, dequeue, and display methods to perform standard queue operations. * The enqueue method replaces spaces with underscores in the input name before adding it to the queue, demonstrating basic string processing and data storage. | |
| **2. Discussion** | |
| A Queue is a data structure that works on the First In, First Out so the first item added is the first one to be removed. These examples of Main Operations in queue are Enqueue, Dequeue, Display. The Enqueue methods adds an item to the front of queue using insert(0,item) and it will replace spaces with underscore in the input before adding it to the list. | |
| **3. Materials and Equipment** | |
| * Python/Google colab was used to write the code and well suited for showing the basic data structure. * String Manipulation as you can see based on my code you will see the (data.replace(“ ”, “\_”)). To manipulate the strings and replace spaces with underscore. * Condition Check I used (if len(self.queue) > 0 ). To prevent trying to remove an element from empty queue and avoid errors. * Pop(0) this method removes an item in front of the list | |
| **4. Procedure** | |
| 1. We need to Create the Queue class after that inside the class I put \_init\_ method to initialize an empty queue which is (self.queue = []) 2. I put define the enqueue method and I input the string manipulation by replacing the spaces with underscores 3. I put define dequeue and I put there the (if len(self.queue) > 0 ) to check if the queue is not empty if the queue is not empty the first element is removed using pop(0). 4. Define the display method so see or show all elements currently in queue 5. my\_queue = Queue() to initializes the queue as an empty list 6. In enqueue I input my name. While the dequeue remove the first element in the queue and print the result 7. Lastly the Print result the results of the display and dequeue, First it printed the full name added to the queue and then it printed the result after performing the dequeue operation. | |
| **5. Output** | |
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| **6. Conclusion**  This Skill test to see how to use the Queue and understating the First in, First Out concept in queue. Not only queues also the simple python basic methods like insert, pop, and replace and showing the three main queue operations which is the enqueue, dequeue and the display. | |
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