

Friday june 6th

```
1 import java.util.ArrayList;
2
3 public class Main {
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6
7         while (true) {
8             System.out.println("_Main Menu_");
9             System.out.println("Input (1) To Add a Service");
10            System.out.println("Input (2) To Book a Service");
11            System.out.println("Input (3) To Exit");
12            System.out.print("Enter your choice: ");
13
14            int choice = input.nextInt();
15            input.nextLine();
16
17            switch (choice) {
18                case 1:
19                    int addService = 0;
20                    choice = addService;
21                    break;
22                case 2:
23                    int bookService = 0;
24                    choice = bookService;
25                    break;
26                case 3:
27                    System.out.println("Thank you for using the service booking program");
28                    break;
29                default:
30                    System.out.println("Invalid choice. Please try again.");
31                    break;
32            }
33        }
34    }
35}
```

For some of the beginning code. Mainly spent the period understanding the code and making aplan but got the menu through a loop and was able to add in the switch case for the users input value.

Sat sun monday june 7th,8th,9th (weekend) work

```
1
2
3 ArrayList<String> serviceNames = new ArrayList<>();
4 ArrayList<String> serviceCategories = new ArrayList<>();
5 ArrayList<Double> serviceRates = new ArrayList<>();
6
7 while (true) {
8     System.out.print("Enter service name: ");
9     String name = input.nextLine();
10
11     System.out.print("Enter category: ");
12     String category = input.nextLine();
13
14     System.out.print("Enter hourly rate: ");
15     double rate = input.nextDouble();
16     input.nextLine();
17
18     serviceNames.add(name);
19     serviceCategories.add(category);
20     serviceRates.add(rate);
21
22     System.out.println("service " + name + " added successfully");
23
24     System.out.print("Add another service? (yes/no): ");
25     String again = input.nextLine();
26     if (!again.equalsIgnoreCase("yes")) {
27         break;
28     }
29 }
30
31 if (serviceNames.size() == 0) {
32     System.out.println("no services available yet.");
33 }
34 }
```

Able to create more of the code getting the service inputs in. i'm pretty sure if the user inputs (2) at the start it still makes them ask the details for a service so i have to fix that. I was sick so I couldn't really do much but I'm pretty sure that this works for the service section.

Tuesday 10th

```
ArrayList<String> serviceNames = new ArrayList<>();
ArrayList<String> serviceCategories = new ArrayList<>();
ArrayList<Double> serviceRates = new ArrayList<>();

while (true) {
    System.out.println("\n_Main Menu_");
    System.out.println("Input (1) To Add a Service");
    System.out.println("Input (2) To Book a Service");
    System.out.println("Input (3) To Exit");
    System.out.print("Enter your choice: ");

    int choice = input.nextInt();
    input.nextLine();
    if (choice == 1) {
        while (true) {
            System.out.print("Enter service name: ");
            String name = input.nextLine();

            System.out.print("Enter category: ");
            String category = input.nextLine();

            System.out.print("Enter hourly rate: ");
            double rate = input.nextDouble();
            input.nextLine();

            serviceNames.add(name);
            serviceCategories.add(category);
            serviceRates.add(rate);

            System.out.println("service " + name + " added successfully.");

            System.out.print("add another service? (yes/no): ");
            String again = input.nextLine();
            if (again.equalsIgnoreCase("yes")) {
                break;
            }
        }
    } else if (choice == 2) {
        if (serviceNames.size() == 0) {
            System.out.println("No services available yet.");
        }

        ArrayList<String> uniqueCategories = new ArrayList<>();
        for (String category : serviceCategories) {
            if (!uniqueCategories.contains(category)) {
                uniqueCategories.add(category);
            }
        }

        System.out.println("Available Service Categories:");
        for (int i = 0; i < uniqueCategories.size(); i++) {
            System.out.println((i + 1) + ". " + uniqueCategories.get(i));
        }

        System.out.print("\nChoose a category: ");
        int catChoice = input.nextInt();
        input.nextLine();
        if (catChoice < 1 || catChoice > uniqueCategories.size()) {
            System.out.println("Invalid category. ");
        }
    }

    String selectedCategory = uniqueCategories.get(catChoice - 1);
    System.out.println("\nServices in category: " + selectedCategory);
}
```

Pretty sure I fixed the main menu issue but i now i gotta give a checkout section after the book a service is selected. Still have to write the display for the checkout and the rates but I think afer that I should be good.

Wednesday 11th

```
String selectedCategory = uniqueCategories.get(catChoice - 1);
System.out.println("\nServices in category: " + selectedCategory);

ArrayList<Integer> matchingIndices = new ArrayList<>();
for (int i = 0; i < serviceNames.size(); i++) {
    if (serviceCategories.get(i).equalsIgnoreCase(selectedCategory)) {
        matchingIndices.add(i);
        String status = "";
        if (serviceAvailability.get(i) <= 0) {
            status = "Fully Booked.";
        }

        System.out.println(matchingIndices.size() + " " + serviceNames.get(i) +
            " | Rate: $" + serviceRates.get(i) + " " + status);
    }
}

if (matchingIndices.size() == 0) {
    System.out.println("No services found in this category.");
}

System.out.print("\nEnter the number of the service to book (or 0 to cancel): ");
int bookChoice = input.nextInt();
input.nextLine();

if (bookChoice == 0) {
    System.out.println("Booking cancelled.");
}

if (bookChoice >= 1 && bookChoice <= matchingIndices.size()) {
    int serviceIndex = matchingIndices.get(bookChoice - 1);
    if (serviceAvailability.get(serviceIndex) == 0) {
        System.out.println("That service is fully booked. You cannot book that service again.");
    } else {
        cartIndices.add(serviceIndex);
        serviceAvailability.set(serviceIndex, 0);
        System.out.println(serviceNames.get(serviceIndex) + " added to your cart.");
    }
} else {
    System.out.println("Invalid choice.");
}

} else {
    System.out.println("Invalid choice.");
}

System.out.println("\n_Your cart_");
double total = 0;
for (int i = 0; i < cartIndices.size(); i++) {
    int idx = cartIndices.get(i);
    System.out.println((i + 1) + ". " + serviceNames.get(idx) + " - $" + serviceRates.get(idx) + "/hr");
    total += serviceRates.get(idx);
}
System.out.println("Total Cost: $" + total);
}
```

	<p>Tried to finish up if the user wants to book a service. I was able to write the code for if the user was fully booked. I had it so that it would say fully booked but still would put the same service into cart but i believe that i fixed that problem.</p>
Thursday 12th	<pre> } else if (choice == 3) { System.out.println("\nThank you for using the service booking program. Here is your Invoice."); System.out.println("\n __Your Invoice__"); double total = 0; for (int i = 0; i < cartIndices.size(); i++) { int idx = cartIndices.get(i); System.out.println((i + 1) + ". " + serviceNames.get(idx) + " - \$" + serviceRates.get(idx) + "/hr"); total += serviceRates.get(idx); } System.out.println("Total Cost: \$" + total); break; } else if (choice == 4) { System.out.println("\n __Your Cart__"); double total = 0; for (int i = 0; i < cartIndices.size(); i++) { int idx = cartIndices.get(i); System.out.println((i + 1) + ". " + serviceNames.get(idx) + " - \$" + serviceRates.get(idx) + "/hr"); total += serviceRates.get(idx); } System.out.println("Total Cost: \$" + total); if (total == 0) { System.out.println("There are no services to remove from your cart"); } else { System.out.print("\nWhat service number do you want to remove from your cart? "); int removeIndex = input.nextInt(); input.nextLine(); if (removeIndex >= 1 && removeIndex <= cartIndices.size()) { cartIndices.remove(removeIndex - 1); System.out.println("Service removed from cart."); } } } </pre> <p>Able to complete both if the user inputs 3 to exit or 4 to remove. Pretty sure i got the remove part working correctly but i am going to keep on testing to make sure there are no errors for it. When the user does 3 i also made sure to output the invoice and added things for better user experience when leaving the marketplace.</p>
Friday 13th	<pre> 165 } else { 166 System.out.println("Invalid selection."); 167 } 168 } 169 } 170 else { 171 System.out.println("Invalid choice. Please try again."); 172 } 173 } 174 } 175 } 176 } 177 } 178 } </pre> <p>Finished up the code and made syntax and display corrections. Pretty sure I have everything, but I'm going to keep on checking.</p> <p>Also change the start from the work i originally did, wasn't working. Had to get rid of the switch case and substitute for general if - else if statements.</p>