OOP PROJECT-1

Unit Converter in Java

What have I created?

Unit Converter for:
- Distance (4 units)
- Mass (5 units)
- Speed (4 units)
- Temperature (3 units)
- Time (6 units)

Overall 22 units

Example

```
---Unit Converter---
Choose type of unit to convert:
1. Temperature
2. Mass
3. Distance
4. Speed
5. Time
6. Exit

Enter your choice:
4
Chose a unit to convert:
1. Meters per second
2. Meters per hour
3. Kilometers per second
4. Kilometers per hour
Enter your choice:
1
Insert value to convert:
10

Converted Units
1.Meters per hour: 36000.0
2.Kilometers per second: 0.01
3.Kilometers per hour: 36.0

---Unit Converter---
Choose type of unit to convert:
1. Temperature
2. Mass
3. Distance
4. Speed
5. Time
6. Exit
```

Problems

- How to convert every value without creating conversion factors to every unit separately

```java
@Override
public void convert(int choice, float value){

    if (choice == 1) {
        mps = value;
    }
    if (choice == 2) {
        mps = value/3600;
    }
    if (choice == 3) {
        mps = value * 1000;
    }
    if (choice == 4) {
        mps = value * 1000/3600;
    }

    mph = mps * 3600;
    kps = mps/1000 ;
    kph = mps *3600/1000 ;
}
```

What did I learn?

- Structure of Java language
- Object oriented thinking
- Algorithms for unit conversion

What could be improved?

- Add GUI to program
- More types of units