Eco-Friendly Smart Agriculture System

Sample Input and Output

Initial State – System_State.txt

Exercise1_Design_Patterns > Behavioural > Observer_Pattern > system_state.txt

```
1   Soil Moisture: Dry
2   Nutrient Level: Low
```

Setting the Moisture State to Wet

```
Enter soil moisture state (true for dry, false for wet):
false
Jul 28, 2024 10:28:58 AM Exercise1_Design_Patterns.Behavioural.Observer_Pattern.IrrigationSystem update
INFO: Irrigation system activated due to dry soil.
Enter nutrient level state (true for low, false for normal):
true
Jul 28, 2024 10:29:02 AM Exercise1_Design_Patterns.Behavioural.Observer_Pattern.FertilizerSystem update
INFO: Fertilizer system activated due to low nutrients.
Current states from file:
Soil Moisture: Wet
Nutrient Level: Low
```

System_State.txt file after Updating

Exercise1_Design_Patterns > Behavioural > Observer_Pattern > system_state.txt

```
1   Soil Moisture: Wet
2   Nutrient Level: Low
```

Setting the Soil Moisture to Dry and Nutrition Level to Normal

```
Enter soil moisture state (true for dry, false for wet):
true
Jul 28, 2024 10:31:02 AM Exercise1_Design_Patterns.Behavioural.Observer_Pattern.IrrigationSystem update
INFO: Irrigation system activated due to dry soil.
Enter nutrient level state (true for low, false for normal):
false
Jul 28, 2024 10:31:06 AM Exercise1_Design_Patterns.Behavioural.Observer_Pattern.FertilizerSystem update
INFO: Fertilizer system activated due to low nutrients.
Current states from file:
Soil Moisture: Dry
Nutrient Level: Normal
```

System_State.txt file after Updating

Exercise1_Design_Patterns > Behavioural > Observer_Pattern > system_state.txt

```
1   Soil Moisture: Dry
2   Nutrient Level: Normal
```