Group no: 14

Vulnerability Type:

Security

Brief Discription: There is no check on creating and purchasing items with negative prices in marketplace. I heve completely ordered an item with negative payment amount without any issue. This allows atteackers to exploit the payment logic and place successful orders with negative total amounts leading to possibly severe financial and system integrity implications.

Steps to Reproduce:

- 1) Go to https://192.168.2.246/marketplace/artifacts/
- 2) Select any item with -ve payment and proceed to buy it. If there is no such item then create one with a account and but it with other one.
- 3) Then see that there is no check or error shown even though amount is -ve and we can buy items with negative amount.

Proof of Concept:

Initially my balance was \$1000, i have bought an iten with amount -100 and my balance updated to \$1100







Impact:

As there is no check on negative amount, attackers could trick the system into paying them money (as negative payment implies money returned) and bypass the actual payment by exploiting negative amounts. In the example ss as well we can increase our balance by buying items with negative amount so attackers could potentially receive money. So there is order confirmed despite the invalid payment flow and its accepting logically invalid transactions.