

Bug Description

The players' cash balances should have been updated upon merging hotels.

The bug was that after merging hotels, the players' cash balances remained unchanged, directly impacting the game's financial accuracy and overall player experience.

Cause of the Bug

An analysis revealed the root cause: the `handle_merging` function in `acquire.py` solely focused on the tile and hotel merger logic without incorporating the critical step of distributing the bonuses of the acquired hotels.

Solution Implementation

The solution involved the creation of a new `distribute_bonuses` function within the `banker.py` class. This function was created to calculate the bonuses for stockholders of acquired hotels accurately. It updated the players' cash balances to reflect these bonuses. The function accounts for various scenarios, including if there are 2 equal majority stockholders and the presence of 2 minority stockholders, to ensure all players receive the correct bonus amounts.

New Tests for Bug Prevention

Some tests were implemented to verify the accuracy of the cash update procedure following the merger. By simulating different merger scenarios, these tests make sure that the cash balances accurately reflect the anticipated results and protect against recurrence.

Preventative Measures

Additional validation checks were implemented to detect anomalies in player cash balances post-merger.