Part 1 Underhanded Solidity

This exploit from a previous contest exploited upgradability mechanisms, read through the submission and make sure you understand what was done.
Submission

His take away points
0. Do not use code that you do not understand - simply put, if you are not sure about how `delegatecall` works, do NOT use it - ask people, read articles and docs!

1. Never trust unstructured storage that does not give the formulas to how the slots are calculated!
2. Even if the formulas are given, do not trust that the coded values are the right ones!
3. Just because the comment above some random values says "EIP" do NOT trust it - specially if its not a finalized proposal.
4. Do not be lazy, verify everything !

Part 2 Audit

Imagine you have been given the following code to audit

Contract

with the following note from the team

"DogCoinGame is a game where players are added to the contract via the addPlayer function, they need to send 1 ETH to play.
Once 200 players have entered, the UI will be notified by the startPayout event, and will pick 100 winners which will be added to the winners array, the UI will then call the payout function to pay each of the winners.
The remaining balance will be kept as profit for the developers."

Write out the main points that you would include in an audit.