Lab 2: Merkle Madness

Group Project Breakdown

//Please pick two files from the list to work on, I have included the difficulty level as well so maybe we can each have a high/medium combo. As for the Main class, we can work on it together since it's pretty simple.

//Below I have included a tentative schedule for your review, let me know what dates work for you so we can decide on a day prior to the deadline to meet up and finalize things :)

File	Teammate	Description		Status
MerkleManager_Test		- Main Class - The entry point for the application and tester. - Instantiate MerkleManager and call manage method	Low ▾	Group App… ▾
MerkleManager	Ramzey	- Manages the game logic - Sets up the game - Prompts the user for input - Manages the game state - Handles interactions between different threads	High ▾	Group App… ▾
Util	Ramzey	- Utility methods used across various classes - Includes: hashing, user prompts, and thread sleep operations.	Medium ▾	Group App… ▾
MerkleThread	Sara	- A thread responsible for collecting user input words - Building the Merkle tree - Calculating the Merkle root - Manages a list of words and ensures the logical flow of the tree.	High ▾	Group App… ▾
RogueThread	Alan	- A thread that simulates a rogue process - Capture user words and increase strike counts - This thread handles random sleep intervals to simulate	High ▾	Group App… ▾

File	Teammate	Description		Status
		processing time, affecting the game's outcome.		
MonitorThread	Sara	- Continuously monitor the game state. - Check if the user has won or lost. - Manage the game's termination. - Monitor the Merkle root comparison and the number of strikes.	Medium ▾	Group App… ▾
MerkleNode	Alan	Represent nodes in the Merkle tree, containing attributes for hash values.	Medium ▾	Group App… ▾

Tentative Schedule:

☐ **by Saturday 8/31:** *Connect with the group and Arrange who is doing what. Decide on meeting dates?*

☐ **Individual Work Phase** *update google doc of progress*

☐ **by Tuesday 9/3:** *Each member should complete the first attempt at their code section. Each member can upload their files to the "Files" section in their Group page.*

☐ **Meeting Day (date not finalized yet)**
☐ Collaborate together.
This might involve helping each other through trouble spots.
Begin to try to put all the code together to try to run the app.
Reach out to tutors if running into problem nobody in group can solve.

☐ **Complete and turn in by <mark>Monday 9/9.</mark>**
Only one person (any group member) turns it in including the reflection paragraphs, and that one submission turns it in for the whole group.