Mbot Party!

9/23/24: Hello, my name is [name]. My team and I are creating an Escape Room for Delaware State University students to participate in. Our mission is to create not only an escape room but to create one that will entertain the students at Delaware State University. Before we begin, we'd like to get to know you. Any sort of information you tell us today will be kept private and will only be used to complete our task. (making the interviewee feel more at ease) But before that let me share some things about myself … [whatever you are comfortable with sharing] What are some interesting things about yourself that you're comfortable with sharing?

Other questions: What is your major (they should be CS/IT majors)? Do you have a job and if so where do you work and in what position? What do you do in your free time? If there was one place you could go with your friends where would it be? Tell me about a time you enjoyed with your friend. Where do you see your pathway taking you in the next five years? If you were stuck on a desert island and you could bring any 5 things in the world or in reality to help you survive what would they be?

Background Questions	**High-level questions**	**Detailed Questions about the task**
"What is your name"	**"What do you do for work?"** **(if answered)** **"What position in this work field?"** **(if answered)** **"What do you hope to accomplish?"**	**"How often do you see yourself facing challenges?"** **(if answered)** **"What strategies do you use to overcome them?"**
"What year are you in?"	**"How would you describe your biggest adversary in your current job."**	**"Tell me about a time when solving a problem felt entertaining or rewarding."** **(if answered)** **"How would using (insert resource) be of use to you?"**
"What is your major?"		**"How do you feel about solving problems?"** **"What would you change given the chance?"**

Real Questions: Have you ever done an escape room? What is your favorite type of puzzle? What does your ideal escape room look like?

Closing: Thank you for your time [name] do you have any questions?

9/25/24: Blue = Problem Statement Green: Goal Yellow: Useful information

9/29:24 Connor Interviews:
Interviewees: Bradley Fomundam, Sydney Hall, Kymani Miller

9/29/24 Leandro Interviews:
Interviewees: Benjamin Kulholm, Adriana Green, Justin Coreano

09/29/24 Garmai Interviews :
Interviewees : Todun A , Jiulyna R , Yaniyah

Do not do ANYTHING that isn't related to the problem statement. (We are NOT making an escape room)

[User…(Description)] needs[need…**(verb)] because [insight…(compelling)]**

- [ ] **CS DSU students need a robot-centered game that is time-bound because… it will help them learn to work under pressure, provide a thought-provoking experience, and improve problem-solving skills while still being engaged and entertained.**

How might we…?

How might we create a difficult game that tests the limits of DSU students' capabilities at solving problems?

How might we be able to create a game with robots that put on pressure with a timer?

How might we direct(appeal) the game to DSU students?

How might we create puzzles that are engaging for the user but also challenging?

How might we incorporate different skills into the puzzles?

How might we create/design different "stages" or increase the difficulty of the level in the game?

How might we satisfy the needs of the DSU students with the game?

How can we create a system that rewards or leaves the player feeling accomplished after solving a puzzle?

How might we create an environment that wows the player?

How might we incorporate 2 robots to entertain students in the best way possible?

How might we create an environment that works well with the robot?

How might we create a program that immerses the robot in its environment?

Sprint Retrospective:
What things went well this past week?
Our ideation process went very well.
What did not go well?
The amount of questions that we had (We could have had more)
What personal characteristics might cause friction in the group?
Miscommunications and personal differences
What plan will the group adopt to help address issues discovered?
Business only interaction, effective communications, Wait for the current speaker to finish their thoughts before giving any other comment or suggestion

Scrum Master (switch every 2 weeks):
Garmai,Connor,Lee

Project Owner: Christian

Games: Jeopardy,Mario Party

Roll a Die and then the higher the number you roll the more difficult the question is

the more difficult the question the easier you can code the robot to move the more easy the question the more difficult code you have to write

A timer could be implemented for both the question and the coding time

Coding Game Concept

Game Overview:

A Mario Party-inspired coding game where players solve coding challenges to progress on a game board. Players roll a die to determine the spaces they move, with higher rolls leading to harder questions. The game incorporates mini-games like Jeopardy and cup pong, with questions varying in difficulty and points. The objective is to complete coding challenges to advance and reach the goal.

Key Elements

1. **Game Board Mechanics**

- **Players roll a die to move forward on the board. The number rolled determines the difficulty of their coding challenge.**
- **Higher rolls lead to more challenging questions or tasks, while lower rolls offer simpler ones.**
- **Players earn points based on successful coding solutions, which allow them to move additional spaces.**

2. **Mini-Games and Coding Challenges**

- **Jeopardy: Players participate in a multiplayer-style Jeopardy round, answering coding or general knowledge questions in five categories. Points earned in Jeopardy can be used to move forward on the board.**
- **Cup Pong: This could be another mini-game where questions or tasks are assigned based on performance, with points awarded for success.**

3. **Layered Coding Challenges**

- **Primary Challenge: Players answer questions related to coding concepts or general knowledge.**
- **Secondary Coding Task: After answering correctly, players must write a specific line of code (provided) within a time limit. Successful completion of both tasks earns full points.**

4. **Walls and Obstacles**

- **Throughout the game board, players encounter "walls" that require specific coding actions to pass.**
- **Examples include:**
- **Coding a sequence to make their robot shine in alternating colors (e.g., red and blue).**
- **Writing code that triggers specific actions in response to obstacles, such as maneuvering around or interacting with a wall.**

Scoring and Progression

- **Points are awarded based on task completion and mini-game performance.**
- **Point values vary by question difficulty, with more complex questions earning higher rewards.**

- **Points determine player ranking, while certain point thresholds allow players to advance additional spaces on the board.**

Goal

Players aim to reach the end of the board by coding their way through challenges, winning mini-games, and overcoming obstacles with their programming skills. The first player to reach the end with the required point total wins the game.

Sprint Retrospective:
What things went well this past week?
We all started to collaborate and give strings of ideas onto a main one.
What did not go well?
Couldn't get into monday. We still don't have a defined project.
What personal characteristics might cause friction in the group?
Bumping heads in some aspects still but it's getting worked on quickly!
What plan will the group adopt to help address issues discovered?
We're going to need more meetings and work on how we communicate.
As a <DSU Student>, I want to <play a robot-centered game that is time-bound>, So that <I can exercise skills like, my mindset, and overall work ethic in the science>
As a <DSU Student>, I want to <play a robot-centered game that is time-bound>, So that <I can exercise skills that pertain to problem solving skills and time management.>
As a <CS DSU Student >, I want to <play a robot puzzle game>, So that <I can achieve real life skills >
As a <CS DSU Student>,I want to <some sort of task>,so that <a type of goal>
As a <CS DSU Student>,I want to <Play an entertaining but challenging robot puzzle game>,so that <I can not only have fun, but better skills pertaining to problem solving and work ethics.>

As a CS DSU Student, I want to play on a game board so that I can not only be entertained but also challenged.

As a CS DSU Student,I want to play on a game board,so that i can navigate to the end, collect and keep track of points
Acceptance Criterion:
- The game has to be challenging
- The game board has to be entertaining/appealing to look at
- They need to be a CS DSU student
- The game board and challenges have to be fun!
- Includes a die

Mini games - Jeopardy , Drag race , maze

11-9-24 Meeting:

- Implemented a Shop on the board where you receive a card if you so choose that can affect you or make the opposing team feel pain!!
- Questions with different difficulties are around the map (like tiles)
- Yellow = Shop, Red = 500, Green = 400 Purple = 300 Blue = Choice Light Green = 200 Tan = 100
- Risk spots
- Little Hats/Accessories

Sprint Retrospective:

What things went well this past week?

We were able to visualize our board giving us leverage. We also created a plan for how it's going to look and function.

What did not go well?

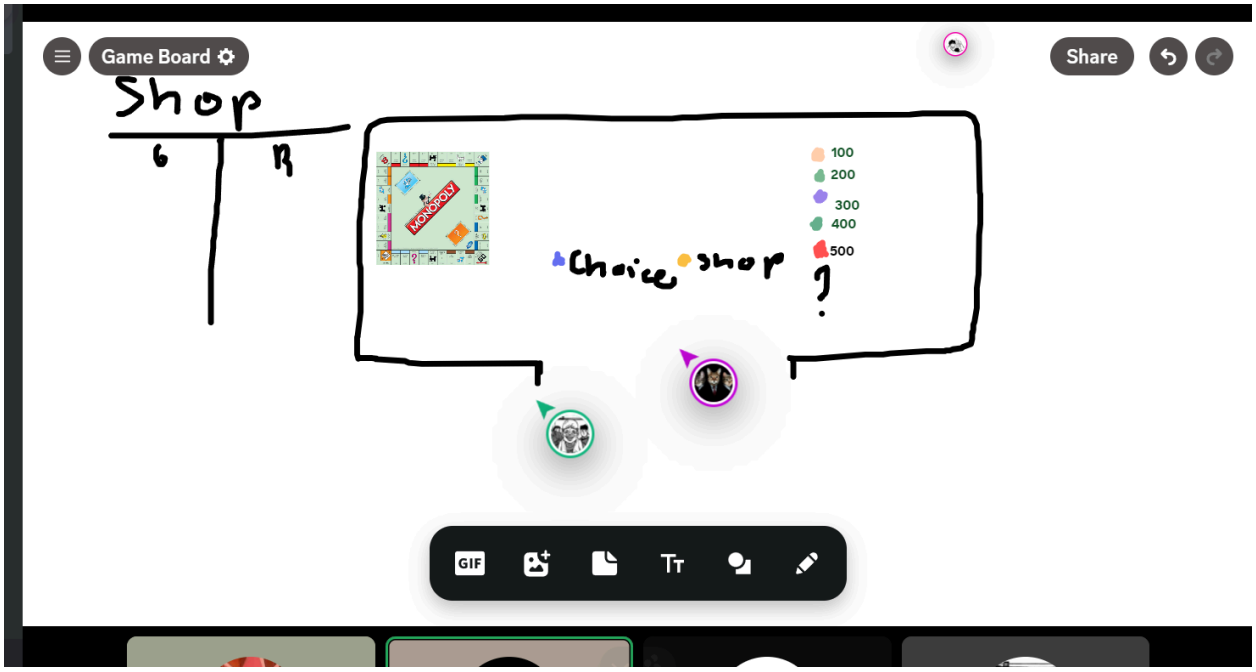
Time Constraints and the board could use some more tweaking.

What personal characteristics might cause friction in the group?

Getting Off Topic.

What plan will the group adopt to help address issues discovered?

Complete all plans first. If all is done, and we have time left over, we can use that time to study / converse on what to do next.



Next Topic: Rules/Questions/Building board and cards.

Rules:

0. **The Users will press the B button on the mbot 2 and whoever has the highest number printed on the cyber pi screen will be the first to go.**

1. The User may not roll the dice when it is **not** their turn.
2. Upon landing on a Jeopardy spot, you have a choice to skip it. However, you will receive **zero** points.
3. When **both** users reach the end of the game, points will be tallied up. Whoever has the most points, **will be the winner**.
4. Card Spaces allow the user to spend some of their points to pick up a **Green** or **Red** card. Red cards can be used to hinder the enemy team from getting any sort of leverage that they have over the opposing team. Green will have benefits to the user that has purchased it. **The cards are to be shuffled after every round.**

General Game Description
Setting: Game board

- The game board will be a set straight path of blocks each being a free space, jeopardy and Pop Quiz

Player Set-up: Two Players

Obstacles: Questions , Timer in the background creating time constraints , maze

Sprint Retrospective:
What things went well this past week?
Ideas, we know what we want to do and a General Idea and Name for the project has now been finalized.
What did not go well?
We met on Wednesday but no work was conducted due to working on the lab.
What personal characteristics might cause friction in the group?
Perception. Other than that, nothing really.
What plan will the group adopt to help address issues discovered?
Be more open, stay focused and meet more often

Things to consider:
Use some tape so that way it knows when to stop.
This can be achieved by creating an if statement when the amount of spaces has been finished. Or something like that anyway