Platform: Intermediate

Soccer Player's Village Quest

In this project, the user controls the Soccer Player character traveling by Train to a village. The user decides which train station to stop at by pressing keys. Messages are broadcasted to start the journey and arrival. Once in the village, the Fairy offers two exploration paths (farm or market), and users choose by pressing keys. The project uses messaging to transition scenes and simple motion to navigate characters.

Key Characters

- Train
- Soccer Player
- Fairy

Guiding Prompts

- You are creating learning materials for students on Scratch coding.
  The following project idea have been presented with Train Station,Village theme:
  The user can choose their own adventure. They play a soccer player who travels to a train stations and explores a nearby village.
  The project has 3 characters: Train,Soccer Player,Fairy.

Please check if they are age appropriate for elementary and middle school students. If the project asked is not age appropriate, give the reason and suggest some alternatives projects ideas.

- You are creating learning materials for students on Scratch coding.
  The students would like a project in Train Station,Village theme as follows:
  The user can choose their own adventure. They play a soccer player who travels to a train stations and explores a nearby village.
  The project has 3 characters: Train,Soccer Player,Fairy
  This is a INTERMEDIATE level project, focus on these concepts when providing solutions, do not use hard concepts: Clone, messaging, advanced motion, variables, sensing
  Create 2 project ideas using the theme, characters, and key storyline students have provided above, focusing on the specified scratch concepts.

Step-By-Step Tutorial

Step 1: 1. Set up the sprites and backgrounds.

Add the Train, Soccer Player, and Fairy sprites. Create or choose backgrounds for the train station, train interior, and village. Arrange the sprites on the correct starting backgrounds.

Step 2: 2. Program the Train journey and station choices.

When the green flag is clicked, broadcast a message to start the journey. The Soccer Player appears on the train. Use key presses (e.g., '1' for Station A, '2' for Station B) to let the user choose where to stop. Broadcast a message for arrival at the chosen station.

```
when green flag clicked
switch backdrop to [Train Station v]
go to [Train v] sprite
show [Soccer Player v]
broadcast [Start Journey v]

when I receive [Start Journey v]
switch backdrop to [Train Interior v]
wait until <key [1 v] pressed or key [2 v] pressed>
if <key [1 v] pressed> then
  broadcast [Arrive Station A v]
else
  broadcast [Arrive Station B v]
end
```

Step 3: 3. Arrival and meeting the Fairy.

When the train arrives at the village, switch the backdrop and show the Fairy sprite. The Fairy greets the Soccer Player and offers two paths: farm or market. Use key presses (e.g., 'F' for farm, 'M' for market) to let the user choose.

```
when I receive [Arrive Station A v] or [Arrive Station B v]
switch backdrop to [Village v]
go to [Fairy v] sprite
show [Fairy v]
say [Welcome! Choose: Farm (F) or Market (M)] for 2 secs
wait until <key [f v] pressed or key [m v] pressed>
if <key [f v] pressed> then
  broadcast [Go Farm v]
else
  broadcast [Go Market v]
end
```

Step 4: 4. Exploring the chosen path with motion and clones.

Depending on the user's choice, the Soccer Player moves to the farm or market. Use motion blocks for walking animation. Optionally, use clones to create animals at the farm or people at the market.

```
when I receive [Go Farm v]
point in direction (90)
glide 2 secs to x: (100) y: (0)
create clone of [Animal v]

when I receive [Go Market v]
point in direction (90)
glide 2 secs to x: (200) y: (0)
create clone of [Person v]
```

Step 5: 5. Use variables and sensing for interaction.

Create a variable (e.g., 'PathChosen') to store the user's choice. Use sensing blocks to detect if the Soccer Player touches a clone (e.g., animal or person) and display a message or score points.

```
when I receive [Go Farm v]
set [PathChosen v] to [Farm]

when [Soccer Player v] touches [Animal v]
say [You found a sheep!] for 2 secs

when I receive [Go Market v]
set [PathChosen v] to [Market]

when [Soccer Player v] touches [Person v]
say [You met a villager!] for 2 secs
```

Potential Problems

- Forgetting to broadcast or receive messages, which can stop the story from progressing.
- Not hiding or showing sprites at the right times, causing characters to appear in the wrong scenes.
- Incorrect use of clones, which can lead to too many or too few animals/people appearing.

Extra Challenges

- Add a timer to see how quickly the player can reach the farm or market.
- Create a simple inventory system where the Soccer Player collects items from the farm or market.