**Scratch Aufgabe**

**Ziele:**

**Aufgabe 1: Create a Simple Animation using scratch.**

**Objective**: Learn basic motion and looks blocks.

1. **Create a new Scratch project**.
2. **Choose a sprite** (like a cat or any other character).
3. **Create a simple animation** where the sprite moves 10 steps forward, then 10 steps back, and then says "Hello!".
4. **Bonus**: Add a background to your project.

**Aufgabe 2: Create a Simple Game using scratch.**

**Objective:** Learn basic control and sensing blocks.

1. **Create a New Scratch Project:**
   * Go to [Scratch](https://scratch.mit.edu/) and click on "Create" to start a new project.
2. **Choose a Sprite:**
   * Select a sprite for the player (e.g., a cat).
3. **Choose a Backdrop:**
   * Select a backdrop for your game environment.
4. **Add Another Sprite:**
   * Choose another sprite to be the target (e.g., a ball or a star).
5. **Script for the Player Sprite:**
   * Use arrow keys to move the sprite:
     + when [up arrow] key pressed -> change y by 10
     + when [down arrow] key pressed -> change y by -10
     + when [right arrow] key pressed -> change x by 10
     + when [left arrow] key pressed -> change x by -10
6. **Script for the Target Sprite:**
   * Move the target sprite to a random position when it is clicked:
     + when this sprite clicked -> go to random position

**Aufgabe 3: Create a Quiz Using scratch.**

**Objective:** Learn about variables, input, and conditional statements.

1. **Create a New Scratch Project:**
   * Go to [Scratch](https://scratch.mit.edu/) and click on "Create" to start a new project.
2. **Choose a Sprite:**
   * Select a sprite to be the quiz master (e.g., a teacher).
3. **Add Questions:**
   * Create variables for the score and the answer:
     + score (set it to 0 at the start)
     + answer
4. **Script for the Quiz:**
   * Ask a question and check the answer:
     + ask [What is 2 + 2?] and wait
     + set [answer] to (answer)
     + if <(answer) = 4> then -> change [score] by 1
     + say [Correct!] for 2 seconds
     + else -> say [Incorrect!] for 2 seconds
5. **Add More Questions:**
   * Repeat the ask and check process for additional questions.

**Task 4: Create a Music Player Using scratch.**

**Objective:** Learn about sound blocks.

1. **Create a New Scratch Project:**
   * Go to [Scratch](https://scratch.mit.edu/) and click on "Create" to start a new project.
2. **Choose a Sprite:**
   * Select a sprite to be the music player.
3. **Add Sounds:**
   * Upload or record different sounds/music clips to use in the project.
4. **Script for the Music Player:**
   * Add buttons to play different sounds:
     + when this sprite clicked -> play sound [sound1] until done
     + when this sprite clicked -> play sound [sound2] until done

**Aufgabe 5: Create an Interactive Story Using scratch.**

**Objective:** Combine multiple skills to tell a story.

1. **Create a New Scratch Project:**
   * Go to [Scratch](https://scratch.mit.edu/) and click on "Create" to start a new project.
2. **Choose or Create Sprites:**
   * Select or create sprites for your story characters.
3. **Add Backgrounds:**
   * Select or create backgrounds for different scenes of the story.
4. **Script the Story:**
   * Animate the characters and have them interact with each other:
     + when green flag clicked -> switch backdrop to [scene1]
     + broadcast [start scene1]
     + when I receive [start scene1] -> say [Hello!] for 2 seconds
5. **Switch Between Scenes:**
   * Use broadcasting to move between scenes:
     + broadcast [next scene]
     + when I receive [next scene] -> switch backdrop to [scene2]
6. **Bonus: Add Sound Effects and Music:**
   * Enhance the story with sound effects and background music.

**Access Scratch:**

* Open your web browser and go to [Scratch's website](https://scratch.mit.edu/).
* Click on "Create" to open the Scratch editor.

**Begrenzungen**

* Bei Fragen wendet euch gerne bei den Ausbildern.
* Das Wichtigste: benutzen Sie nicht chatGPT.

**Info:**

Bitte postet euere Ergebnisse jeweils in meinem persönlichen Chat.

**Zeitvorgaben**

Fertigstellung bis Freitag, 16.08.2024 (9:30).