

Animation & Game Development Elementary Category

(8 -12 years Old)



(Road Safety Adventure)

The Premium Supporters/Partners of STEM Festival Port Harcourt 2024



RIVERS STATE
GOVERNMENT



NDDC
Niger Delta Development Commission
...Making a Difference



Summary for Safe Cities: Animation & Game Development Elementary Category Competition

This document outlines the competition rules for the Elementary Category of the STEM Festival, focusing on the development of "Road Safety Adventure." Participants will have 2-3 months to design, program, and test their animations or games before showcasing them at the host city of the competition, Port Harcourt, Nigeria.

Key Points:

- **Focus:** Create simple animations and games that teach children about road safety.
- **Skill Level:** This category is designed for young children, utilizing tools like Scratch to develop their projects.
- **Objectives:** Educate on traffic lights, pedestrian crossings, and helmet safety.

Ethics Code for Teams:

- **Participation and Learning:** Prioritize learning and enjoying the process over winning.
- **Collaboration and Fun:** Encourage teamwork and fun while developing new skills.
- **Learning Impact:** Focus on the knowledge gained rather than the competition outcome.

Safe Cities

Elementary Category (8-12 years old)

Category Focus: Road Safety Adventure

Introduction:

Welcome to the Elementary Category of the STEM Festival! In this category, participants are invited to create engaging animations and games that teach important road safety lessons. Young developers will use Scratch to bring their ideas to life, helping children learn about traffic rules, pedestrian safety, and the importance of wearing helmets when cycling.

Mission:

The mission for participants in the Elementary Category is to design and develop animations or games that educate children on road safety. These projects should be interactive, fun, and informative, making learning about safety engaging for young audiences.

Tasks:

1. Animation/Game Design:

- **Create Characters and Scenes:** Design characters, vehicles, and city scenes using Scratch.
- **Develop Storylines:** Craft storylines that highlight different aspects of road safety, such as crossing the road, following traffic lights, and wearing helmets.

2. Traffic Light Simulation:

- **Program Traffic Lights:** Implement functioning traffic lights that change from red to green.
- **Pedestrian Crossing:** Create scenarios where characters cross the road safely at pedestrian crossings.

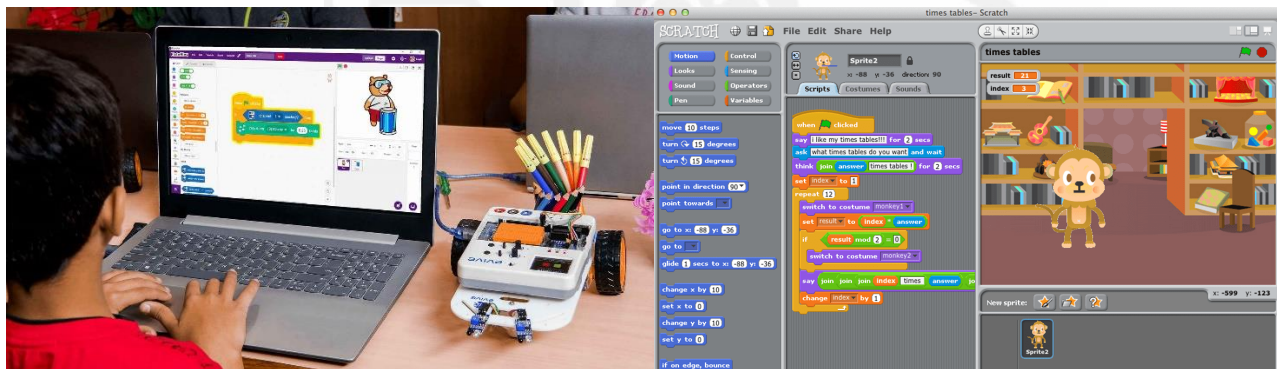
3. Helmet Safety:

- **Cycling Animation:** Develop animations showing characters wearing helmets while riding bicycles.
- **Safety Messages:** Incorporate messages about the importance of helmet safety.

4. Interactive Elements:

- **User Interaction:** Include interactive elements where users can click or press keys to control the characters.
- **Feedback Mechanisms:** Provide positive feedback when users make safe choices.

Sample Image



Design Tools/Programming Software (Your Free Choice):

❖ Design Tools:

- Scratch: Use Scratch for creating animations and interactive stories.
- Tynker: An alternative tool for designing and programming simple games.

❖ Programming Software:

- Scratch: A block-based programming language suitable for children to create animations and games.

Scoring/Earning Points:

Section 1: Animation/Game Design (25 points)

Criteria	Description	Points Awarded (Max: 25)
Creativity and Visual Appeal	Originality and attractiveness of the characters and scenes.	10
Educational Value	Effectiveness in teaching road safety concepts.	10
User Engagement	Level of interactivity and engagement for users.	5

Section 2: Traffic Light Simulation (25 points)

Criteria	Description	Points Awarded (Max: 25)
Functionality of Traffic Lights	Accuracy in simulating real-life traffic light changes.	10
Pedestrian Crossing Safety	Effectiveness in portraying safe road-crossing behavior.	10
User Interaction	Degree of user control and interaction with traffic lights.	5

Section 3: Helmet Safety (25 points)

Criteria	Description	Points Awarded (Max: 25)
Representation of Helmet Use	Accuracy and consistency in showing helmet usage while cycling.	10
Safety Messaging	Clarity and impact of the safety messages included.	10
User Feedback	Quality of feedback provided for safe behavior.	5

Section 4: Interactive Elements (25 points)

Criteria	Description	Points Awarded (Max: 25)
User Control	Effectiveness of user control in the game/animation.	10
Engagement Level	Degree to which the interactive elements engage the users.	10
Response Mechanism	Quality of the feedback and response mechanisms in the project.	5

Overall Comments:

- **Judges may award bonus points** for exceptional performance, unique functionalities, or innovative solutions beyond the core requirements (up to 10 points).

Conclusion:

Participants are encouraged to prioritize creativity, educational value, and user engagement in their Road Safety Adventure projects. Emphasizing the importance of road safety through interactive and fun animations and games will help instill lifelong safety habits in young users.

We wish you the best of luck in creating your Road Safety Adventure animations and games for the STEM Festival!