

Coding Elementary Category

(8 - 12 Years Old)



The Premium Supporters/Partners of STEM Festival Port Harcourt 2024



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Summary for Safe Cities: Coding Early Category Competition

This document provides an overview of the Coding Elementary Category for the STEM Festival Port Harcourt 2024, focusing on the theme of "Safe Cities." Participants in this category are tasked with developing a mobile app that enables users to report suspicious activities, request emergency assistance, and access safety tips within their community.

Key Points:

- You have a period of 2 to 3 months to learn, design, program, and test your mobile app solutions in preparation for STEM Festival PH 2024.
- These rules serve as guidelines for the Coding Elementary Category, offering flexibility to accommodate participants with varying levels of coding experience.
- The competition emphasizes the importance of creating solutions that address real-world safety concerns, encouraging participants to leverage technology to enhance community safety.
- Participants are encouraged to showcase creativity and innovation in their mobile app designs while ensuring clarity and functionality.
- While completing all tasks is not mandatory, participants are encouraged to strive for excellence and present their app's functionalities clearly to the judges.

Ethics Code for Teams:

- Participating and learning are more important than winning the prizes.
- Teams are encouraged to learn and master new skills while having fun together.
- It is not whether you win or lose, but how much you learn that counts.
- Join the global community of inventors and practical problem-solvers across Africa and the globe at STEM Festival.

STEM Festival Team

Tasks:

1. **App Design:** Create an intuitive and user-friendly interface for the Safety Contact App, allowing users of all ages to easily navigate its features.
2. **Reporting Functionality:** Implement a feature that enables users to report suspicious activities directly through the app, providing essential information to local authorities.
3. **Emergency Assistance:** Develop a mechanism for users to request emergency assistance with just a few taps, ensuring a swift response during critical situations.
4. **Safety Tips:** Integrate a section within the app that offers valuable safety tips and guidelines to help users stay informed and prepared.
5. **Accessibility:** Ensure that the Safety Contact App is accessible to all members of the community, including those with disabilities or language barriers.

Programming Software (Your Free Choice):

- **Appy Pie's AI Kids App Builder:** This option utilizes an AI assistant to guide kids through the app creation process. It offers pre-built templates and a user-friendly interface for building basic apps.
- **MIT App Inventor:** A block-based coding platform specifically designed for creating mobile applications, ideal for young learners.
- **Code.org:** Offers a variety of coding tutorials and activities for children, including lessons on building mobile apps using block-based coding.
- **Thunkable:** This platform uses a drag-and-drop interface, making it easy for kids to create apps visually without writing code.

Sample Image



Sample App

Unleash your creativity and develop a useful app that can help everyone in your neighbourhood !

Scoring/Earning Points:

Section 1: Safety Contact App Design (25 points)

| Criteria | Description | Points Awarded (Max) |
|-----------------------|--|----------------------|
| User Interface Design | Clarity and ease of use of the app interface for reporting suspicious activity, requesting emergency assistance, and accessing safety tips | 15 |
| Data Security | Measures in place to ensure secure transmission and storage of user-reported data | 10 |

Section 2: Functionality (45 points)

| Criteria | Description | Points Awarded (Max) |
|-------------------------|--|----------------------|
| Reporting Functionality | Effectiveness of the app in allowing users to report suspicious activity | 15 |
| Emergency Assistance | Effectiveness of the app in allowing users to request emergency assistance | 15 |
| Safety Tips | Effectiveness of the app in allowing users to access safety tips | 15 |

Section 3: Reliability (15 points)

| Criteria | Description | Points Awarded (Max) |
|-------------|---|----------------------|
| Reliability | Consistent performance of the app in providing accurate information and responding to user requests | 15 |

Section 4: Accessibility (10 points)

| Criteria | Description | Points Awarded (Max) |
|---------------|---|----------------------|
| Accessibility | Ease of access to the app for users of all ages and technological backgrounds | 10 |

Overall Comments:

Please Note: Judges may award bonus points for exceptional performance, unique functionalities, or innovative solutions beyond the core requirements.

Remember:

- Prioritize safety in your app design and operation.
- Focus on real-world application by considering the needs of users during emergencies.
- Be prepared to competitively demonstrate your app's capabilities and explain its design decisions to the judges.

We wish you the best of luck in creating a life-saving Safety Contact App for Nigeria!