

The Next Generation School Ain Khalid Campus Scratch Sprint 2023-24: Code to Victory!





Objectives:

- Scratch competitions aim to inspire and challenge participants to use their imagination and creativity to develop unique projects.
- Scratch Competitions provide an opportunity for participants to hone their coding skills and learn new techniques.
- Competitions provide a platform for participants to showcase their projects and receive feedback from peers and judges. This can help build confidence and motivate participants to continue learning and improving their coding skills.

The Scratch Sprint 2023-24: Code to Victory consists of two categories:

- 1. Open Category
- 2. On-Spot Challenge Category

Students participating in Open Category **cannot** participate in On-Spot Challenge competition. Team registration form need to be filled by scanning through the QR Code by Monday 1st April 2024 before 13:00.

Category	Date	Time
Year 1 -2	Thursday 4 th April 2024	09:00 - 12:00
Year 3-4	Sunday 7 th April 2024	09:00 - 12:00
Year 5-6	Monday 8 th April 2024	09:00 - 12:00

The Schedule will be follows for both Open Category and On-Spot Challenge Category.

1. Open category

In the Open Category competitions, students create an animation project, in English, that follows the competition theme and share the project online via the Scratch website at scratch.mit.edu and the link is to be shared through the provided QR Code. Each entry will be reviewed by a panel of judges on the presentation day.

Guidelines

- All projects must be written in Scratch 3.0 language.
- Each team must consist of 2 students from the same school.
- One supervisor can work with only **one** team for each category (Group Category).
- No student can be a member of more than one team.
- Projects need to be completed and submitted **one day prior** to the presentation day from the link below:



Link: https://forms.office.com/r/jPWtDp8Ueh

- Project must be presented in English.
- Entries must be original work created by the team.
- Team supervisors: A team supervisor can be either a teacher or staff memberfrom your school.
 - Only supervisors can register teams and submit competition entries.
 - On the competition day, all teams must be accompanied by their supervisors.

<u>Themes</u>

In this round of Scratch Coding Competition, each team can submit a Scratch animation

(a story or a game) as per their respective category **<u>under one</u>** of the following themes:

<u>Category – Group A – Year 1 -2</u>

• **Health:** What are some habits that contribute to a healthy lifestyle? Are there any medical conditions you would like to raise awareness about? Do you want to shedlight on the role of computer science in healthcare? Your pick!

Category – Group B – Year 3 -4

• **Climate Change:** From allocating electric car charging stations in Qatar to usingsolar panels as your house's source of electricity; share some ways for raising awareness of climate change and reducing its impact.

<u>Category – Group C – Year 5 -6</u>

• Artificial Intelligence: From facial recognition to self-driving cars; explain the growing impact of AI, and how it is being implemented locally in various fields including education, energy, health, and public safety.

or

• **Cybersecurity:** Highlight the growing-importance of securing sensitive informationonline (such as personal data or financial transactions) and share some ways Qatar is raising awareness.

Category	Year group	Theme	Number of participants
Open Category - Group A	Year 1-2	Health	2
Open Category - Group B	Year 3-4	Climate Change	2
Open Category - Group C	Year 5-6	Artificial Intelligence	2
		Or	
		Cybersecurity	



Evaluation Criteria

- Animations should focus on one or more of the designated team as per the year level.
- Idea is creative and embodied in an interesting way.
- Storyline is clear and purposeful.
- Complexity of the scenario.
- Interactivity and events (use of events is not compulsory in the animations).
- Look and feel quality of animations.
- Use of sounds.
- Story is robust and doesn't stop or pause for any reason.
- Story is within the specified duration limit of **5 minutes**.
- Presentation is logical and interesting.
- Team members produce clear, precise, and convincing explanations/answersabout the animation and the program.

Judging Criteria:

- Each entry will be reviewed by a panel of judges.
- The judges will award points according to the Rubric, which provides detailed information in relation to what the Judges will be looking for.
- The judges will use these score sheets during the competition.
- The rubric and score sheet is given below.
- The decisions of the judging panel are final.
- The maximum time duration for presentation including the presentation of the project shall **not be more** than 15 minutes.



Scratch Competition Score Sheet - Open Category:

Scratch Competition Score Sheet – Open Category							
Name of the Team:							
School Name:							
	1 2 3 4						
Theme							
 How well does the project adhere to the given theme? 							
 Is the theme interpreted creatively and effectively? 							
Originality							
Is the project unique and innovative?							
 Does it showcase original ideas or concepts? 							
Creativity							
 Evaluation of the creativity in the choice of backgrounds and 							
sprites.							
 How well do the backgrounds and sprites contribute to the 							
overall aesthetic and atmosphere of the project?							
Graphics							
 Quality of animations, if any, within the project. 							
Evaluation of the music and sound effects used.							
 How well do these elements enhance the user experience? 							



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Scripts		
 Quality of the code and scripts used in the project. 		
 Identification and evaluation of any errors or bugs present. 		
 How efficiently are scripts utilized to achieve desired 		
functionalities?		
Functionality		
 Assessment of menus and user interface design. 		
 Evaluation of the control system and how intuitive it is for the 		
user.		
 Review of event handling and responsiveness within the project 		
Qatar Identity		
 How well the creator included Qatar Identity in the project? 		
How well the inclusion of Qatar Identity is relevant to the story?		
Presentation Time		
 How effectively does the creator made his/her story/game within 		
the allotted time?		
 How effectively does the creator present and explain their project 		
within the allocated time?		
Clarity of explanation and demonstration of key features.		
Total (32)		



Scratch Competition - Rubric							
Scores	4	3	2	1			
Theme (Topic, Subject)		Project message is somewhat clear.	Project message is not very clear.	Project has no message or theme.			
Originality		Some ideas were taken from another project.	Most ideas were taken from another project	All ideas were taken from another project			
Creativity (Background, Sprites)	Very Creative	Somewhat creative	Less creativity	No creativity at all			
Graphics (Animation, Music, Sound)	animations are abundant; Cred	Smooth and original animations; Credits are provided.	There are some animations, but they are not original; Credits are provided.	There are no original animations or graphics, and no credit is given.			
Scripts (Code, Errors)	Used all required blocks; Script work properly. without any errors.	Only used all required blocks;	Missed some of the required blocks; Some scripts do not work properly	No programming blocks were used; Scripts do not work at all			
Functionality (Menus, Control, Events)	with movements, controls, events and menus.	Project is somewhat functional with movements, controls, events and menus.	Project is not functional with movements, controls, events and menus. Some effort has been made to establish the project.	The project is not functional with movements, controls, events and menus.			
Qatar Identity Inclusion	Very well	Somewhat well	Fairly well	Not included			
Presentation Time	story and the presentation	Within time frame of the presentation but not the story.	Within time frame of the story but not the presentation time.	Both criteria not satisfied.			



2. On-Spot Challenge Category

The On-Spot Challenge Category will be conducted in the Computer Lab on the day of the competition. No prior preparation is required. There are three levels in this category which are as follows.

Level 1: Scratch Game 30-minutes Challenge

Level 2: Crack the code.

Level 3: Twist the Story

Category	Year group	Number of participants
On-Spot Challenge - Group A	Year 1-2	2 (Peer Work)
On-Spot Challenge - Group B	Year 3-4	2(Peer Work)
On-Spot Challenge - Group C	Year 5-6	2(Peer Work)

Level 1: Scratch Game 30-minutes Challenge

Challenge Category: Algorithmic Animation and Programming

In this exciting challenge, participants will put their Scratch programming skills to the test in a fast-paced 30-minute competition. Participants will be provided with a specific algorithm and/or animation concept to implement within their Scratch project. The challenge will focus on quick thinking, problem-solving, and effective use of Scratch's features to create an engaging story/ functional game.

Challenge Rules:

- Participants will receive a prompt containing a specific algorithm, animation concept, or programming task related to game development.
- Using Scratch's visual programming interface, participants must quickly implement the provided concept to create a simple yet engaging game within the 30-minute time limit.



- Participants are encouraged to unleash their creativity and experiment with different features, sprites, and game mechanics to enhance their game's appeal.
- While simplicity is key, participants should aim to create a game that is functional, enjoyable, and showcases their programming proficiency.
- Participants must adhere to the provided guidelines and focus on completing the core elements of the game within the allocated time.

	Scratch Competition Score Sheet - Level 1: Scratch Game 30-minutes Challenge						
Name	of the Team:						
Schoo	l Name:						
		1	2	3	4		
•	Adherence to Algorithm/Animation Concept: How well does the participant implement the						
	provided algorithm or animation concept within their Scratch game?						
•	Creativity and Originality:						
	Assessment of the creativity and originality displayed in the design and execution of the game.						
•	Functionality and User Experience:						
	Evaluation of the game's functionality, including controls, interactions, and overall user experience.						
٠	Efficiency of Code:						
	Review of the coding practices employed, including clarity, organization, and efficiency of the						
	code.						
٠	Presentation and Explanation:						
	How effectively does the participant present and explain their game within the given timeframe?						
	Clear communication and demonstration of key features will be essential.						
Total	(20)						



Level 2: Crack the code.

Challenge Category: Algorithmic Animation and Programming

Description:

Level 2 of the Scratch Game 30-Minute Challenge takes the excitement up a notch with the "Crack the Code" edition. In this level, participants will be presented with a Scratch story video showcasing a game created by the organizers. Their task is to watch the video and decipher the code behind the game. Participants can view the video as many times as they wish before or during the competition to analyze the gameplay, features, and mechanics.

Challenge Rules:

- Participants will be provided with a video of a Scratch game created by the organizers. They must carefully observe the gameplay, interactions, and overall functionality of the game.
- Using their observational skills and understanding of Scratch programming, participants need to reproduce the game as closely as possible to the shared game within the 30-minute timeframe.
- Participants are not allowed to directly copy the code from the video or any external sources. The challenge is to interpret the code and implement it independently.
- Creativity is encouraged in the reproduction process, but the core mechanics and functionalities of the original story/ game must be preserved.



Scratch Competition Score Sheet – Level 2: Crack the code.

Name of the Team:							
School Name:							
	1	L	2	3	4		
Accuracy of Reproduction: How closely does the participant's Scratch project rese original game showcased in the video?	emble the						
 Understanding of Gameplay Mechanics: Assessment of the participant's comprehe the gameplay mechanics and their successful implementation in the reproduced gate 							
• Efficiency and Cleanliness of Code: Review of the coding practices employed, includ organization, and efficiency of the code.	ding clarity,						
• Creativity in Interpretation: Evaluation of any creative additions or interpretations the participant while reproducing the game.	made by						
 Overall Presentation: How effectively does the participant present and explain thei game within the given timeframe? Clear communication and demonstration of key essential. 							
Total (20)			I	1			



Level 3: Twist the Story

Challenge Category: Creative Storytelling and Programming

Description:

Level 3 of the Scratch Game 30-Minute Challenge introduces an intriguing twist to the traditional storytelling format. Participants will be presented with a pre-existing story along with its associated Scratch code. Their task is to creatively modify the code to twist the story into something entirely new and unexpected, all within a limited timeframe.

Challenge Rules:

- Participants will receive a story along with the Scratch code that corresponds to it. The story may contain characters, settings, and plot elements.
- Using the provided code as a foundation, participants must make significant modifications to the code to alter the storyline and create a unique narrative experience.
- Participants are encouraged to think outside the box and introduce creative twists, new characters, alternative endings, or unexpected plot developments.
- The modifications to the code should align with the changes made to the story, ensuring that the gameplay reflects the updated narrative.
- Participants will have a limited time to complete the challenge, adding an element of urgency and excitement to the creative process.



Scratch Competition Score Sheet – Level 3: T	wist the	Story		
Name of the Team:				
School Name:				
	1	2	3	4
Creativity in Storytelling: Evaluation of the participant's ability to				
introduce innovative and engaging twists to the original story.				
Integration of Code and Story: Assessment of how effectively the				
modifications to the Scratch code enhance and support the altered				
narrative.				
Execution of Gameplay: Review of the participant's implementation of the				
modified code, including functionality, user interactions, and overall gameplay				
experience.				
Adherence to Time Limit: How well does the participant manage their				
time to complete the challenge within the allocated timeframe?				
Presentation and Explanation: Clear communication and demonstration of the				
twisted story and its corresponding Scratch game within the given time limit.				
Total (20)				

Regards TNG Ain Khalid Management Team