



Date- 08.11.2023

Dear Principal,

Sub.: Invitation to participate in 'Geek<a/>Hertz' an Annual International Tech-Fest-2023.

Dear Sir / Madam

In the words of the famous American Sociologist, Daniel Bell.

"Technology, a testament to the boundless creativity of the human mind, weaves the fabric of our ever-evolving world."

We are delighted to announce the Eight Edition of our Annual Inter School Tech Fest, Geek<a/>Hertz 2023. This computer festival provides an exciting opportunity for students to participate in and showcase their skills in a wide range of school-based offline and online competitions. Students from Delhi NCR, national, and international schools are invited to participate, and the event is scheduled for Thursday, November 30, 2023.

Just as learning different languages enables effective communication, acquiring computer skills empowers children to create technologies that have a profound impact on the world. Geek<a/>Hertz 2023 aims to nurture and harness the computer skills of students ranging from classes III to XII.

For comprehensive information about the various competitions, please visit our official website at www.geekahertz.in. Registration can be completed at www.geekahertz.in. It's important to note that school registrations must be submitted by the latest deadline of November 25, 2023.

We eagerly anticipate your active participation in this exciting event. This is a unique opportunity for students to explore and showcase their technological prowess and creativity.

Thanking you

Yours sincerely

**PRINCIPAL
(ANJALI AGGARWAL)**

Event In charge: Naveen Gupta
M-09971999404, E-mail: naveen.gupta@saintmarksschool.com
Encl: Awards, rules and event schedule.



St. Mark's Sr. Sec. Public School,
Meera Bagh, New Delhi



Annual Inter School Tech-Fest 2023
Date : 30th November, 2023 (Thursday)

AWARDS

- The Overall Trophy will be awarded to the school that scores the highest points.
- The point system in each game would be as follows: -
 - 1st position: 10 points
 - 2nd position: 7 points
 - 3rd Position: 4 points
- Participation certificates will be given to all the participants.
- The Winning team of each event will be awarded merit certificates and trophies.

General Rules

Local Schools (Delhi and NCR)

1. All schools must arrive for the registration at the school premises by 8.15 a.m. sharp.
2. Schools not adhering to the rules and regulations of the events will be disqualified.
3. School should confirm their participation by visiting on the registration link <http://geekahertz.in/> or <https://forms.gle/VkSPGEABY3gg6MLm6> or Scan the QR Code



4. The last date for School registration is November 23rd, 2023.
5. Schools need to register separately for each event.
6. Submission Date for all the preliminary categories is 24th November 2023. List of Final round of participants will be uploaded on our Facebook page and our website on 29th November 2023.
7. The participating teams are advised to regularly visit our website <http://geekahertz.in/> and Facebook page for updates <https://www.facebook.com/geekahertzsms> or Discord server Link: <https://discord.gg/dA2Qa6jZ4f>
8. The decision of the Judges will be final and binding.
9. All the participants can join the discord server for their respective event - for regular updates.
10. Plagiarism will lead to instant disqualification of the team.



Annexure - 1

Registration and Submission Link

S No.	Event Name	Registration Link	Submission Link
1.	Junior Techies	Reg Link (Junior Techies)	Sub Link (Junior Techies)
2.	Electra Canva	Reg Link(Electra Canva)	Sub Link(Electra Canva)
3.	Code Quest	Reg Link (Scratch)	Sub Link (Scratch)
4.	ComiCreations	Reg Link ComiCreations	Sub Link ComicCreations
5.	AdVistaFest	Reg Link (AdvistaFest)	Sub Link (AdvistaFest)
6.	Web Coders	Reg Link (Web Coder)	Sub Link (Web Coder)
7.	Lights Camera Action	Reg Link (Movie Making)	Sub Link (Lights Camera Action)
8.	SnapShot	RegLink(SnapShot)	Submission link (snapshot)
9.	Binary Masters	Reg Link (Binary Coders)	
10.	Design.apk	Reg Link (Design.apk)	Sub Link (Design.apk)
11.	Gamers' Paradise	Reg Link (Gamers Paradise))	Sub Link (Gamers' Paradise)
12.	Markians' Gaming League	Reg Link (Gaming)	
13.	Decrypter's Dilemma	Reg Link (cryptomania)	
14.	Imagica	RegLink(Imagica)	
15.	Minicomp Wizards	Reg Link (Minicomp Wizards)	
16.	B-Plan	Reg Link (B-Plan)	Sub Link (B-Plan)
17.	BattleBots Blitz	Reg Link battlebots Blitz	Submission Link

Delhi & NCR Schools

GEEK BIT



1. Junior Techies (PRESENTATION)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant(s) per team: 2

Software: Canva and Microsoft PowerPoint

Classes: 3-4

Mode: Offline

- For the prelims, participants will have to prepare an original presentation on Canva based on the topic **"The Internet and Online Safety."**
- Provide the original Canva file link and the .pptx file format using the submission form specified in Annexure 1." (Maximum 10 Slides)
- Based on the results of the preliminary round, the top 18 teams will be selected for the final round.
- Participants will be required to create an attractive Microsoft PowerPoint presentation with the theme and raw data provided on the spot in 120 Minutes in PowerPoint.
- No other media may be used; however, participants can write some of the text themselves.
- One girl participant is compulsory in a team.

2. ElectraCanvas (ePOSTER)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant(s) per team: 1

Software: Canva

Class: 4-5

Mode: Online

- Participants are required to design a poster on the topic **"Cybersecurity Awareness"** - Promoting online safety and cybersecurity practices.
- They must also create an attractive and catchy slogan to complement the poster.
- The link of the original canva file and .jpeg file are to be submitted on the submission form mentioned in the annexure 1.
- Participants will be evaluated based on originality & unique ideas, creativity & design, technical skills, and user-friendliness.
- The results of the event will be declared on 22nd November, 2023.
- The certificates for the winners will be handed over to the accompanying teacher on the day of the event.

3. "CodeQuest: Scratch Game & Story Creation Challenge"

Eligible Schools: Delhi & NCR Schools

Teams per school: 2

Participant(s) per team: 2

Classes: 6-8

Mode: Online

- a) The participants are required to prepare a story or game based on an educational topic:

"A Journey Through History" - Take players on a historical journey through different time periods and events.

"Enchanted Forest" - Create a magical and enchanting world filled with mythical creatures and quests.

"Wildlife Safari" - Develop a game or story that simulates a wildlife adventure in various ecosystems.

- b) Submission form link is given in annexure 1. Results will be declared based on this submission only.
- c) Participants will be evaluated based on originality & unique ideas, creativity & design, technical skills, and user-friendliness.
- d) The results of the event will be declared on 22nd November, 2023.
- e) The certificates for the winners will be handed over to the accompanying teacher on the day of the event.

4. "ComiCreations - Unleash Your Imagination with Digital Comics"

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participants per team: 2

Classes: 6-8

Software: Canva

Mode - Online

- Participants need to create a comic strip on "Digital World Explorers" - Imagine a journey into a digital world where characters encounter tech-related challenges and solutions. Comic strips must not exceed 2 pages.
- The link of the file of Canva should be uploaded on the submission form link given in annexure 1. The PDF file of the comic strip should also be uploaded in the given link.
- Must not copy an existing comic or characters from the Internet.
- Participants will be evaluated based on Originality & Unique Ideas, Creativity & Design, Technical Skills, and User-Friendliness.
- Dialogues and characters should be original. Copying may lead to disqualification.
- The results of the event will be declared on 22nd November, 2023.
- The certificates for the winners will be handed over to the accompanying teacher on the day of the event.



5. "AdVistaFest" - Student Advertisement Showcase

Eligible Schools: Delhi & NCR Schools

Teams per school: 1

Participants per team: 2

Classes: 6-9

Duration of the Ad: 30 seconds (Max.)

Mode - Online

- Participants are required to create an enticing advertisement promoting our event, the **'Geek<a/>Hertz' Annual International Tech Fest.**
- Submission form link is given in annexure 1.
- Teams must submit an advertisement video, which can be in the form of a recorded video, an animation, or a combination of both.
- Teams are prohibited from copying existing advertisements from the internet.
- Teams are encouraged to incorporate various forms of expression, such as jingles, slogans, or other innovative elements.
- Submissions must adhere to the specified time limit of 30 seconds; exceeding this limit will result in disqualification.
- Students will be judged on storyline, creativity, originality, and code complexity.
- The results of the event will be declared on 22nd November, 2023.
- The certificates for the winners will be handed over to the accompanying teacher on the day of the event.

6. Web Coders (Web Designing)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participants per team: 2

Classes: 8-11

Mode - Offline

- Create a dynamic website for the topic **"Building a Sustainable Future: Eco-Friendly Website Design"** which involves incorporating interactive elements, multimedia, and content that align with sustainable and eco-friendly themes.
- Participants will be evaluated based on originality & unique ideas, creativity & design, technical skills, and user-friendliness.
- The submission link is provided in Annexure 1.
- The top 12 teams will be selected to present their dynamic websites.
- Each team will have 5 minutes to explain their website and share the code.

Note: Only dynamic websites are required for this competition.

7. Lights Camera Action (Movie Making)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participants per team: 2-3

Classes: 9-12

Mode - Offline

- The event will be based on the topic, **“Digital Afterlife- if people upload their consciousness to the cloud”**. The movie should be uploaded on YouTube as unlisted.
- Submission form link is given in annexure 1.
- Students will be judged on Storyline, Creativity, Originality and Code Complexity
- All movies are to be given a suitable title and the duration should be 3-4 minutes.
- All participating teams will be called for the final round. The videos of the top 7 teams will be screened, and the winners will be declared based on the jury's decisions.
- One girl participant is compulsory in a team.

8. Snapshot (Photo Editing)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant(s) per team: 2

Software: Photoshop Version -20 or above

Classes: 9-12

Mode - Offline

- In the Prelims, participants are required to edit, combine and/or create images and build a final composition based on a topic **“Reimagining Nature: Transforming Landscapes and Wildlife.”**
- Submission form link is given in annexure 1.
- Students will be judged on storyline, creativity, originality and code complexity.
- A total of 12 teams will be selected for the final round.
- Time allotted for the Final Round will be 120 Minutes.
- Participants will be provided with the theme and raw data on the spot and will have to create their own composition.

9. Binary Masters (Programming)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant(s) per team: 2

Classes: 9-12

Languages: C++, Java or Python 3.0 onwards

Platform: Online Software IDE

Mode - Offline

- a) A preliminary round will be held for all students on 20th November 2023 between 6:00 pm and 10:00 pm but the students will be allowed 2 hours and 30 minutes to complete the problems. For more information on preliminary round, stay connected with our Facebook page and our website.
Contest link: www.hackerrank.com/binary-masters-prelims-2023
- b) The top 15 teams will be shortlisted for the final round. The final round will be hands-on-computers.
- c) The participants will be given 120 minutes to solve problems in the final round.
- d) The problems will encompass themes of logic, reasoning, and math.
- e) The Competition will be held on <https://www.hackerrank.com/> for the final round.
- f) In the event of multiple teams from the same school ranking at the top, only one team per school will be selected for the final round.

10. Design.apk (Android App Designing)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant(s) per team: 2

Classes: 9-12

Mode - Offline

- a) Students will be required to make their own original app based on a topic as follows:
Objective of the Problem Statement: The key goals of the problem statement are to enable young developers to participate and collaborate in the digital public goods ecosystem and improve transparency in procurement of goods by institutions like schools, hospitals and other public serving key organizations of our country; encourage young students to participate in paperless technology with focus on data security and storage optimization.
 - 1. Problem Statement: Develop a cross platform Android, ios or PWA (progressive web-app) application using hybrid frameworks like ionic, react native, flutter, native script or Appgyer framework for the project

"Billing and Invoicing system for Government/Private Schools" using the project repository template: <https://github.com/seetadev/GovtInvoice>. You may use the web version and convert it to a deep linking mobile project using the [google drive link](https://drive.google.com/file/d/1BcPLWBUtlax2dZoebw7P_dAePuYXiE2Q/view?usp=drive_link): https://drive.google.com/file/d/1BcPLWBUtlax2dZoebw7P_dAePuYXiE2Q/view?usp=drive_link (please comment the AWS-SDK component). The further objectives of the project:

- Save to cloud feature: Please find the screenshots attached for a workflow which is documented for dropbox on ionic angular. You could use a firebase or AWS with ionic react if you wish. Please visit https://drive.google.com/drive/u/2/folders/1ORr1D9dQifuX-fkRux49ZDnu1_u7oAJE
 - Export as .html or CSV using the email plugin feature to email the worksheet selected. Please use the plugin like <https://github.com/EinfachHans/capacitor-email-composer>
 - Integrate at least 3 community capacitor plugins of your choice to the invoicing and billing system from the list of APIs at <https://capacitorjs.com/docs/plugins/community>
 - Learning Resources:
 - Getting Started: <https://ionicframework.com/react>
 - <https://www.youtube.com/watch?v=xn-qpnT2n3Q>
 - https://www.youtube.com/watch?v=WugT638KS3Q&list=PLYxzS_5yYQlhvyLXSKhv4oAvl06MlnSE
 - <https://www.youtube.com/watch?v=K7ghUiXLeF8>
 - <https://www.youtube.com/watch?v=-aHBhvkrFLY>
 - <https://github.com/ionic-team/ionic-react-conference-app>
 - <https://stackblitz.com/edit/ionic-react-demo?file=index.js>
 - Community Plugins: <https://capacitorjs.com/docs/plugins/community>
2. Design an app which provides women access to resources, guidance, and opportunities with a strong connected community for Indian women in technology. Despite several measures, many women are left behind in the technology and management careers due to lack of exposure and gender imbalance. There is a need to build a self-sustaining community of women in technology. Create a self-generated database of female academicians and professionals, engineer a mobile app to enable the following: 1. Login and new registration facility with inputs for CV details such as educational qualifications, skills set, experience etc. 2. A search engine to search services for nearby mentors 3. A channel for one-to-one communication between members 4. Newsletter facility with sign-up to receive news 5. Facility to organize and manage meetups and events and send SMS invites Dataset: An extendable database of existing professionals with their email address, location, occupation, skill-set and work experience.
- b) Submission link is given in annexure 1.
- c) The top 10 teams will be called to present their App.



- d) Students will be judged on storyline, creativity, originality, and code complexity.
- e) Students who will be selected for the finals are required to present a self-created app/software on his/her own Android device, along with a well-formatted hardcopy/softcopy of the source code.

11. Gamers' Paradise (Game Designing)

Eligible Schools: Delhi & NCR Schools

Teams per school: 1

Participants per team: 3-5

Classes: 9-12

Mode - Offline

- a) The event will be based on a topic:

"EcoQuest: A Sustainable Gaming Adventure"

Participants can be tasked with creating a game that revolves around environmental sustainability and conservation. The game should encourage players to make eco-friendly choices, explore the challenges of environmental protection, and showcase the importance of sustainability. This topic promotes awareness of ecological issues and challenges participants to design a game with a positive impact.

- b) A trailer of the game should be uploaded on YouTube.
- c) Submission form link is given in annexure 1.
- d) A total of 15 teams will be selected to take part in the finals.
- e) All finalists are required to bring their original source code, device, and software for the game. No team will be provided with any hardware and software at the venue.
- f) All the finalists will have to present their game to the judges on the spot and students must showcase their gameplay.
- g) Students will be judged on storyline, creativity, originality, and code complexity.
- h) If any significant part of the design/model is found to be extracted from the internet, the team will be disqualified from the competition.

12. Markians' Gaming League

Eligible Schools: Delhi & NCR Schools

Teams per school: 1

Participant(s) per team: 2

Classes: 6-12

- a) Prelims: Participants will be competing in a 2 vs 2 Valorant(Swift play) match on 18th and 19th November 2023.
- b) Top 8 teams will be selected.
- c) Final Round: CS:GO (Wingman) 2 vs 2 Tournament on 19th November 2023.
- d) All the participants are required to join the discord server- <https://dsc.gg/geekahertz>
- e) A Steam and Riot Games account is required.

13. Imagica (INNOVATION)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant per team: 2

Classes: 6-12

Mode: Offline

- a) Students must think out of the box and use recyclable e-waste to make new products.
- b) A maximum of one model can be submitted by each school.
- c) The material used for the model should consist of computer junk.
- d) Each team will be provided with a table and power supply to display their model.
- e) Team members should be able to explain their model and answer the queries of the judges and students.

14. MiniComp Wizard (Arduino application / Raspberry Pi)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant per team: 2

Classes: 6-12

Mode: Offline

- a) Students must think out of the box and create something using an Arduino Board. E.g. Electric panel, Traffic Light Bots etc.
- b) A maximum of one model can be submitted by each school.
- c) Each team will be provided with a table.
- d) Participants are required to come along with all necessary equipment.
- e) Team members should be able to explain their model and answer the queries of the judges and students.

15. B-Plan (Idea Pitching)

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant per team: 3

Classes: 6-12

Mode: Offline / Online

- Participants are required to present an original idea for a start-up for a unique product/service.
- Submission form link is given in annexure 1.
- A total of 10 teams will be selected for the final round. Each team will be given 5 min to present their ideas in front of the judges.
- Students will be judged on creativity, originality and plan complexity.
- One girl participant is compulsory in a team.

16. Decrypter's Dilemma (Cryptic Hunt)

Eligible Schools: Delhi & NCR Schools

Classes: 9-12

Teams per school: Open

Participant per team: 2

Mode: Offline

- Prelim round: A preliminary round to select top 10 teams more than one team per school cannot qualify beyond this level.
- Final round: The participants would be made familiar with the rules for this round at the venue, it is an offline treasure hunt.
- Participants are requested to bring a smartphone with a good internet connection for both rounds.

Hidden in plain sight lies a key
That not many can see
But one who learns of its effect
Shall find the first quest direct

{Sample clue for questionnaire to be added at time of final brochure being completed as it is to be hidden in the document structure}

17. "BattleBots Blitz: The Ultimate RoboWar Challenge"

Eligible Schools: Delhi & NCR Schools

Teams per school: Open

Participant per team: 3

Classes: 6-12

Mode: Offline

Task

Design and construct a remote-controlled robot capable of fighting a tournament against another robot(s).

- A team must consist of students from the same school.
- Every team must have a unique name. Teams will be called in the arena by their team names only.
- Each team must specify their team representative (leader) at the time of registration. All the important communications between organizers and the registered teams will be done through their team representative. The team representative must submit valid contact details (phone no., email ID etc.) at the time of registration.
- Submit a mandatory 1-minute video describing the robot progress till 20th November 2023.

For information click or scan the QR code:

<https://drive.google.com/file/d/1L47oN3MAxZ42C9I06STlgqyRTRmbeLP1/view?usp=sharing>



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National & International Schools

General Rules :

1. The schools apart from Delhi and NCR will be considered and are eligible for National and International School events.
2. All the events will be judged only on a submission basis.
3. All winners will be awarded a merit certificate.
4. All participants will get an e-certificate.
5. Only 5 events are for the Online submission category.
6. All the participants can join the discord server for their respective event - <https://discord.io/geekahertz> for regular updates.

1. Junior Techies (Presentation)

Eligible Schools: National and International Schools

Teams per school: Open

Participant(s) per team: 2

Software: Canva

Classes: 3-4

Mode: Online

- a) Participants will **have to prepare an original presentation on Canva based on the topic "The Internet and Online Safety."**
- b) Provide the original Canva file link and the .pptx file format using the submission form specified in Annexure 1." (Maximum 10 Slides)
- c) Students will be judged on storyline, creativity, originality and code complexity
- d) **Results will be declared based on this submission only.**

2. "CodeQuest: Scratch Game & Story Creation Challenge"

Eligible Schools: National and International Schools

Teams per school: 2

Participants per team: 2

Classes: 6-8

Mode: Online

- a) The participants are required to prepare a story or game based on an educational topic:
 - "A Journey Through History" - Take players on a historical journey through different time periods and events.
 - "Enchanted Forest" - Create a magical and enchanting world filled with mythical creatures and quests.
 - "Wildlife Safari" - Develop a game or story that simulates a wildlife adventure in various ecosystems.
- b) Submission form link is given in annexure 1.
- c) Results will be declared based on this submission only.
- d) There will be no final round for this event.
- e) Students will be judged on storyline, creativity, originality, and code complexity.

3. ElectraCanvas (ePOSTER)

Eligible Schools: National and International Schools

Teams per school: Open

Participant(s) per team: 1

Software: Canva

Class: 4-5

Mode: Online

- a) Participants are required to design a poster on the topic **"Cybersecurity Awareness"** - **Promoting online safety and cybersecurity practices.**
- b) They must also create an attractive and catchy slogan to complement the poster.
- c) The link of the original canva file and .jpeg file are to be submitted on the submission form mentioned in the annexure 1.
- d) Students will be judged on storyline, creativity & originality.
- e) The results of the event will be declared on 22rd November, 2023.

4. "ComiCreations - Unleash Your Imagination with Digital Comics"

Eligible Schools: National and International Schools

Teams per school: Open

Participants per team: 2

Classes: 6-8

Software: Canva

Mode - Online

- a) Participants need to create a comic strip on **"Digital World Explorers"** - Imagine a journey into a digital world where characters encounter tech-related challenges and solutions.
- b) Comic strips must not exceed 2 pages.
- c) The link of the file of Canva should be uploaded on the submission form link given in annexure 1. The PDF file of the comic strip should also be uploaded in the given link.
- d) Must not copy an existing comic or characters from the Internet.
- e) Dialogues and characters should be original. Copying may lead to disqualification.
- f) Students will be judged on Storyline, Creativity, Originality and Code Complexity
- g) The results of the event will be declared on 22rd November, 2023.

5. Snapshot (PHOTO EDITING)

Eligible Schools: National and International Schools

Teams per school: Open

Participant(s) per team: 2

Software: Photoshop Version -20 or above

Classes: 9-12

Mode: Online Submission

- a) In the Prelims, participants are required to edit, combine and/or create images and build a final composition based on a topic **"Reimagining Nature: Transforming Landscapes and Wildlife."**
- b) Submission form link is given in annexure 1.
- c) Students will be judged on creativity & originality.

6. Markians' Gaming League

Eligible Schools: National and International Schools

Teams per school: 1

Participant(s) per team: 2

Classes: 6-12

Mode: Online

1. Prelims: Participants will be competing in a 2 vs 2 Valorant (Swift play) match on 18th and 19th November 2023.
2. The top 8 teams will be selected.
3. Final Round: CS:GO (Wingman) 2 vs 2 Tournament on 19th November 2023.
4. All the participants are required to join the discord server- <https://dsc.gg/geekahertz> .
5. A Steam and Riot Games account is required.

6. Lights Camera Action (Movie Making)

Eligible Schools: National and International Schools

Teams per school: Open

Participants per team: 2-3

Classes: 8-12

Mode - Online

- a) The event will be based on the topic, **“Digital Afterlife- if people upload their consciousness to the cloud”**. The movie should be uploaded on YouTube as unlisted.
- b) Submission form link is given in annexure 1.
- c) Based on submission, participant will judge and awarded.
- d) Students will be judged on storyline, creativity, originality, and technicality in editing.
- e) All movies are to be given a suitable title and the duration should be 3-4 minutes.
- f) Final winners will be announced on 22rd November, 2023.

For more details login to :

<https://www.facebook.com/geekahertzsms>

or

<http://geekahertz.in/>

Dr. Naveen Gupta

Event - Incharge

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