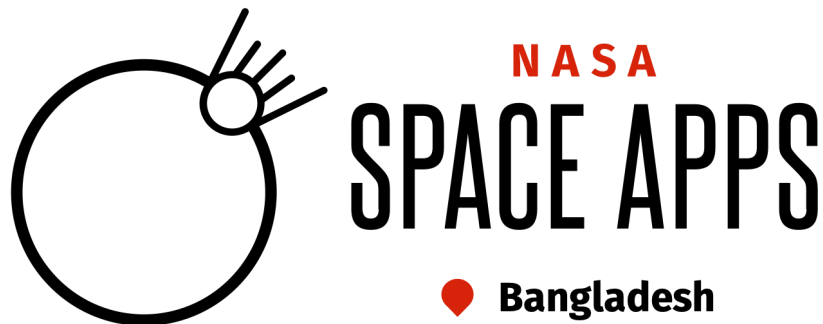


Participant's Guide for NASA Space Apps Challenge 2024 in Bangladesh

READ CAREFULLY: FOLLOW EVERY DETAIL



(This will be updated until the hack-a-thon)

Version: June 20, 2024

Participant's Guide for NASA Space Apps Challenge 2024 in Bangladesh

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If Any Queries,

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Assistant Manager, Event & Communication

Project Coordinator, NASA Space Apps Challenge Bangladesh

Email: event2@basis.org.bd

Mobile: 01789929911(Whatsapp)

Slack for Bangladesh - [NASA Space Apps Challenge Bangladesh](#)

NASA INTERNATIONAL SPACE APPS CHALLENGE 2024 – BANGLADESH

BASIS, Bangladesh Association of Software and Information Services, along with BASIS Student's Forum & Cloud Camp Bangladesh is organizing consecutively for the 12th time NASA International Space Apps Challenge 2024 on October 4, Friday and Saturday, October 5, 2024.

NASA is going to organize this event in 350+ Cities Globally. From Bangladesh 9 Cities (Dhaka, Sylhet, Chattogram, Barisal, Rangpur, Mymensingh, Khulna, Rajshahi, and Cumilla) will be able to participate in this Global Hack-a-Thon. It will involve any University students in Bangladesh virtually, and nearly ten thousand students will be reached in this event. The 2024 NASA International Space Apps Challenge theme is "The Sun Touches Everything!!" At Space Apps, we strive to eliminate barriers to access to space and science opportunities. Space Apps is for anyone and everyone! Participants from around the world are welcome regardless of background and experience to create, explore, learn, and build together. Through each year's Space Apps Challenge, we continue to support and empower ideas through innovation and inclusion.

NASA International Space Apps Challenge is an international mass collaboration focused on space exploration that takes place over 48-hours in 350+ cities around the world. It is going to be organized from October 4 and October 5, 2024, simultaneously and virtually all over the world. Last year, in Bangladesh, we received more than 500 projects from 5 categories. Among them, 50 teams were invited to participate in the 48-hour global hackathon physically. It's been a great honor for us that, amongst 160 countries, 31,561 participants, 5,327 teams, and 3,094 projects from all over the world, Bangladesh's own TEAM VOYAGERS from Rajshahi was awarded GLOBAL champion for the Best Use of Storytelling category in 2023. In addition, Bangladesh obtained 3rd and 5th place in 2017; and won the championship in 2018, 2021, and 2022; along with additional finalists in 2019 and 2020 from Bangladesh. We are on a roll and intend to continue to lead the world in this competition!!

All are welcome in Space Apps. The common thread among Space Apps participants is that you are interested in space science and exploration, you are creative, and you want to solve problems. Over 31,561 people from 148 countries and 251 cities around the world participated in the 2024 International Space Apps Challenge. If you can't find a Space Apps event located near you, or you cannot join in time for the Bangladesh event, join the Virtual Event online, and do the Space Apps challenge from your home!

Space Apps builds connections. As a part of Space Apps, you are part of a global hack-a-thon community that embraces collaboration across borders, sectors, and cultures to bring about paradigm-shifting innovation.

Specific milestones and target Dates for Bangladesh Space Apps Challenge for 2024:

Create an Account: July 15, 2024

Choose Your Local Event: July 15, 2024

Recruit Your Team Members: July 15, 2024

Submit the preliminary application with BASIS: 1st August, 2024

Check out the Challenges: 24 August 2024

Submit your final application with BASIS: September 1, 2024

Announcement of final 50 physical participating team at BASIS September 20, 2024

(If you have missed the physical participation, you can always participate virtually)

Finalize (Join or Create) a Team 1st September 2024

The Hackathon Begins! 4th October 2024

Reference Links

Space Apps Bangladesh Website: <https://nsac.basis.org.bd/>

Space Apps Bangladesh Twitter Page: <https://twitter.com/spaceappsbd>

Space Apps Bangladesh Facebook Page: <https://www.facebook.com/SpaceAppsChallengeBD>

Slack Channel: https://join.slack.com/t/spaceappsbd/shared_invite/zt-a9litut0-IS90oC2Xyy86SfEcwG9qtg

WhatsApp channel: <https://chat.whatsapp.com/DnnxLS8wQYq5xWuAOD4o4v>

Location Links

<https://www.spaceappschallenge.org/2024/locations/barisal/>
<https://www.spaceappschallenge.org/2024/locations/chattogram/>
<https://www.spaceappschallenge.org/2024/locations/cumilla/>
<https://www.spaceappschallenge.org/2024/locations/dhaka/>
<https://www.spaceappschallenge.org/2024/locations/khulna/>
<https://www.spaceappschallenge.org/2024/locations/mymensingh/>
<https://www.spaceappschallenge.org/2024/locations/rajshahi/>
<https://www.spaceappschallenge.org/2024/locations/rangpur/>
<https://www.spaceappschallenge.org/2024/locations/sylhet/>

The final day for your registration at **BASIS site** (<https://nsac.basis.org.bd/>) is **August 1st, 2024, 11:59 PM**, Bangladesh Standard Time.

Each Team **MUST REGISTER** at NASA International Space Apps Challenge Site (<https://www.spaceappschallenge.org/2024/locations/>). For updates, please visit BASIS, BASIS Students Forum or Space Apps Challenge <https://nsac.basis.org.bd/>.

You must register for one of the locations from here: Dhaka, Sylhet, Chattogram, Barisal, Rangpur, Mymensingh, Khulna, Rajshahi, and Cumilla.

For all event-related questions, make sure to join the **Bangladesh Space Apps Challenge** - Slack Channel: https://join.slack.com/t/spaceappsbd/shared_invite/zt-a9litut0-LS90oC2Xyy86SfEcwG9qtg and/or WhatsApp channel: <https://chat.whatsapp.com/DnnxLS8wQYq5xWuAOD4o4v>

SCHEDULE FOR BANGLADESH LOCATIONS

Schedule (All times Asia/Dhaka)

Date: Friday, October 4 - Saturday, October 5

October 4, Friday, 2024

October 4: 7:00 AM – Team Registration / Breakfast

October 4: 8:30 AM – Mentor Meet & Greet & Register in NASA website

October 4: 10:30 AM – Opening Ceremony

October : 11:00 AM – Tea Break

October 4: 11:15 AM – Mentor Meetup & Q&A

October 4: 11:30 AM – Mentor Round: Finalize team setup in NASA site, team member's role, draft of presentation, judging criteria, 240 Second of Glory, and 30 Seconds Video; assist in video transcript and draft

October 4: 12:30 PM – Lunch & Prayer Break

October 4: 3:00 PM – Mentor Round: Clarify judging criteria, listen to the presentations, and provide feedback

October 4: 4:30 PM – Group Picture & Team Pictures

October 4: 4:45 PM – Tea Break

October 4: 6:00 PM – Mentor Round: Finalize presentation for 240 seconds

October 4: 6:30 PM – Upload 240 seconds video in the BASIS provided google drive

October 4: 7:00 PM - Live Broadcast with NASA (TBD)

October 4: 9:00 PM - Dinner Break

October 4: 10:00 PM - Mentor Round: Feedback for NASA website content and 30 seconds video presentation

October 4: 11:00 PM – Hack-a-Thon Continues: Finalization for NASA website & 30 second video

October 5, Saturday, 2024

October 5: 7:30 AM – Breakfast Break

October 5: 8:30 AM – Mentor Round: Finalize NASA Website submission & draft 30 seconds video

October 5: 9:00 AM – Final upload of 30 seconds video in NASA website

October 5: 10:00 AM – Judges and Mentors Round

October 5: 10:30 AM – Tea Break

October 5: 11:00 AM – Local Judging Starts (240 Seconds of Glory)

October 5: 1:30 PM – Lunch & Prayer Break

October 5: 2:00: PM – Award Finalization

October 5: 4:30 PM – Group Picture & Team Pictures

October 5: 6:00 PM – Closing Ceremony & Award Distribution

October 5: 8:00 PM – Thanks and See You Next Year

LOCATIONS IN BANGLADESH

Bangladesh Mainstage: Independent University, Bangladesh

Plot 16 Aftab Uddin Ahmed Rd, Dhaka 1229, Bangladesh

Our Locations in Bangladesh:

Bangladesh Mainstage: Independent University, Bangladesh

Plot 16 Aftab Uddin Ahmed Rd, Dhaka 1229, Bangladesh

Mr. Russell T. Ahmed

President, BASIS

Email: president@basis.org.bd

Mr. Tanvir Hossain Khan

Director, BASIS

Email: tanvir@basis.org.bd

Hashim Ahmed

Secretary, BASIS

Email: secretary@basis.org.bd

Mr. Mohammad Mahdee Uz Zaman

Local Advisor, NASA Space Apps Challenge Bangladesh

Email: mohammad.zaman@gmail.com

Mr. Ariful Hasan Opu

Local Advisor, NASA Space Apps Challenge Bangladesh

Email: info@ahopu.com

Toufiq Elahi Plabon

Assistant Manager, Event & Communication, BASIS

Email: event2@basis.org.bd

Dhaka/Main Stage

Independent University, Bangladesh

Plot 16 Aftab Uddin Ahmed Rd, Dhaka 1229, Bangladesh

Coordinator: Md. Khaled Sohel, Assistant Professor, Daffodil International University // Phone: +8801712493251 // Email: khaledsohel@daffodilvarsity.edu.bd

Lead: Md. Maidul Islam // Phone: +8801711476754 // E-mail: rummanmaidul13@gmail.com // City University

Cumilla

Coordinator: Partha Chakraborty, Chairman & Assistant Professor, Department of Computer Science and Engineering, Cumilla University, Cumilla, Bangladesh // Phone: +8801717629764 // Email: partha.chak@cou.ac.bd

Lead: Mazharul Hasan // Phone: +8801631981121 // Email: mazhar11808006@gmail.com // Cumilla University

Mymensingh

Coordinator: Mahbubun Nahar, Lecturer, Department of Computer Science and Engineering, Jatiya Kabi Kazi Nazrul Islam University, Mymensingh, Bangladesh // Phone: +8801770393499 // E-mail: mahbuba.knu@gmail.com

Lead: Kanis Fatema Shanta // Phone: +8801987934996 // E-mail: kanisfatemashanta.cse@gmail.com // Jatiya Kabi Kazi Nazrul Islam University, Mymensingh

Sylhet

Coordinator: Md. Saiful Islam, Asst. Professor, Shahjalal University of Science and Technology, Sylhet, Bangladesh // Phone: +8801717960979 // E-mail: saiful-cse@sust.edu

Chattogram

Coordinator: Md. Iftekharul Alam Efat, Noakhali Science & Technology University, Noakhali, Bangladesh // Phone: +8801727208714 // phone: iftekhar.iit.nstu@gmail.com

Lead: Al Adnan Sami // E-mail: aladnansami21@gmail.com // Phone: +8801625208031 // Noakhali Science & Technology University

Barisal

Coordinator: Md. Mostafijur Rahman, Lecturer, University of Barisal, Barisal, Bangladesh // Phone: +8801739097182 // E-mail: mostafij.csebu@gmail.com

Lead: Niaz Hassan // Phone: +8801819949151 // E-mail: mirmukut@gmail.com

Rangpur

Coordinator: Masud Ibn Afjal, Assistant Professor, Hajee Mohammad Danesh Science & Technology University, Rangpur, Bangladesh // Phone: +8801737049633 // E-Mail: masud@hstu.ac.bdHajee

Lead: Md. Shakil Ahamad // Phone: +8801892186018 // E-mail: shakil.ahamadhstu@gmail.com // Haji Mohammad Danesh Science & Technology University, Rangpur, Bangladesh

Rajshahi

Coordinator: Md. Rashed-Al-Mahfuz, Assistant Professor, Department of Computer Science and Engineering, University of Rajshahi, Rajshahi, Bangladesh // Phone: +8801723580555 // E-mail: ram@ru.ac.bd

Lead: Hossain Md. Sabir // Phone: +8801677452170 // E-mail: hossainmdsabir123@gmail.com // Rajshahi University

Khulna

Coordinator: Akib Shariyar, Lecturer, Khulna University of Engineering & Technology, Khulna, Bangladesh // Phone: +8801917828888 // E-mail: akib.shahriyar@cse.kuet.ac.bd

Lead: Sumit Chanda // Phone: +8801964158014 // E-mail: chanda1505012@stud.kuet.ac.bd // Khulna University of Engineering & Technology, Khulna, Bangladesh

THE PROCESS FOR THE NASA SPACE APPS CHALLENGE IN BANGLADESH

Before the Hack-a-Thon Day

1) Read all the problems in NASA Space Apps Challenge site

<https://www.spaceappschallenge.org/2024/challenges/> in detail, and make sure you understand everything. Pick a category and challenge based on your skill level.

YOU MUST UTILIZE NASA'S OPEN DATA FOR YOUR WINNING SOLUTION: Check out all the data and API availability here:

NASA Open Data: <https://open.nasa.gov/open-data/>.

NASA Open API: <https://api.nasa.gov/>

Utilize Python Library, pyNASA: <https://github.com/bmtgoncalves/pyNASA> (instruction: <https://bmtgoncalves.github.io/pyNASA/>)

You can use NASA data to even create a poster, build an application, utilize your hardware, create a video, and anything in between. If you do not know how to use NASA data and use of API, use the following videos to learn:

- You can learn how to use API using this YouTube video: <https://www.youtube.com/watch?v=WXsD0ZgxjRw>
- How to use NASA API: https://www.youtube.com/watch?v=JfXp_YEQRRl
- NASA API solution Video: https://www.youtube.com/watch?v=JfXp_YEQRRl&pp=ygUgaG93IHVzZSBuYXNhIGRhdGEgdGhyb3VnaCBhcGk%3D

2) Must join the WhatsApp and Slack Channels to get regular updates, ask for support and get news and announcements:

- a. Slack Channel: https://join.slack.com/t/spaceappsbd/shared_invite/zt-a9litut0-IS90oC2Xyy86SfEcwG9qtg
- b. WhatsApp channel: <https://chat.whatsapp.com/DnnxLS8wQYq5xWuAOD4o4v>

3) Register with BASIS Students' Forum by **August 1st** at <https://nsac.basis.org.bd/> this is a team based registration. You have to choose the name of the Team, and number of the team members (preferable number is 5), and contact information (Email Address and Mobile Number) for each of the participants. You need to choose a location - Dhaka, Chattogram, Sylhet, Rangpur, Barisal, Mymensingh, Khulna, Cumilla or Rajshahi – your intended Hack-a-Thon location. Please write a short description of a problem, and create a YouTube Video.

THIS ENSURES THAT YOU GET ALL NOTIFICATIONS AND UPDATES, AS WELL AS BEING JUDGED AT VIRTUAL PARTICIPATION FOR THE FINAL HACK-A-THON.

4) Register with NASA SPACE APPS CHALLENGE based on your LOCATION you have selected in the step #1.

STEP 1: SIGN UP FOR A SPACE APPS ACCOUNT: Sign up for a Space Apps account [HERE](https://www.spaceappschallenge.org/create-account/) (<https://www.spaceappschallenge.org/create-account/>). Once you input your information, you will be prompted to verify your email address.

STEP 2: REGISTER TO PARTICIPATE

Participant registration for Space Apps 2024 opens in mid-July and will remain open through the end of the hackathon on October 5, 2024 (11:59 p.m. local time).

To participate in the Space Apps Challenge, you must register for a Local Event or the Universal Event. We encourage you to complete this step at least one to two weeks before the hackathon to join the chat channels and form teams.

Log in to the website using your username and password

Click “Choose a Local Event” from the user dashboard (see “Dashboard” in your menu bar) OR register through one of the Local Event pages or Universal Event page. The location registration URL is

<https://www.spaceappschallenge.org/>; search for the locations either one of the followings:

- Dhaka
- Chattogram
- Sylhet
- Barisal
- Cumilla
- Rangpur
- Rajshahi
- Khulna
- Mymensingh

EVERY INDIVIDUAL MUST REGISTER AT THE **INTERNATIONAL SPACE APPS CHALLENGE SITE** TO BE ELIGIBLE to PARTICIPATE PHYSICALLY FOR THE BANGLADESH EVENT.

The Space Apps Challenge features hundreds of Local Events allowing participants to find potential teammates located in the same community or time zone, or who speak the same language. Since one of the goals of Space Apps is to build local communities, we suggest that participants join a Local Event based on their physical location or their networks/connections to a particular location. If there are no Local Events in your area, you can register for the Universal Event.

You can change your Local Event at any time by selecting the "change" option next to your designated Local Event on your user dashboard.

Teams may consist of participants from one Local Event or from several Local Events. You may eventually choose to join a team that is tied to another Local Event because you like their project idea. Or you may choose to invite people from other Local Events to join your team because you need their skills. During Local Judging your project will be evaluated by the local judges at the Local Event for which your team is registered.

STEP 3: CONNECT WITH YOUR LOCAL LEAD (BASIS for Bangladesh)

Local Leads are the organizers of Space Apps Challenge Local Events. They are available to answer questions and help connect you to potential teammates prior to the hackathon. Local Leads are the primary points of contact for your Local Event and will support your hackathon experience. They will also be available in the chat channels in the week leading up to the hackathon and during the hackathon. Please reach out to them as you prepare and for specific details regarding your Local Event!

- 5) **Form your TEAM** and optionally choose mentor(s). Make sure your team is fully prepared to and understood the problem thoroughly. They have completed UX design, created the prototype, and tested with data. You should be fully ready for the Hack-a-Thon!!

- a. If you need data, please use the space apps challenge site <https://www.spaceappschallenge.org/> ; go under the “CATEGORY” > then “CHALLENGE” > then you will find resources.

6) **BE SOCIAL!!** Make sure that you are active in the Facebook and Twitter; as we need to publicise as much as possible all of our activities. Connect with the following and follow. **MAKE SURE TO TWEET AT A LEAST A FEW EVERYDAY, POST IN FACEBOOK A FEW POSTS EVERYDAY.**

- a. Facebook: BASISStudentsForum, spaceappschallenge, mohammad.zaman and other related sites/pages
- b. Twitter (X): @NASASpaceappsBD, @SpaceApps, @BASISBD, @SpaceAppsBD, @MohammadZaman
- c. Keep a close eye on the Space Apps Challenge Facebook page (<https://www.facebook.com/BASISStudentsForum/>).

7) **Create YouTube Videos of your project:**

- a. For **Qualification** and **Local Judging**: For your initial qualification and local judging, you need to create a **240 Seconds of Glory** video, by using the following format.

Initially, you will create one video for the qualification for physical participation, the date for this submission is **September 1, at 11:59 PM** Dhaka Time.

Once you are qualified, you can modify the Video for local judging during the hack-a-thon, which you will submit at 6:00 PM on Day 1 of the hack-a-thon.

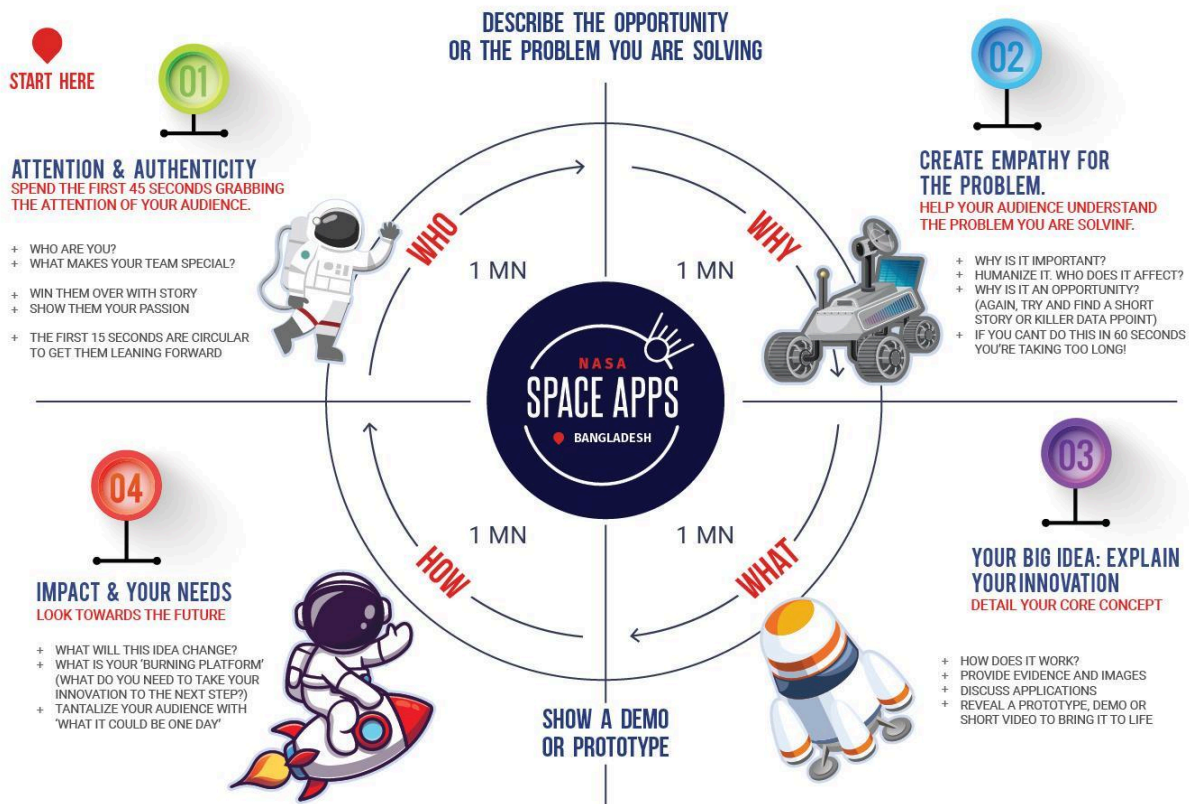
240 SECONDS OF GLORY FOR LOCAL JUDGING

For **participants** at Space Apps local events, your final project presentations on the last day of Space Apps will usually be limited to a four minutes each, using the 240 seconds of Glory. The two **global nominees** from each Space Apps location will also be making a 30-second video.

240 Seconds of Glory

A MODEL FOR THE PERFECT PITCH AT SPACE APPS

A GREAT PITCH CAN BE THE DIFFERENCE BETWEEN GREATNESS AND OBSCURITY. THIS ROUGH GUIDE IS DESIGNED TO ENSURE YOUR GOOD WORK GETS THE ATTENTION IT DESERVES.



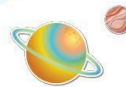
- b. For Global Judging: Create a short, no more than **30 Seconds** video. Use the following guide to create the Video. This will be used by the NASA Judges, once you are nominated globally as a winner from the local event. You have to submit this by 12:00 PM of the Day 2 of the hack-a-thon.

30 Seconds of Glory



A MODEL FOR THE PERFECT PITCH
AT SPACE APPS

- 0.00 **INTRODUCE YOURSELF** What is your name and your team's name?
- 0.02 **LEAD US IN** What topic does your solution address, or what is your passion?
- 0.05 **NAME YOUR SOLUTION** Provide a title and tagline to catch your audience's attention
- What do people gain? Where is the opportunity?
 - What problem does it solve?
- 0.10 **DESCRIBE YOUR IDEA** How does it work?
- Display images or a prototype
 - Describe a user's experience
 - Include how data and technology make your solution possible
- 0.20 **LOOK INTO THE FUTURE** Paint a picture
- What will your idea change?
 - Tantalize your audience with what it could be
 - What can your solution do for people, the world and beyond?



0.30s



- 8) **Upload your documentation/code into GitHub** and provide the link to GitHub. This would be your code, full documentation, your journey, your description, your video and your poster.. and the links.

This year's challenges

You can find this year's challenges [here](https://www.spaceappschallenge.org/2023/challenges/): <https://www.spaceappschallenge.org/2023/challenges/> Make sure to select "2024 NASA Space Apps Challenges" from "Show Challenges From" in your top right corner.

Show Challenges From:

2024 NASA Space Apps Challenge 

DURING THE HACK-A-THON DAYS

9) Go to Space Apps Challenge website and upload your project:

- a. Login to the Space Apps Challenge Site
- b. Member Tab: Make sure every member is listed in your project, with picture and with their role
- c. Go to your challenge category & topic
- d. Provide all the details of your project, including links and documentation
- e. Click to Submit your project

10) **Information you MUST enter in Space Apps Challenge website**

- a. High Level Summary: Provide a high level summary of the project; come up with a project name as well. Add the link to the 240 seconds video and the GitHub Link.
- b. Project Demo: Create a YouTube video of the project demonstration and link it here; MUST be less than 30 seconds. Use the 30 Seconds of glory video guidance.
- c. Final Project: Provide details of your final project, possible link to FIGMA, Github or other detailed documentation.
- d. Project Details: Here your job is to shine. Use pictures and details with links. You need to fill in the sections for:
 - i. The WHY, the WHAT, and the HOW
 1. How we addressed the challenge
 2. How we developed this project: (make sure to list details of all data you used here)
 - ii. The COMMUNITY INVOLVEMENT
 1. Hope to achieve
 2. Important note
 3. Highlighted features
 4. Benefits
 - iii. The TOOLS and TECHNOLOGIES
 1. Tools and languages used
 2. Use of Artificial Intelligence
 - iv. Space agency data: (this is where you have to list all the space agency data you are using)
 - v. References: (make sure you list all the references here)

11) **Win the Hack-a-Thon!!** There will be up to 3 local winners selected from each location by the local judges, depending on the number of participating teams!

a. **Local Judging:**

- i. **TWO AWARDS** - Each of the Locations would have two awards, based on the category, challenge & one of the following concepts!
 1. Best Use of Science: The solution that makes the best and most valid use of science and/or the scientific method.
 2. Best Use of Data: The solution that best makes space data accessible, or leverages it to a unique application.
 3. Best Use of Technology: The solution that exemplifies the most innovative use of technology.
 4. Galactic Impact: The solution with the most potential to improve life on Earth or in the universe.
 5. Best Mission Concept: The solution with the most plausible concept and design.
 6. Most Inspirational: The solution that captures our hearts.

7. **NEW Best Storytelling Award:** The solution that most creatively communicates the potential of open data through the art of storytelling.
8. **NEW Global Connection Award:** The solution that best connects people around the world through technology.
9. **NEW Art & Technology Award:** The solution that most effectively combines technical and creative skills.
10. **NEW Local Impact Award:** The solution that demonstrates the greatest potential for local impact.

ii. **(Optional) ONE AWARD** – From each location for Open NASA’s Innovation Space: This reflects: One award which has not been awarded for other categories, but has very creative use of NASA’s Open Data. This is a potential award, and there might not be any, if not selected by the judges.

b. **Global Judging:** Upto TWO projects get nominated for Global Judging from each location: We may have two projects to be showcased on open NASA's Innovation Space. This site salutes the incredible work citizens create with NASA's open data. The Innovation Space nominations should be projects you did not submit for global awards but still want to recognize. The review process for the Innovation Space will occur after global awards are determined.

The NASA team will review nominations from Hosts across the universe to select finalists and winners within each category. During our judging process, you'll keep your community informed and engaged across email, your event page and social media. Together, we'll all celebrate the reveal of this year's biggest impacts!

i. **ONE** Globally from each the following categories:

1. **Best Use of Science:** The solution that makes the best and most valid use of science and/or the scientific method.
2. **Best Use of Data:** The solution that best makes space data accessible, or leverages it to a unique application.
3. **Best Use of Technology:** The solution that exemplifies the most innovative use of technology.
4. **Galactic Impact:** The solution with the most potential to improve life on Earth or in the universe.
5. **Best Mission Concept:** The solution with the most plausible concept and design.
6. **Most Inspirational:** The solution that captures our hearts.
7. **NEW Best Storytelling Award:** The solution that most creatively communicates the potential of open data through the art of storytelling.
8. **NEW Global Connection Award:** The solution that best connects people around the world through technology.
9. **NEW Art & Technology Award:** The solution that most effectively combines technical and creative skills.
10. **NEW Local Impact Award:** The solution that demonstrates the greatest potential for local impact.

IMPORTANT SITES AND LINKS FOR NASA SPACE APPS CHALLENGE

- BASIS Site for Registration: <https://nsac.basis.org.bd/>
- NASA Challenges: <https://www.spaceappschallenge.org/2024/challenges/>
- Earth Data: <https://earthdata.nasa.gov/user-resources/remote-sensors>
- NASA Data Site: <https://data.nasa.gov/>
- NASA API Site: <https://api.nasa.gov/>
- YouTube: <https://www.youtube.com>
- GitHub : <https://www.github.com>
- Space Apps Challenge Facebook page: <https://www.facebook.com/BASISStudentsForum/>.
- Twitter Page: <https://twitter.com/spaceappsbd>
- Facebook Page: <https://www.facebook.com/SpaceAppsChallengeBD>
- BASIS Registration Site: <https://nsac.basis.org.bd/applicant-registration>
- Participants Guide: <https://docs.google.com/document/d/1MgHWEQzDx5MU5rVS37-sWzjKfRLtQ5jt/edit>
- Slack Link: <https://spaceappsbd.slack.com/archives/CNJERFETY>
- How to use NASA Data and API videos in YouTube:
 - You can learn how to use API using this YouTube video:
<https://www.youtube.com/watch?v=WXsD0ZgxjRw>
 - How to use NASA API: https://www.youtube.com/watch?v=JfXp_YEQRRl
 - NASA API solution:
https://www.youtube.com/watch?v=JfXp_YEQRRl&pp=ygUgaG93IHRvIHVzZSBuYXNhIGRhGEgdGhyb3VnaCBhcGk%3D

JUDGING GUIDELINE & SCORE SHEET

Name of the Team:

NASA Space Apps Registered Location:

Project Name:

Challenge:

Topic within Challenge:

Global Guideline

JUDGING: AWARDS AND ELIGIBILITY

Space Apps offers local and global awards. Solutions with intriguing and innovative insights and compelling storytelling rise to the top in the judging process. Eligible solutions may compete for two different levels of awards: local and global.

TO BE ELIGIBLE FOR AWARDS, YOU MUST:

- Develop a project in response to one of the official Space Apps Challenges
- Include a link to code/documentation in a public repository on your project page (make sure that it is publicly accessible)
- **USE NASA's Open DATA!!**
- Keep any code developed during the event open-source. We LOVE Open!
- Ensure that all your team members are registered and identified on the team's webpage

Local Awards

Local judging and awards occur under the direction of the Local Leads at each Space Apps location. Leads may then nominate up to two solutions from each location to compete in the global judging process.

Global Awards

The brightest ideas across the Space Apps universe receive global recognition. Global award winners are featured on the Space Apps website and receive an invitation to visit NASA's Kennedy Space Center (or other location) with the Space Apps Global Organizing Team.

**Winner(s) and one guest each will be responsible for their personal travel, meals and incidental expenses, and accommodation expenses.*

GLOBAL JUDGING PROCESS

Each location Lead may nominate up to two finalists from their location for global judging by NASA; nominations are due by 11:59pm EST, October 6th, 2024. Teams nominated for global judging will be asked to create a 30-second video about their project using effective storytelling techniques (see 30 Seconds of Glory graphic). Teams will submit videos by 12:00 PM local time on October 6th, 2024, by embedding a link to their video in their project page.

NASA experts will then review these nominations to select the top 30 projects. NASA experts will choose the global winners based on information from their project pages. So, don't forget to keep project pages updated with project descriptions, the project video, and open source code and related information.

JUDGING CRITERIA

- **Impact:** How much impact (quality and quantity) can this project have? Does it solve a big problem or a little problem? Will it inspire or help many, or a few?
- **Creativity:** How creative/innovative is the approach? Is the project novel and something that hasn't been attempted before, or is it an incremental improvement on something that already exists?
- **Validity:** Is the solution scientifically valid? Will it do what it sets out to do? Can it work in the real world?

- **Relevance:** Is this project responsive to the challenge for which it was submitted? Is it a complete solution or does it have a long way to go? Is it technically feasible? How usable or user friendly is the solution?
- **Presentation:** How well did the team communicate their project? Were they effective in telling the story of the project: the challenge, the solution, and why it is important?

****HOW TO CRAFT A WINNING PRESENTATION**

While many Space Apps teams consider the first four criteria carefully and excel at developing solutions with great potential, the best of these teams pay equal attention to the final criterion, presentation. After all, how can your solution make a difference if you can't effectively present and explain your solution in a way that will convince people to implement it?

We recommend devoting enough time and thought to developing your Space Apps presentation and building a great story around your project. Be sure to recruit team members with expertise in storytelling, design, and other means to capture your project and share the value of your solution. We have some ideas to help you! Please refer to the 240-Seconds of Glory guide for local judging and 30-Seconds of Glory for Global Judging.

240 SECONDS OF GLORY FOR LOCAL JUDGING

For **participants** at Space Apps local events, your final project presentations on the last day of Space Apps will usually be limited to a four minutes each, using the 240 seconds of Glory.

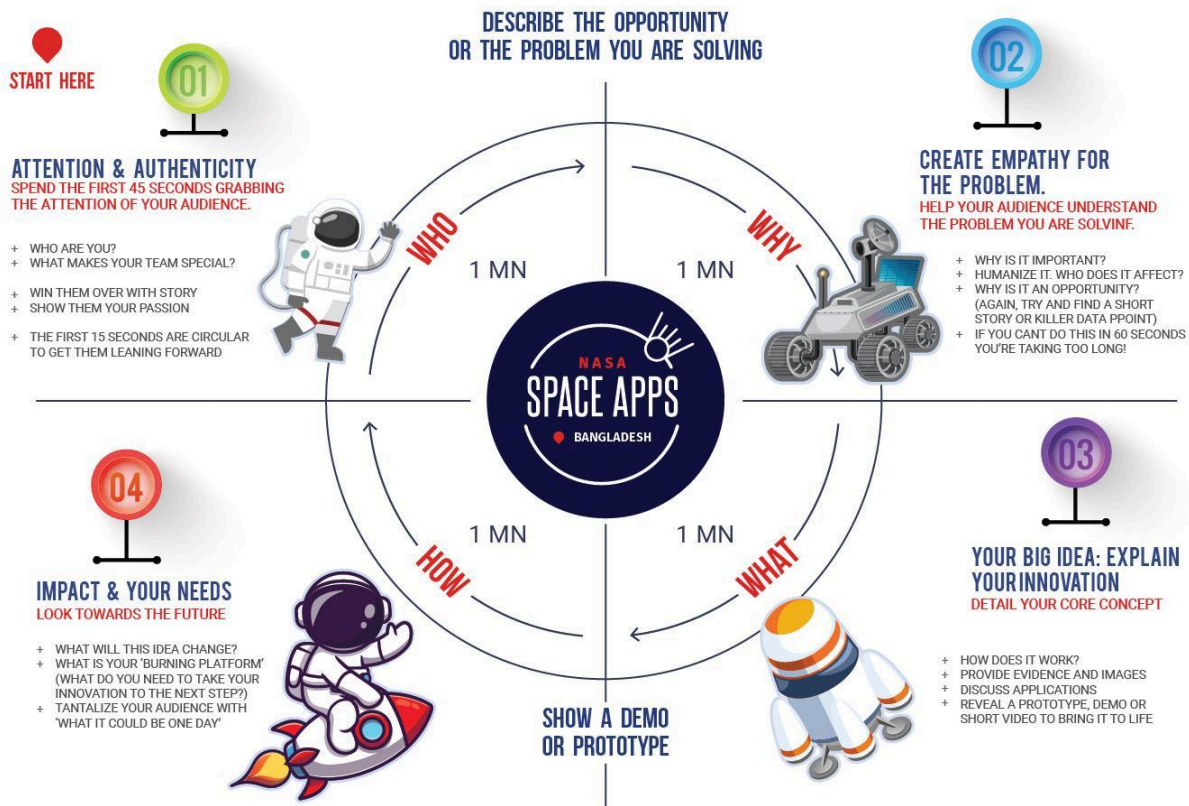
240 SECONDS OF GLORY FOR LOCAL JUDGING

For **participants** at Space Apps local events, your final project presentations on the last day of Space Apps will usually be limited to a four minutes each, using the 240 seconds of Glory. The two **global nominees** from each Space Apps location will also be making a 30-second video.

240 Seconds of Glory

A MODEL FOR THE PERFECT PITCH AT SPACE APPS

A GREAT PITCH CAN BE THE DIFFERENCE BETWEEN GREATNESS AND OBSCURITY. THIS ROUGH GUIDE IS DESIGNED TO ENSURE YOUR GOOD WORK GETS THE ATTENTION IT DESERVES.



30 SECONDS OF GLORY FOR GLOBAL JUDGING

Participants will make a 30-second video to present their challenge solution.

30 Seconds of Glory



A MODEL FOR THE PERFECT PITCH
AT SPACE APPS

0.00

INTRODUCE YOURSELF

What is your name and your team's name?

0.02

LEAD US IN

What topic does your solution address, or what is your passion?

0.05

NAME YOUR SOLUTION

Provide a title and tagline to catch your audience's attention

- What do people gain? Where is the opportunity?
- What problem does it solve?

0.10

DESCRIBE YOUR IDEA

How does it work?

- Display images or a prototype
- Describe a user's experience
- Include how data and technology make your solution possible

0.20

LOOK INTO THE FUTURE

Paint a picture

- What will your idea change?
- Tantalize your audience with what it could be
- What can your solution do for people, the world and beyond?

0.30s



JUDGING GUIDELINE - THE SCORING MECHANISM

Based on the global judging we have adopted a local scoring mechanism. Follow carefully to achieve the best possible score.

Point Guideline for 1-5 Questions:

Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20

Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10

Unique Implementation – The idea has been there for the public domain, but the implementation is Unique – 5

Public Domain – Concept, Idea & Implementation is available in the public domain - 1

1) Impact: How much impact (quality and quantity) can this project have? Does it solve a big problem or a little problem? Will it inspire or help many, or a few?

Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20

Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10

Unique Implementation – The idea has been there for public domain, but the implementation is Unique – 5

Public Domain – Concept, Idea & Implementation is available in public domain - 1

2) Creativity: How creative/innovative is the approach? Is the project novel and something that hasn't been attempted before, or is it an incremental improvement on something that already exists?

Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20

Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10

Unique Implementation – The idea has been there for public domain, but the implementation is Unique – 5

Public Domain – Concept, Idea & Implementation is available in public domain - 1

3) Validity: Is the solution scientifically valid? Will it do what it sets out to do? Can it work in the real world?

Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20

Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10

Unique Implementation – The idea has been there for public domain, but the implementation is Unique – 5

Public Domain – Concept, Idea & Implementation is available in public domain - 1

4) Relevance: Is this project responsive to the challenge for which it was submitted? Is it a complete solution or does it have a long way to go? Is it technically feasible? How usable or user friendly is the solution?

Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20

Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10

Unique Implementation – The idea has been there for public domain, but the implementation is Unique – 5

Public Domain – Concept, Idea & Implementation is available in public domain - 1

5) Presentation: How well did the team communicate their project? Were they effective in telling the story of the project: the challenge, the solution, and why it is important?
 Absolutely WoW – The Concept is Unique, I never could imagine; and I don't think anyone could have imagined – 20
 Unique Idea – The idea is unique, implementation is unique, but I have seen or heard somewhere similar concept, I have not experienced any implementation – 10
 Unique Implementation – The idea has been there for public domain, but the implementation is Unique – 5
 Public Domain – Concept, Idea & Implementation is available in public domain - 1

Point Guideline for 6-10 Questions:

These questions will be scored between 0 and 5, except for the #10, that is either 5 or 0.

- 6) **Teamwork:** How did the team work? Did they demonstrate a collaborative effort? – Please rate between 1 and 5; 5 being the absolute best
- 7) **User Experience:** How do you think the user would be able to utilize this? Is this very simple & easy to use vs does this require significant training? Please rate between 1 and 5; 5 being very easy to use & 1 being require significant training.
- 8) **Quality of YouTube Video:** Please rate between 1 and 5; 5 being the best representation of the Solution Created and Provided in Clear English
- 9) **Successful Demonstration of the App or Hardware:** Please rate between 1 and 5; 5 being the best demonstration
- 10) **Environmental Conservation:** The Project addresses Environmental Conservation (5 Pts -Yes or 0 Pts-No)

Point Guideline for 11-16 Questions:

These questions will be scored either 0 or 1.

- 11) Space Apps 2024 Challenge Category Identified
- 12) The presentation was completed in 4 minutes
- 13) Link to GitHub Provided and Code/Information Available in GitHub
- 14) Link to YouTube Provided
- 15) YouTube Videos is 30 seconds or less in length
- 16) Space Apps Challenge Project Page completed

Point Guideline for 17 Questions:

If there are women member(s) in the team, they would get an additional 5% of the aggregate point.

- 17) Women Participation Bonus - If Yes, 5% additional point in the aggregate

YES/NO for Nomination

1. *Best Use of Science: The solution that makes the best and most valid use of science and/or the scientific method.*
2. *Best Use of Data: The solution that best makes space data accessible, or leverages it to a unique application.*
3. *Best Use of Technology: The solution that exemplifies the most innovative use of technology.*
4. *Galactic Impact: The solution with the most potential to improve life on Earth or in the universe.*
5. *Best Mission Concept: The solution with the most plausible concept and design.*
6. *Most Inspirational: The solution that captures our hearts.*
7. *NEW Best Storytelling Award: The solution that most creatively communicates the potential of open data through the art of storytelling.*
8. *NEW Global Connection Award: The solution that best connects people around the world through technology.*
9. *NEW Art & Technology Award: The solution that most effectively combines technical and creative skills.*
10. *NEW Local Impact Award: The solution that demonstrates the greatest potential for local impact.*

HOW TO DEVELOP A WINNING SPACE APPS SOLUTION!

YOU ARE READY TO SOLVE.

You have your crew & you built your winning team!

You have registered with BASIS as well as at NASA Space Apps Challenge website.

BASIS Registration Site: <https://nsac.basis.org.bd/>

You picked a challenge from the categories, sub-categories and challenges.

You read all the instructions, a few times and then one more time.

You have the passion, the talent, and the knowledge – so how can you put it together to develop a winning Space Apps solution?

Here are some tips from the very people who will be judging your solutions, so listen closely!

Space Apps solutions are typically judged based on the following criteria— all equally important:

Impact: How much impact (quality and quantity) can this project have? Does it solve a big problem or a little problem?

Creativity: How creative is the approach? Is the project new and something that hasn't been attempted before? Is it something that isn't being addressed by the current market?

Product: How well does this project fit the needs of the challenge it addresses? How user-friendly is the technology? Is it a complete solution or does it have a long way to go before being ready to use?

Sustainability: How good is the plan for next steps? How prepared is the project team to continue their work beyond the event? OR, is the project organized in a way so others can take the project to the next level?

Presentation: How well did the team communicate their project? Are they effective in telling the story of the project and why it is important?

While many Space Apps teams consider the first four criteria carefully and excel at developing solutions with great potential, the best of these teams pay equal attention to the final criterion, **presentation**. After all, how can your solution make a difference if you can't convince people to see your idea and implement it? Follow this for your local level judging:

INSTRUCTION FOR VIDEO UPLOAD

There are two videos you would have to upload. Any video uploaded after that time will not be considered for judging. The videos are:

- 1) **240 Seconds of Glory Video** (4 minutes video for local judging): This video will be used for local judging. You will be competing with the other teams from your local region. Maximum of two of the teams will be nominated and move to the global level. Email your 4 minutes video Link here: (Web@basis.org.bd).

***YOU MUST FOLLOW THE VIDEO NAMING CONVENTION IN THIS FORMAT*:** **Zone-Team Name-Challenge Category** (Dhaka-Bluesky-Create)

Last time for your complete video upload is Friday, October 6th , 2024 at 7:30 PM Bangladesh Time. Make sure that you start earlier, say around 5:30 PM so, you can finish and check you have uploaded the right video to the right location.

- 2) **30 Seconds of Glory** (30 seconds video for global judging): You must upload your 30 seconds of glory video in YouTube and provide that link within your project in [NASA website](#). This will be judged as part of the global judging, and once you move forward to the global level.

Last time for your complete video upload is, October 6, 2024 at 2:00 PM Bangladesh Time. Make sure that you start earlier, say around 12:30 PM so, you can finish and check you have uploaded the right video to the right location. Once you upload your video to the YouTube Channel, make sure that the right link is in your project at [NASA website](#).

MENTORING GUIDELINE

Who are the Mentors?

We want to thank the mentors who will be providing valuable times to guide the teams to a winning project. There will be investment of times (pre-hack-a-thon, 8-10 hours; during hack-a-thon two days October 5 and October 6). Mentors are the key, who will be providing support to the teams specially clarifying any procedures, listen to presentations, and provide answers as asked. Mentors **will not** assist in coding or building the solution (hardware/software/demonstration/presentation), as they will be playing only the clarification role, and procedural support. Key theme is the IDEA must be the team's own, mentors can point to answer questions. Mentors are also allowed to provide guidance on choice of tools, technologies, and recommendations, however, the team would decide on the technologies and tools they like to use. Another role the mentors will play is guiding the teams to make sure that they finish all the steps required by the NASA Space Apps Challenge (GitHub, YouTube, Messaging, etc.). The mentors will also be listening to their presentation, and guide them if there is any gap. Mentors will also assist in choosing the preliminary set of teams who will be participating at the Bangladesh Main Stage, from all the submitted solutions. So, in sequence the roles would be:

- 1) **Selecting the teams & Projects for Bangladesh Main Stage** (Pre Hack-a-Thon task)
- 2) **Provide the Data Boot camps prior to the hack-a-thon** (if possible)
 - a. Data boot camp is guiding the teams the basics of the NASA Space Apps Challenge
 - b. Provide them with some sample of previous winning projects
 - c. Guide them regarding tools and technologies
 - d. Can utilize videos generated by the organizing team
 - e. Can be 2-4 hours, based on availability of the logistics
- 3) **Clarifying and questions the teams have** (utilize this guide to answer)
- 4) **Providing technology and tool recommendation** if required by the team (optional)
- 5) **Making sure that every team has used NASA data** and provided documentation on how, what and where. Confirm that they mentioned it in their respective 240 second and 30 second video.
- 6) **Confirming that the teams have been following the steps** outlined for the hack-a-thon
- 7) **Listening to the 4 minutes presentation** and guide if there is any gap
- 8) **During the hack-a-thon, provide the mentor rounds**, and make sure to cover all the teams
- 9) **Listening to the 30 seconds video presentation** and guide if there is any gap. Make sure that this is crisp and to the point. This must be in English.