

CODEATOUR 6.0

INTERNATIONAL

General Information







Table of Contents - General Information

1. Introduction	
1.1. What Sets Us Apart?	3
1.2. Participation Benefits for Students	
2. Tracks for Codeavour 6.0 International	
2.1. Track 1 - Innovation and Entrepreneurship	
Sustainnovation - Bring Sustainable Solutions for the Modern Society	
Clean Energy and Sustainable Cities	
Climate Action and Responsible Consumption	
3. Life Below Water and Life on Land	6
4. Good Health and Wellbeing	(
5. Industry, Innovation and Infrastructure	
2.2. Track 2 - Climate Action Challenge	
Leveraging AI and Robotics to Shape a Greener Tomorrow	8
About Challenges	8
Arena Description and Challenges	8
3. Age Groups, Team Size, and Participation Fees	10
4. Important Guidelines	10
5. Stages of Participation	11
5.1. Stage 1: Registration	11
5.2. Stage 2: Preparation	11
5.3. Stage 3: Submission	11
5.4. Stage 4: Regionals	12
5.5. Stage 5: Nationals	12
5.6. Stage 6: International	12
6. How to Participate?	13
7. Prizes	14
Participants' Agreement and Guidelines	14









1. Introduction

Codeavour 6.0 International, the biggest Innovation Fest for the Next-Gen is centered on the theme of Sustainability and Climate Action. Codeavour goes beyond competition; it is a dynamic launchpad for young minds, empowering them to delve into Al-ML, AR-VR, Robotics, and Coding. This prestigious international competition invites young innovators to craft cutting-edge projects using PictoBlox, with the inspiring goal of making the world a better place. Through dynamic and interactive activities, participants embark on an exhilarating journey into Artificial Intelligence, Coding, and Robotics.

The competition aims to motivate children by:

- CultivatinginterestinSTEMfieldsthroughengaginggamification.
- Enhancing21st-centuryskills:criticalthinking,creativity,collaboration,andcommunication.
- Fosteringaglobalmindsetinyouthforinnovationandentrepreneurship.
- Promotingempathyandunderstandingthroughdiversityandinclusion.
- Encouragingandsupportingwomen'sparticipationinSTEM.









1.1. What Sets Us Apart?

- 1. Global Platform for Innovators: Codeavour 6.0 International provides a unique opportunity for young innovators worldwide to showcase their talent and collaborate on groundbreaking projects on an international platform.
- 2. **Proven Impact with Innovators Stories:** Discover inspiring success stories from innovators who have transformed their ideas into reality and made a lasting impact.
- 3 Experience and Learn the Latest Technologies: Immerse in AI, XR, AR/VR, ML, and Robotics through hands-on learning to propel your innovation journey and excel.



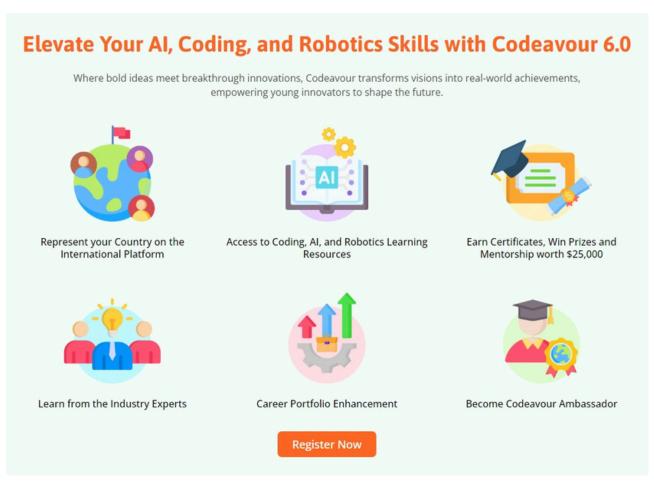






4. Mentorship Sessions: Empowering entrepreneurial dreams through exclusive mentorship sessions, resources, and a network to elevate your innovative projects.

1.2. Participation Benefits for Students



Participating in the world's biggest Coding, AI, and Robotics competition brings in a ton of benefits, which includes:

- Master 21st-Century Skills: Develop critical thinking, creativity, collaboration, and 25networking abilities.
- **Exciting Rewards:** Win prizes and mentorship worth over \$25,000.
- Earn Certificates: Stand out in the tech community and earn participation and winning certificates.
- Foster Innovation: Unleash creativity and potentially develop groundbreaking tech ideas for solving real-world challenges.









- Access Free Resources: Benefit from complementary learning tools and resources, including datasets and computational resources.
- **Hands-On Learning:** Engage in practical learning with workshops, live sessions, boot camps, and doubt sessions on the latest technology.
- International Exposure and Career Advancement: Participants get the chance to represent their skills on an International platform. Achievements in international platforms can be highlighted in resumes, LinkedIn profiles, and interviews, helping one stand out in job applications or academic pursuits. Additionally, credibility gets enhanced, one understands global trends, attracts investors or venture capitalists for new ideas, and can also lead to invitations to other global events, conferences, workshops, or job opportunities.

2. Tracks for Codeavour 6.0 International

The 6th edition of Codeavour consists of two exciting tracks, empowering the next generation of changemakers to create impactful solutions for the environmental challenges aligned with the United Nations Sustainable Development Goals.

2.1. Track 1 - Innovation and Entrepreneurship

Sustainnovation - It involves developing innovative solutions that prioritize sustainability, addressing global challenges while fostering environmental, social, and economic well-being for the future.

The Innovation and Entrepreneurship track is a dynamic platform that highlights students' creativity and entrepreneurial drive. It focuses on sustainability and climate action. This track inspires participants to develop cutting-edge solutions that address contemporary environmental challenges, transforming their visionary ideas into actionable and sustainable ventures that will benefit society.







1.1. Project Themes

1. CleanEnergyandSustainableCities

Objective: To drive advancements in energy efficiency and urban sustainability, promoting greener cities and improved quality of life through innovative technologies.

Focus Areas:

- Affordable and Clean Energy: Innovations in renewable energy technologies, such as solar, wind, or bioenergy, that are cost-effective and accessible to all.
- Sustainable Urban Development: Projects aimed at creating eco-friendly and resilient urban environments, including green buildings, smart grids, and sustainable transportation systems.

2. ClimateActionandResponsibleConsumption

Objective: To encourage innovative approaches to mitigating climate change and fostering sustainable consumption patterns, thereby

enhancing environmental stewardship.

Focus Areas:

- Climate Action: Solutions that mitigate climate change impacts, including carbon footprint reduction, climate resilience, and innovative green technologies.
- Responsible Consumption and Production: Projects that focus on reducing waste, promoting recycling, and designing products with minimal environmental impact.











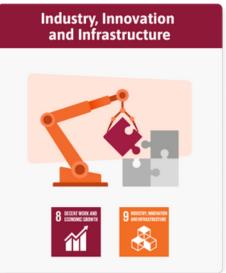


3. LifeBelowWaterandLifeonLand

Objective: To promote the protection and restoration of both marine and terrestrial ecosystems through innovative technology and conservation strategies.

Focus Areas:

- LifeBelowWater:Projectsaddressingmarine conservation, pollution control, and sustainable fisheries to ocean protect ecosystems.
- Life on Land and Water: Solutions that emphasize the conservation of terrestrial ecosystems, prevention of deforestation, of preservation biodiversity, the protection of clean water resources and sanitation.



4. GoodHealthandWellbeing

Objective: To advance healthcare and well-being through innovative solutions that enhance both physical and mental health, ensuring a healthier and happier society.

Focus Areas:

Health Innovations:

Technologies that improve healthcare delivery, such astelemedicine, wearable health devices, and health data analytics.

Microplastics and Health:

Develop preventive healthcare measures to improve overall quality of life by addressing the impact of microplastics on human health, with a focus on their infiltration into the brain and its effects on mental and physical wellbeing.











5. Industry, Innovation & Infrastructure

Objective: To drive technological innovation in industry and advancements enhance productivity, that sustainability, and efficiency in various sectors.

infrastructure, fostering

Focus Areas:

- IndustryInnovation:Technologiesthatdrive and industrial efficiency, automation, advanced manufacturing techniques.
- Infrastructure **Development: Projects** that focus on improving infrastructure through smart technologies, sustainable construction, and efficient resource management.



2.2. Track 2 - Climate Action Challenge

Leveraging AI and Robotics to Shape a Greener Tomorrow

Dive into a transformative journey where students harness the power of AI and robotics to address pressing environmental challenges. Participants will design a robot using Quarky and program it with PictoBlox in this inspiring track to execute innovative, eco-friendly tasks that champion sustainability. Through their creative solutions, students will showcase how advanced technology can drive significant environmental change, paving the way for a cleaner, greener world. This track is not just about technology—it's about envisioning and crafting a future where innovation and sustainability go hand in hand.









Arena Description and Challenges

- Thegamefieldsizeis45inx93in
- Pathwidth:15cm
- Widthofblackline:1.5cm
- Pickuppointsidelength:5.5cm
- Droppointsidelength:8cm

(Note: Pick and drop locations are square)

The arena is marked at various places with red and green outlines for the cube's pick-up and drop locations. Red outlines are for pick-up and green outlines signify drop locations. All objects are, by default, placed at a red area (pickup location), and the robot is responsible for moving it to the indicated drop location as part of the challenge.

The Climate Action Challenge consists of 8 exciting challenges. These Challenges are as follows:

- Protecting the Forest- Your task will be to deploy your robot to fight the fire in the forest.
- Making Roof Gardens: This task requires sending your robot to install plants on the buildings.
- Repurposing Tyres: To complete this task, you will ferry the used tyres to the park.

9 | Page



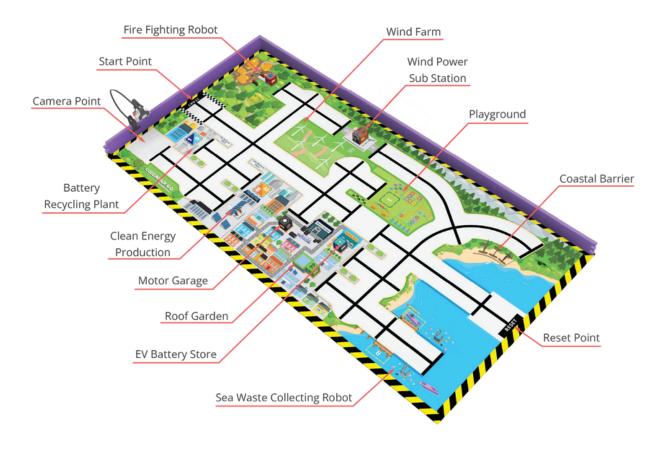




CODEAVOUR 6.0



- Reusing Battery: This task will involve transporting used batteries to the wind farm.
- Recycling Battery: You are required to collect the battery waste from the wind farm and deposit it at the battery station.
- Enhancing Solar Cell Efficiency: Your task is to change the angle of the panels to maximize energy absorption.
- Constructing Coastal Barriers: To protect coastal ecosystems, you have to lay sediment bags and complete the wall of defense.
- Safeguarding Aquatic Life: Your task will be to assist in cleaning up the sea with your robot.











Creator's Kit

The creator's kit serves as an upgrade to the innovator's kit. This kit comes with a variety of components like Quarky mount, IR sensors, battery, high-speed motors, servos, a variety of fasteners, wheels, spanner, screwdriver, practice objects with stickers, etc.

The Quarky kit lets users make many different kinds of moving parts for their robot, from simple to complex. This helps them design and build robots that can move quickly and precisely and do any task. Here are some examples of the types of moving parts and robots one can make with the kit.

The basic mechanisms include the linkage mechanism which allows the robot to make complicated and varied movements. These parts are connected, but they can still move about each other. The Advanced mechanisms would include the Pick and Place mechanism, scissor mechanism, and gripper mechanism.

Learnings from the Climate Action Challenge

Climate Action Challenge, which aligns with the 13th United Nations SDG of Climate Action, is divided into eight challenges designed to address the problem of climate change in the city of Harborton represented by our 45-inch x 93-inch arenas. These challenges are part of the overall attempt to mitigate the city's environmental impact. Through their active participation in this competition, contestants not only test their problem-solving skills but also gain valuable knowledge about climaterelated issues. They play a crucial role in shaping a sustainable future. Through challenges focused on topics like wildfires, forest conservation, and e-waste management, participants learn about the importance of reuse, repurposing, and recycling. They learn about various strategies to mitigate climate change, become advocates for climate action, and explore solutions such as cleaner energy sources, proper waste management, climate-positive infrastructure, and increased efficiency of renewable resources.

The collaborative nature of working with robots encourages participants to develop innovative and efficient solutions. This experience enhances their technical skills and fosters a sense of using technology for the betterment of society.









3. Age Groups, Team Size and Participation Fees

Anyone from age 7 to 18 can take part in Codeavour 6.0 International as per the following 3 Age groups:

- 1. Elementary (7 10 years old) Participants must be born between 2014 and 2017.
- 2. Junior (11 14 years old) Participants must be born between 2010 and 2013.
- Senior (15 18 years old) Participants must be born between 2006 and 2009.

Team Size: One can participate as an individual or in a team of 2-3 members with 1 mentor.

Note: It's highly recommended all team members should belong to the same age group. In the case of different age groups, the age of the eldest will be considered to determine the age group.

Participation Fees: To join the competition, each team is required to pay a ₹ 2000 registration fee. For teams advancing to the showdown of Codeavour 6.0 International, you'll have to pay ₹ 5000, ensuring they receive the highest level of support and services during the international event.

Note:

- 1. Under-represented students facing financial constraints or seeking fee discounts can access Scholarship codes through Codeavour 6.0's official partners.
- 2. Teams need to manage their travel and accommodations themselves or with a school or training partner's support to participate in the physical events at various levels.

4. Important Guidelines

- 1. The project should be programmed using **PictoBlox** only.
- 2. The mentor or coach's responsibility is limited to mentorship and guidance only. They should not be directly involved in project making, demonstration, or pitching ideas. Otherwise, it can lead to the disqualification of the team.













3. Only 1 project can be submitted per team. If anyone wants to submit more than 1 project, they need to do another registration.

5. Stages of Participation



The competition will happen in six stages:

5.1. Stage 1: Registration

At this stage, teams will register with our staff by filling in all the required information and paying the registration fees. Registration will be open from September 10th, 2024.

5.2. Stage 2: Preparation

After completing the registration, the next step is to gear up for the competition. Whether in Track 1 or Track 2, the Codeavour team is dedicated to helping contestants prepare. Here's how one can get started:









- Learning Materials: Participants get access to a variety of self-paced learning resources for both Tracks, available through their team's dashboard on the official Codeavour 6.0 website.
- 2. Interactive Sessions: Participants get to join live sessions hosted by the Codeavour team, where they'll explore the latest advancements in AI, ML, AR, VR, Python Coding, Robotics, and more. All registered participants can attend these sessions live or catch up with the recordings.
- 3. Expert Guidance: Regular doubt-solving sessions can be attended where one can consult with experts to overcome any hurdles during the competition.
- 4. Advanced Workshops: Opt for premium workshops and bootcamps offered by Codeavour's partners. These specialized programs provide an opportunity to deepen your expertise and stand out in the competition.

5.3. Stage 3: Submission

After preparing thoroughly, whether working on an innovative project for Track 1 or building a robot for Track 2, the next crucial step is to complete the online submission and robot **verification** according to the rules and regulations for the respective Tracks.

Important: Without this online submission and robot verification, there will be no further proceedings. Participant's project submission and robot verification is essential to verify alignment with Codeavour 6.0 guidelines, and while it won't be visible to others, it ensures their participation is validated.

For schools and academic partners with many teams, it's advisable to hold a school-level competition to nominate the top performers for regional consideration. However, every team must complete their online submission to receive participation certificates.

5.4. Stage 4: Regionals

After successfully submitting the project online and passing the verification and screening process, the team will be invited to participate in the regional level of the competition. Every participating team will receive regional-level certificates, with top performers advancing to the National Level.









Notes: The numbers and locations of regional events may vary from country to country. The details will be available with official country partners and on the official website of Codeavour 6.0 International.

5.5. Stage 5: Nationals

Top-performing teams from regional competitions will be invited to participate in the nationallevel competition. The number of teams advancing from regionals may vary by country, depending on participation levels. All teams at the national level will receive certificates, and the top performers will earn a spot at the International Level.

If regional events are not held in certain countries, submissions will be evaluated online, with top teams being directly invited to the national competition.

5.6. Stage 6: International

Top-performing teams from national-level competitions will advance to the international showdown. For countries where regional or national events are not conducted, submissions will be evaluated online, and exceptional teams will be directly invited to participate in the international competition.

Teams selected from the national level to attend the international showdown will need to pay an additional fee of ₹ 5000. This fee ensures that one receives the highest level of support and services during the global event.

Notes: The dates and locations of all regional and national level competitions will be updated on the website on a time-to-time basis, and all respective teams of that region will be notified.









6. Prizes



7. Participants' Agreement and Guidelines

Honest Communication

- Comply with this Code of Civility
- Be accurate (where they state facts)
- Be genuinely held (where they state opinions)
- Be in compliance with applicable law in any country from which they are posted
- Respect Oneself and Others





We require that all Codevaour participants treat other people with respect. Any use of Communication Services (see the Code of Civility) to threaten, harass, stalk, or abuse others using these services is unacceptable and is strictly forbidden. All contributions are expected to: We reserve the right to remove content that advocates or encourages expressions of violence, bullying, general cruelty, bigotry, racism, illegal activity, hatred, or profanity. This includes content that is deemed inappropriate, offensive, or that violates guidelines in the Terms of Service or the Code of Civility. Falsely impersonating a Codeavour employee, agent, manager, host, or any other person other than oneself is forbidden.

Code of Civility

As part of the commitment to making Codeavour and its related social media channels a great place to meet and interact with others who have a passion and commitment to science, technology, engineering, math, innovation, and entrepreneurship, you agree to abide by this Code of Civility. By participating on the Site and social media community, you give your commitment to abide by this Code when contributing to all Codeavour resources and programs, including, but not limited to, profiles, team pages, chats, posts and comments, emails, social media sources, etc. ("Communication Services"), and to help create a positive experience for all the community's users. We reserve the right in our sole discretion to eject or ban any user from participating in the Codeavour, the Site, or social media community who behaves in a manner deemed inappropriate or offensive, or who violates the guidelines of this Code of Civility. Codeavour and its partners and service providers are not responsible for any user-created content or other activities.

Protect Your Privacy

We caution you against sharing unnecessary personally identifiable information during the Zoom challenge (such as home address or personal contact information), which may be inadvertently obtained by others or, in rare instances, used for illegal or harmful purposes. Talk to your coach, parent, or the Codeavour staff if you have a question or concern.

Protecting Your Intellectual Property

It is the sole responsibility of the creator(s) of their innovation to determine whether their innovation requires protection, and what type of protection it may require. It is the sole responsibility of the creator to contact the appropriate legal professionals to secure any or all protection they deem necessary. Anytime you decide to share your idea or innovation, if you have a scientific discovery or









invention that could lead to a Patent or any other intellectual property protection, it is best to check your country's patent law before publicly sharing your idea. It is important to understand the intellectual property laws in your country if you have any plans to bring your product to market in the future. When presenting, be cautious about sharing the specific details of what you made and focus on sharing the general operation and benefits of your product.

Non-discrimination Policy

The Codeavour continuously addresses issues of diversity and multiculturalism and is committed to engaging in actions that create inclusive communities, increase diversity, and eliminate discrimination. The Codeavour prohibits discrimination based on race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, and gender identity or expression in all of its programs and activities.

Release Agreement

By registering your child, you grant permission for your child to take part in the Codeavour and verify agreement with the following Codeavour photography/filming release: Without expectation of compensation or other remuneration of any kind, now or in the future, on behalf of my registered student, I as guardian do hereby give consent, permission, and authorization to Codeavour, including its parent, affiliates, subsidiaries, successors, members, directors, officers, principals, partners, and agents, to use their name, image and likeness, including all rights, title, and interest therein, for Codeavour's use in whatever form (digital, web-based, hard-print or otherwise) and for whatever purpose in perpetuity. Codeavour's use includes, without limitation, any advertising, video footage, recording, publication, website, radio, digital media, print media, or other promotional marketing or media activities, as well as, all film, motion picture, and television rights (e.g., free television, pay television, basic cable, subscription, video-on-demand, pay-per-view, syndication, digital streaming, and all other methods of transmission delivery systems and formats). Both my registered child and I as their guardian, hereby further release Codeavour from any claims or disputes, including damages in any form, for libel, slander, right of publicity, invasion of right of privacy, trademark infringement, or false endorsement, breach of contract, or any other tortious claim or personal right associated with Codeavour's use of said name, image and likeness, and further, hereby acknowledge that Codeavour shall have no obligation to use said name, image or likeness. This consent is given in perpetuity and does not require prior approval. By completing the online registration and paying the non-refundable registration fee, I hereby grant my child permission to participate in the Codeavour. I have been thoroughly informed of the rules and requirements of the Codeavour I understand and consent to my child being in virtual contact with Codeavour employees and volunteers to evaluate and advise my child's project. I hereby release Codeavour and any of its officers, directors, employees, or sponsors, from responsibility and liability for any damage, injury or illness that my









child may sustain as a result of or in any way connected to my child's participation in the Codeavour and, further, waive any rights to assert any claims against Codeavour for any damages allegedly sustained as a result of my child's participation in the Codeavour.

Behaviour Agreement

- I understand and agree that my child's behavior concerning their participation in the Codeavour is my responsibility. I will instruct my child in proper behavior and ensure that they respect and adhere to the Code of Conduct, which includes the Participant Community Guidelines and the following:
- The content of my child's project submission in the Codeavour shall be age-appropriate and non-discriminatory.
- My child's Codeavour project submission must be of a nature where it cannot cause harm to property, animals, my child or other children, and any other adults.
- Plagiarism, defined as when an author attempts to pass off someone else's work as their own, of any type and format, is strictly prohibited.
- In the event of (a) behavior problem(s) regarding my child's participation in the Codeavour failure to adhere to the Participant Community Guidelines, I understand that I will be contacted to correct any problem or issue. In the event a problem or issue cannot be corrected, I recognize my child will no longer be allowed to participate in the Codeavour for the remainder of the event year.

Codeavour International Participant Community Guidelines

Welcome to the Codeavour International! We are excited to have you join our global community of innovators and problem solvers. To ensure a positive and productive environment for everyone, we have established the following Community Guidelines. By participating in Codeavour, you agree to adhere to these guidelines:

1. RespectandCivility

- a. Be Respectful: Treat all participants, mentors, judges, and organizers with kindness and respect. Personal attacks, harassment, or bullying will not be tolerated.
- b. Constructive Feedback: Offer constructive and positive feedback. Criticize ideas, not people.









2. Integrity and Honesty

- a. Original Work: Ensure that all submissions are your original work. Plagiarism or copying without proper attribution is strictly prohibited.
- b. Accurate Information: Provide accurate and truthful information in all your communications and submissions.

3. Collaboration and Teamwork

- a. Team Participation: Work collaboratively and fairly within your team. Respect each team member's contributions and ideas.
- b. Inclusivity: Encourage and support a diverse and inclusive environment where everyone feels valued and heard.

4. Compliance with Rules and Laws

- a. Competition Rules: Follow all rules and guidelines outlined for the competition. Failure to comply may result in disqualification.
- b. Legal Compliance: Adhere to all applicable laws and regulations in your country and any country from which you participate.

5. Appropriate Content

- a. Respectful Communication: Use respectful and appropriate language in all communications. Avoid offensive, abusive, or profane language.
- b. No Harmful Content: Do not share content that promotes violence, discrimination, illegal activities, or any form of harm or hate speech.

6. Safety and Security

- a. Personal Information: Protect your personal information and respect the privacy of others. Do not share personal details without consent.
- b. Cybersecurity: Be mindful of cybersecurity practices to protect your projects and personal data.

7. Support and Guidance











- a. Mentorship: Utilize available mentors and resources for guidance and support. Respect their time and expertise.
- b. Help and Assistance: Do not hesitate to ask for help if you encounter any issues or have questions about the competition.

8. Fair Play

- a. Fair Competition: Compete fairly and avoid any actions that could be considered cheating or unfair advantage.
- b. Sportsmanship: Display good sportsmanship and congratulate other participants on their successes.

9. Community Engagement

- a. Active Participation: Engage actively in community discussions, forums, and events. Share your knowledge and learn from others.
- b. Positive Environment: Contribute to creating a positive, encouraging, and inspiring community atmosphere.

10. Violation Consequences

- a. Enforcement: Violations of these guidelines may result in warnings, removal of content, or disqualification from the competition.
- b. Reporting Issues: If you witness or experience any behavior that violates these guidelines, report it to the competition organizers immediately.

Thank you for being a part of the Codeavour International. Together, we can create an empowering and innovative environment for everyone. Let's code, collaborate, and create solutions that make a difference!



