

# INNOVATEX 4.0 – Presidency University

## MakerSpace Cluster | Standard Rule Book

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### Event Overview

Field	Details
Event Name	AppForge
Cluster	MakerSpace Cluster
Event Type	Hybrid Innovation Challenge
Mode	Hybrid
Team Size	Individual / Team of 2
Duration	6 Hours

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### Event Task / Objective

The objective of **AppForge – Mobile App Development Challenge** is to conduct a **college-level technical competition** that encourages undergraduate and postgraduate students to apply their academic knowledge to **real-world mobile application development**. The event is designed to enhance technical competency, innovation, and problem-solving skills among students through competitive and experiential learning.

#### Specific Objectives:

1. To provide a competitive platform for college students to **design, develop, and demonstrate functional mobile applications** addressing real-world and SDG-based problem statements.
2. To strengthen students' **practical understanding of mobile app development concepts**, tools, and frameworks beyond classroom learning.
3. To encourage **innovation, creativity, and analytical thinking** through theme-based and on-the-spot development challenges.

4. To promote **teamwork, time management, and professional coding practices** in a competitive academic environment.
  5. To expose students to **industry-oriented evaluation standards**, technical reviews, and presentation methodologies through expert jury assessment.
  6. To bridge the gap between **academic curriculum and industry expectations** by simulating real-world development workflows.
  7. To motivate students to build **socially relevant and sustainable digital solutions** aligned with the United Nations Sustainable Development Goals (SDGs).
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## Design / Technical Specifications

- The project must be a **functional mobile application** developed for **Android, iOS, or cross-platform platforms**.
  - Applications should be designed around **one selected SDG theme**, addressing a real-world or community-centric problem.
  - The app must follow a **modular and scalable architecture**, clearly separating UI, business logic, and data handling.
  - **UI/UX design** should be intuitive, user-friendly, accessible, and responsive across different screen sizes.
  - Development tools and technologies may include **Android Studio, Kotlin, Java, Swift, Flutter, React Native**, or equivalent mobile frameworks.
  - Backend integration (if applicable) may use **Firebase, REST APIs, databases, or cloud services**.
  - The application must demonstrate **core functional features**, proper navigation flow, and basic error handling.
  - **Data security and privacy considerations** must be addressed wherever user data is involved.
  - The app should be **tested for functionality, performance, and usability** before final submission.
  - Participants must be prepared to **present system architecture, technology stack, and design choices** during evaluation.
  - All code and design work must be **original**, and plagiarism will lead to disqualification.
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## General Guidelines

1. The competition is open to **UG and PG students** from recognized institutions.
  2. Each team must consist of **a maximum of two members**; interdisciplinary teams are encouraged.
  3. **Only one project submission per team** is permitted.
  4. Participants must register online within the stipulated deadline; confirmation will be shared via email or WhatsApp.
  5. Teams must select **one SDG-aligned theme** and develop a mobile application relevant to the chosen domain.
  6. All projects must be **original**; plagiarism or reuse of existing solutions will lead to immediate disqualification.
  7. Participants must bring their **own laptops, chargers, and required software/tools**.
  8. Internet access, power supply, and workspace will be provided at the venue.
  9. Teams must adhere to the **event schedule, time limits, and instructions** given by coordinators and jury members.
  10. Any form of **misconduct, rule violation, or false information** will result in disqualification.
  11. The **jury's decision will be final and binding** in all phases of evaluation.
  12. Participants are expected to maintain **discipline, professionalism, and safety** throughout the event.
  13. Organizers reserve the right to **modify rules, schedules, or evaluation criteria** if required.
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## Safety Rules

- ❖ Participants must strictly follow all **safety instructions** issued by the event coordinators and volunteers.
- ❖ Proper care must be taken while using **electrical equipment**, laptops, extension boxes, and charging devices provided at the venue.
- ❖ Any project involving **electrical components or hardware interfaces** must comply with basic electrical safety standards.

- ❖ Unsafe wiring, damaged cables, or improper use of power sources is **strictly prohibited**.
  - ❖ Participants must ensure that their workstations remain **clean, organized, and free from hazards**.
  - ❖ Running, overcrowding, or disruptive behavior inside the event arena is not permitted.
  - ❖ Volunteers and coordinators will **monitor safety compliance** throughout the event.
  - ❖ In case of any emergency or technical issue, participants must **immediately inform the event coordinators**.
  - ❖ Any act that compromises **personal safety, equipment safety, or venue safety** may lead to disqualification.
  - ❖ Participants are expected to maintain **discipline, professionalism, and responsible conduct** at all times.
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## Event Rounds / Structure

Round	Description	Duration
Round 1 – Online Screening	Preliminary round where teams submit and demonstrate a functional mobile application aligned with a selected SDG theme. Evaluation is based on problem identification, innovation, technical implementation, and usability.	Pre-Event (Online)
Round 2 – On-the-Spot Development	Shortlisted teams are given a new theme/problem statement and must design and develop a working mobile app prototype within the given time frame, focusing on rapid planning, UI/UX design, and core feature implementation.	On-Site (Time-Bound)
Final Evaluation – Creative Enhancement & Demo	Teams enhance their prototype with advanced or creative features and present the final application through live demonstration, technical explanation, and Q&A before the jury.	Same Day (On-Site)

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## Submission Guidelines

Final submissions must include:

- Each team must submit **only one mobile application project** developed specifically for this competition.
  - The submitted project must be a **functional mobile application** (Android / iOS / cross-platform) aligned with **one selected SDG theme**.
  - Teams must submit the following details during **Phase I (Online Screening)**:
    - Project title and brief overview
    - Problem statement and selected SDG theme
    - Technology stack used
    - Live demo link or **screen-recorded video demonstration**
    - Brief explanation of features and implementation approach
  - Submissions must be made **within the specified deadline**; late submissions will not be accepted.
  - The application must demonstrate **core functionality, UI/UX design, and basic backend logic** (if applicable).
  - All submitted work must be **original**; plagiarism or copied solutions will result in disqualification.
  - Shortlisted teams must be prepared to **modify, enhance, or redevelop** the application during on-site rounds.
  - During on-site rounds, teams must present a **working prototype** and explain system architecture, design decisions, and technical implementation.
  - Participants must ensure that their application is **stable and demo-ready** at the time of final evaluation.
  - Any false information or mismatch between submission and demonstration may lead to disqualification.
  - The **jury's decision regarding submissions and evaluations is final and binding**.
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## Judging Criteria

Criteria	Weightage
Innovation & Originality	20%
Technical Implementation	20%
Functionality & Working Output	20%
Real-World Impact & Relevance	20%
Presentation & Documentation	20%

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## Scoring Overview

Parameter	Max Points
Performance / Accuracy	50
Technical Design	25
Safety & Compliance	15
Innovation / Aesthetics	10
<b>Total</b>	<b>100</b>

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## Penalties & Disqualifications

Violation	Penalty
Late Submission	-10 Points
Unsafe Operation	Immediate Disqualification
Incomplete or Pre-built Work	-20 Points
Violation of Safety Zone	-15 Points / -10 Points
Misconduct or Unethical Practice	Permanent Ban

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## Awards & Recognition

Category	Prize	Remarks
1st Prize	₹20,000	Winner
2nd Prize	₹15,000	Runner-up
Special Mention	₹10,000	Creativity / Sustainability

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## Problem Statement / Challenge

### Domains / Themes

- Public Safety & Emergency Response
- Skill Development & Career Readiness
- Smart Home & IoT Control
- Urban Mobility & Transport
- Digital Accessibility & Inclusion

## Themes / SDG Problem Domains

Participants must choose **any ONE SDG-aligned theme** and develop an **innovative mobile application (Android, iOS, or cross-platform)** that addresses a real-world or community-centric problem. The application should demonstrate strong functionality, intuitive user experience, and practical social impact.

### **SDG 1 – Good Health & Well-Being**

Develop a mobile app that promotes healthcare access, wellness, or mental well-being. Solutions should improve health awareness, monitoring, or support services.

### **SDG 2 – Quality Education**

Create an educational mobile app that enhances learning and skill development. The solution should improve accessibility, engagement, or assessment methods.

### **SDG 3 – Clean Water & Sanitation**

Build a mobile app addressing water quality, sanitation awareness, or issue reporting. The solution should encourage conservation and safe water practices.

### **SDG 4 – Affordable & Clean Energy**

Develop a mobile app focused on clean energy usage or awareness. Applications may track consumption, efficiency, or renewable energy adoption.

### **SDG 5 – Industry, Innovation & Infrastructure**

Create a mobile app that supports innovation, infrastructure, or industrial processes. The solution should enhance productivity, automation, or digital infrastructure.

### **SDG 6 – Sustainable Cities & Communities**

Build a mobile app that improves urban living and community engagement. Solutions may address mobility, waste management, or public services.

### **SDG 7 – Responsible Consumption & Production**

Develop a mobile app promoting sustainable consumption and waste reduction. The solution should encourage responsible purchasing and resource efficiency.

### **SDG 8 – Climate Action**

Create a mobile app that supports environmental awareness or climate monitoring. Applications should help track, reduce, or visualize environmental impact.

### **SDG 9 – Peace, Justice & Strong Institutions**

Build a mobile app that enhances governance, transparency, or civic engagement. The solution should support accountability, legal awareness, or public services.

**Note:** Projects should demonstrate **innovation, feasibility, and real-world relevance**. Interdisciplinary and socially impactful solutions are encouraged.

