



App-A-Create (Hackathon)



INTRODUCTION:

[Blitzschlag'17](#) and [Forsk Technologies](#) presents App-a-create (Android App Development) . Android has a dictionary meaning of being a human that resembles automation. The true character of its name is it's the Google created software stack for creating comprehensive Mobile Applications and Software to realize the full potential of one's Mobile handset and its possibilities. Android is a comprehensive software stack of mobile devices that includes an operating system, middleware, and key application. This rich source of software bunch is used in Mobile Technology through its innovation module of The Android Software Development Kit (SDK). People are gradually moving towards various smart phone platforms; so to make their life easier, mobile apps are developed.

TASK:

Students are invited to raise the bar during this mobile app development throw down! Expand your technical and troubleshooting skill set while showcasing your innovation in the mobile frontier! The app must be based on Android Platform. You will be given a problem statement to develop an app that will be from the following categories:

- ❖ Business Tools: Accounting & Finance; HR, Legal & Logistics; Marketing & Analytics; Sales & CRM etc.
- ❖ Education: Academic Resources; Family; Foreign Languages; Teacher & Admission Tools etc.
- ❖ Entertainment: Books; Music & Radio; Online Video; Photos; TV; Movies etc.
- ❖ Games: Arcade & Action; Board & Card; Puzzle & Brain; Role Playing & Strategy; Sports Games; Virtual Worlds etc.
- ❖ Lifestyle: Astrology; Food & Health; Money; Religion; Shopping; Travel etc.
- ❖ News and Weather: News Reporting; Social News; Sports; Weather Forecasts etc.
- ❖ Productivity: Creative Tools; Developer Tools; Office Applications; Search and Browsing Tools; Task Management etc.
- ❖ Social and Communication: Blogging; Chat & IM; Email and Contacts; Phone and SMS; Social Networking etc
- ❖ Utilities: Alarm Clocks; Bookmarks; Calculators; Dictionaries; Notepads etc.

The problem statement will be given 3 days prior to this event. You will have about **70** hours to develop an app based on the problem statement given to you. This is your chance to prove your mobile coding prowess with this exciting national technology competition.

Skills:

- Ability to program in Android language using **Android Studio** only
- Use an Array, Hash, JSON or file to manipulate or display data
- Store/retrieve information locally on the device using the device's built-in database platform
- Send/receive data to an Internet-based data source to display web pages (e.g., URL/Web Request) and/or exchange JSON data with a web service.
- Sense the orientation of the device, as it is tilted/rotated, in order to provide user input to the application
- Provide implicit intents to share or send data through other apps in the device
- Capture jpeg/png images from the device's built-in camera and store/retrieve/display them within the application
- Use Platform-specific APIs to support location, games, gyroscope or other platform features
- Be able to run your prototype application within the simulator included in the SDK installed on your computer

Event Rules and Specifications:

Event Structure

- ✓ Register your team on www.blitzschlag.org
- ✓ Problem statement will be declared on **23rd February 2017 12:00 noon.**
- ✓ Contestants have to design an android application till 26th February.
- ✓ Teams must submit their progress report (code) on 24th and 25th till 5pm.
- ✓ Final presentation cum evaluation round will be held at CSE Department, MNIT JAIPUR at **26th February 2017 9:00 am.**
- ✓ Teams must be present at MNIT to present their app on 26th February only.

Team Size

Minimum 1 and Maximum 3 participants are allowed in a team. All the members of a team must be of same college.

Eligibility

Any student from a recognized institute/college of the country can participate in this event. You are requested to bring your laptops.

Rules

- Participants will be considered only after the timely submission of the app.

- The decision of the judges shall be final and binding on all the participants.
- The organizers reserve all rights to change any or all of the above rules.
However, you are suggested to keep checking the website regularly.

Resources:

Note: No third party apps to build a solution in HTML or JavaScript, and then convert to native code are allowed! The contest is exclusively for those who can build an app in the native programming environment using object-oriented mobile app programming skills.

- BYOC - bring your own computer already loaded up with the SDK for your selected platform (Android) installed and ready to go (Minimum API levels: Android API 19+ (4.4),) - see instructions below.
- Bring whatever open source libraries, sample code, reference books, etc. you would like to use with you to the contest.
- BYOD - You may bring your own Android device, if you choose. While not required, it may be helpful as a means of testing, and may be faster than using an emulator/simulator

For all Platforms: It is very important that you have your development computer fully configured and tested prior to entering the contest. You will not have sufficient time and/or network bandwidth during the competition to install and configure the necessary tools. Preparation is the first step to success in this “brave new world” of mobile application development.

For Android Studio: Go to <https://developer.android.com/sdk/index.html> and select the “Download Android Studio” button.

Scoring:

If it doesn't **compile**, it will not be evaluated.

Please ensure that a working prototype is submitted for judging, along with all the source code and related resources.

- 70% Successfully meets functional requirements
- 15% Technical elegance of solution
- 10% Creativity of solution
- 5% Code documentation

Prizes worth INR 20000

+Many More Exciting Goodies
Certificates will be provided to all the contestants.

Best Design: Rewards the most skilled team with the best implemented idea from the design perspective. The award will go to the app with the best (friendliest) user interface.

Best Innovation: Rewards the most innovative idea. This award's purpose is to encourage participants who didn't have enough skills to complete the implementing part, but they came up with a great idea and work towards developing it to an application.

Best Overall Score: Rewards the team with the highest total score in all judging criteria. So, the team which gathers the above characteristics, skillfully designed, innovative, popular and stands out will have this award.



About Forsk Technologies

Forsk Technologies is based out of Jaipur and works with universities to bring industry approach of product development among their students using technology and data. Currently, Forsk developer's team is working on developing a Paytm like wallet and building automation products in IoT domain!!

Forsk's ESTP helps students fill industry gap by improving skills in emerging technologies, better connect with industry and secure quality career in industry. All the ESTP tracks are project based and designed around industry needs. Forsk's founding team has more than 14+ years of experience working with industry giants like Qualcomm, Samsung, Nokia and startups like Mango Technologies. Team has extensive hands-on experience of working on IoT, Data Analytics, Fullstack and mobile apps across multiple platforms.

Contact us

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