

**Alumni**  
**Guest Lecture on**  
**Mobile Application Development**

**23rd December 2021**  
**Organized by Department of Computer Science & Engineering**

**Participants:**  
**II Year B.Tech – Computer Science & Engineering Students – MITS**

**Resource Person: Mr.Mohan Babu Raja, System Architect, HID Mobile Apps Team,  
Chennai (MITS-Alumni)**



**MOHAN BABU RAJA**  
Mobile Leader | System Architect

18 years of experience in IT who excelled in designing and developing end to end mobile solutions. Proficient in app security. Handled large teams comprising of both Android and iOS.

A proud alumni of MITS and topper of CSE branch 2003 outgoing batch.

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A Guest Lecture on “**Mobile Application Development**” was organized by the Department of Computer Science & Engineering for II B. Tech students.

The inauguration of the Guest Lecture was started at 11:00 A.M in Auditorium, the dignitaries were Dr.R. Kalpana, HoD-CSE, Mr.Mohan Babu Raja, System Architect, HID Mobile Apps Team, Chennai, Dr.Ramesh Reddy, Alumni Relation Officer.

The lecture was started with opening remarks by, Dr.R. Kalpana who thanked Management for this great initiation of creating an opportunity to invite the Alumni members of the institute and enabling them to interact with the students and enlightening them with the current developments in the corporate world. Dr.Ramesh Reddy has shown pleasure and promised to conduct many more lectures in future for the benefit of the students.

Mr. BSH. Shayeez Ahamed has introduced about the speaker and invited him to share his valuable experiences to the students. The number of students participated in the lecture were around 510.

After inaugural session, the main session was started at 11:30 A.M, Mr. Mohan Babu Raja explained about Mobile Application Development.

### **What is mobile application development?**

Mobile application development is the set of processes and procedures involved in writing software for small, wireless computing devices, such as smartphones and other hand-held devices.

Like web application development, mobile application development has its roots in more traditional software development. One critical difference, however, is that mobile apps are often written specifically to take advantage of the unique features of a particular mobile device. For example, a gaming app might be written to take advantage of the iPhone's accelerometer or a

mobile health app might be written to take advantage of a smartwatch's temperature sensor.

Today, the two most prominent mobile platforms are iOS from Apple and Android from Google. Phones and tablets from Apple come preloaded with essential applications, including a full web browser and the Apple App Store. Android devices also come preloaded with similar apps and you can install more using the Google Play Store.

### Types of mobile applications

In the early years of mobile apps, the only way to ensure an app could perform optimally on any device was to develop the app natively. This meant that new code had to be written specifically for each device's specific processor. Today, the majority of mobile applications developed are device-agnostic.

In the past, if an app needed to be cross-platform and run on multiple operating systems (OSes), there was little, if any, code that could be reused from the initial development project. Essentially, each device required its own mobile app development project with its own code base. Modern cross-platform tools use common languages such as C# and JavaScript to share code across projects; more importantly, they integrate well with application lifecycle management tools, such as Jenkins. This enables developers to use a single codebase for Apple iOS, Google Android and progressive web apps (PWAs). PWAs are built to take advantage of native mobile device features, without requiring the end user to visit an app store, make a purchase and download software locally. Instead, a PWA can be located with a search engine query and accessed immediately through a browser, thereby eliminating the need for e-commerce merchants to develop native apps for multiple mobile OSes.

Just like YouTube videos, PWA content is downloaded progressively, which provides the end user with a better user experience than a traditional website that uses responsive design. Progressive web apps may also be referred to as *instant mobile apps*.

Before developing an app, you need to determine which type you'll be creating. Here's a breakdown of several types of mobile app development technologies with information about each.

- **Native applications.** These applications are built using integrated development environments (IDEs) and languages for mobile OSes such as Apple iOS or Google Android. Native apps enable you to customize necessary features, but they can be more costly than other technologies.

- **Hybrid apps.** These are web apps that act like native apps. They are developed using technologies such as HTML, JavaScript and Cascading Style Sheets (CSS). Hybrid apps are more cost-effective to develop than native apps and can be created faster, but they aren't as feature-rich as native applications.
- **Progressive web apps.** A PWA is a website that looks and behaves as if it is a mobile app. These applications are developed with web technologies such as Facebook React.
- **Encapsulated apps.** An encapsulated app runs within a container app. Products such as the Microsoft Power App drag-and-drop app creation tool enable less experienced developers to build a mobile application rapidly. But the lack of isolation from the core OS, OS lock-in and the relative newness could pose problems.
- **Frameworks and libraries.** You can use this reusable code written by someone else to accelerate your development of a mobile app.

### **Costs of developing a mobile app**

The cost of developing an app can range from almost nothing to millions of dollars -- it all depends on the type of app and its intended use. Following is a breakdown of the ranges you can expect to pay for building a mobile app:

- **No-code app builders.** A developer doesn't need to know how to code if the app has basic feature requirements. Free tools such as GoodBarber, Appery.io, Shoutem, Appy Pie and BuildFire offer the freedom to build apps without learning Swift or other programming languages. Although these tools are limited in their functionality and can't be used to create a game with no-code apps, the no-code approach will meet most organization's needs.
- **Enterprise apps.** The concept of Citizen Developer, where anyone can build a mobile app, is exploding with tools such as Amazon's HoneyCode, Mendix and Microsoft Power Suite. These devices offer drag-and-drop interfaces that can connect to data sources and manage content flow. The price is typically tied to a monthly subscription of less than \$50.
- **Mobile optimized website.** Although it's most practical to build websites for both desktop and mobile devices, the website content management tool you're using will likely have plugins you can buy for less than \$100 to optimize your website for mobile devices.
- **Complex apps.** An app that requires features, such as 3D, gaming or sophisticated artificial intelligence (AI), will likely need to be developed as a native app. The cost for a complex app

can typically be \$250,000 or more. The price is directly related to the scarcity of mobile developers.

### Key Takeaways of MAD:

- Research.
- Identify Target Audience.
- Right Platform Selection.
- Set Plan of Action.
- Know your Budget.
- Think Out of the Box.
- Smooth and Efficient.
- User Experience.

At the end of session resource person conducted Quiz on Mobile Application Development. There were 3 winners from the IInd CSE Students. Each winner received 1000 rupees' cash prize by resource person.

The session is completed at 12:30 P.M, and he clarified the queries of enthusiastic young minds with a great zeal during the interaction time.

The resource person was honored by a token of respectable appreciation by Dr.R. Kalpana HoD-CSE, Dr.Ramesh Reddy, Alumni Relation Officer and all faculty members of the department.

**Vote of Thanks:** Mr. BSH. Shayeez Ahamed proposed a vote of thanks to Resource person, HOD and Alumni Relations Officer for attending the function. He extended his thanks to the Principal, and the Management for their support to conduct the training.



### విద్యార్థులు వైపుణ్యాలను పెంపొందించుకోవాలి

కురబలకోట, డిసెంబరు 23: విద్యార్థులు వైపుణ్యాలను పెంపొందించుకోవాలని రిసోర్స్ పర్సన్ మోహన్ బాబు పేర్కొన్నారు. అం గళ్లు నమీషంలోని మిట్స్ ఇంజనీరింగ్ కళాశాల అల్యూమ్ని అసోసియేషన్ ఆధ్వర్యంలో నీఎస్ఈఆఫ్ అవ గాహన సదస్సును నిర్వహించారు. మొబైల్ యాప్ డెవలప్ మెంట్ పై మార్కెటింగ్ రంగంలో మెరుగైన ఉద్యోగావకాశాలున్నాయని, వీటిని నవ్వినియోగం చేసుకోవాలన్నారు. కొత్త సాంకేతికలపై హార్మిస్సాయిలో అవగాహన పెంచుకోవాలన్నారు. అల్యూమ్ని రిలేషన్ ఆఫీసర్ రమేష్ రెడ్డి, విభాగాధిపతి కల్పన, కోఆర్డినేటర్ అహ్మద్ తదితరులు పాల్గొన్నారు.



విద్యార్థులకు సూచనలిస్తున్న మోహన్ బాబు

# మొబైల్ యాప్ డెవలప్మెంట్ పై మెరుగుగా ఉద్యోగ అవకాశాలు

మదనపల్లె, డిసెంబర్ 23(కురుక్షేత్రం ప్రతినిధి): మదనపల్లె ఇన్స్టిట్యూట్ ఆఫ్ టెక్నాలజీ అండ్ సైన్స్, మదనపల్లె మిట్స్ కళాశాలలో అల్యూమిని అసోసియేషన్ వారు కంప్యూటర్ సైన్స్ విద్యార్థులకు గెస్ట్ లెక్చర్ ను ఏర్పాటు చేసినారు. ఈ కార్యక్రమానికి ముఖ్య అతిథిగా కళాశాల పూర్వపు విద్యార్థి మోహన్ బాబు రాజా, సిస్టం ఆర్కిటెక్ట్, హెచ్ ఐ డి మొబైల్స్ యాప్ టీం, హెచ్ ఐ డి గ్లోబల్ కంపనీ, చెన్నై పాల్గొన్నారు. ఆయన మాట్లాడుతూ ప్రస్తుతం మొబైల్ యాప్ డెవలప్మెంట్ పై మార్కెట్ లో మెరుగుగా ఉద్యోగ అవకాశాలు ఉన్నాయని, విద్యార్థులు ప్రస్తుతం జరుగుతున్న టెక్నాలజీస్



పై అవగహన పెంచుకోవాలని అన్నారు. ప్రతి ఒక్కరు వారి వారి మొబైల్స్ లో యాప్ లు వాడూతూ ఉంటారు. ఒక కంప్యూటర్ సైన్స్ విద్యార్థిగా మన ఆలోచన ఈ మొబైల్ యాప్ డెవలప్ చేయడానికి కావలసిన సాఫ్ట్వేర్ గురుంచి మరియు టెక్నాలజీ గురుంచి తెలిసికోవాలి. ప్రస్తుతం ఆండ్రాయిడ్ ఆపరేటింగ్ సిస్టం మరియు ఐ ఫోన్ ఆపరేటింగ్ సిస్టం కు సంబంధించిన యాప్ డెవలప్మెంట్లు జరుగుతున్నాయని, ప్రస్తుతం ఉన్న టెక్నాలజీ పరంగా ప్రతి ఒక్క వెబ్ సైట్ కు ఒక యాప్ డెవలప్ చేస్తున్నారని, విద్యార్థులు ఈ టెక్నాలజీ పై అవగహన పెంచుకోవాలి అన్నారు. ఈ కార్యక్రమం లో అల్యూమిని రేలషన్ ఆఫీసర్ డాక్టర్ రమేష్ రెడ్డి, కంప్యూటర్ సైన్స్ విభాగాధిపతి డాక్టర్ ఆర్ కల్పన, కోఆర్డినేటర్ షాయిజ్ అహమ్మద్ పాల్గొన్నారు.