

**Title:** Utilization of Mobile Application Projects under Neural disease diagnosis

**Speaker:** Dr. Mamta Pandey

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**Venue:** Google Meet

**Abstract:**

In our research journey we found that, our body is constantly communicating information about our health. This information can be captured through physiological instruments that measures heart rate, blood pressure, Oxygen Saturation Label, Blood Glucose, Nerve conduction, brain activity and so forth. The World Health Organization (WHO) is a specialized agency of United Nations responsible for International Public Health has published a report with title of “Public health challenges: Neurological disorders”. Neurological disorders are increasingly recognized as major causes of death and disability worldwide. Mobile application (app) industries have rapid growth and highest demand in application software. Software firms also come in new app development for biomedical sector and disease diagnosis. In the past few years, the mobile application (app) industry has witnessed rapid growth owing to massive demand and popularity for apps. As a result, various software development firms also start taking up new projects based on mobile app development to remain competitive. App distribution is efficiently carried out using digital distribution channels owned and maintained by dominating cyber players like Google. Faster diffusion of mobile devices into the customer market made developers rely on conventional processes and approaches of software development to use in the context of mobile app development. Notwithstanding a shortage of standards, guidelines, and practices, unconventional apps are developed using conventional development standards. Lack of significant research initiatives pertaining to mobile app development provides an interesting area to investigate in computer science. Fostering quality into a software system is of utmost importance to ensure its acceptability, durability, and maintainability. It is essential to figure out at the business design level that what characteristics form a successful app, and what lacunae may result in a disaster. The mobile app development is also challenging due to the ever-changing requirements from the user community which can be addressed through flexible development approaches. Mobile app developers follow the traditional software development mechanism but process of app development is different. Traditional methods are not fit for app development so that apps suffer to fulfil the user’s expectation including low quality, not deliver on time etc. This is validated by various literatures. Very little work has done in the field of app development. There is a strong need of software development process for apps. To solve this problem the customized approaches have proposed. Initially, the app issues have identified and further interrelationships have established among the issues. All software development approaches are not suitable for app development, it is difficult to decide which approach is suitable for app development so that we have proposed a framework for selection of app development model. Due to lack of proper planning apps are getting unsuccessful. Hence we have proposed a framework to estimate the effort based on the features of apps. Since, app development approach is different so that app defects are also different from the traditional software. We have compared the defects of mobile apps with desktop and web apps. It is found that mobile apps are more defecting prone than desktop and web applications. The objective of the proposed thesis work is to identify and analyze the primary concern areas in mobile app development and propose a holistic approach to application development life cycle (ADLC) in the context of mobile devices. In this technological age mobile software system has important role in human life style, health and security issue has high value. I observe that mobile app can provide a best platform for neural disease diagnosis like Parkinson’s, Alzheimer’s, and other neural disease. It has more areas for research. By using these techniques, we can easily diagnose patient without clinical visit.

**Bio (in her own words):**

My general introduction to Computer Science Engineering began in RGPV University Bhopal and I found my doctoral research journey starting point at Jaypee University of Engineering & Technology, Guna. Under the valuable guidance of its faculty members, I got exposed entire spectrum of Computer Science Engineering. In a competitive environment where research goes hand- in-hand with learning, I also found a lot of drills in theoretical research work and implementation in Mobile Application sector. My academic and co-curricular documents have been consistently good, throughout the school as well as now. I have achieved in first division with honors in M.Tech program. I have achieved a milestone in research journey with six SCI and three Scopus indexed publications, two book chapters with more than seven International and national conferences paper.