

# **THE DESIGN AND DEVELOPMENT OF PINK BOOK APP**

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## ***ABSTRACT***

This final year project explores the design and development of the Pink Book app, a mobile application created to detect early signs of Autism Spectrum Disorder (ASD) during pregnancy based on user input. Utilizing Android Studio for development, Firebase for backend services, and the BLoC (Business Logic Component) architecture for state management, the app integrates advanced algorithms and machine learning models to analyze maternal health records, genetic information. The goal is to identify potential autism risk factors with high accuracy. Designed to be intuitive and user-friendly, the Pink Book app is accessible to both expectant parents and healthcare professionals. Through rigorous testing, the app has demonstrated reliability and effectiveness in early autism risk assessment, enabling timely interventions that can improve developmental outcomes for children at risk of ASD. This project highlights the app's potential to revolutionize prenatal care through innovative technology, providing a valuable tool for early autism detection and contributing to research in prenatal health.

**Keywords:** BLoC, Autism Detection, Infant Health, Innovative Technology, Pregnancy care, Health Care System, Autism, Autism Risk