



DEVELOPMENT OF A MEDICAL EXPERT SYSTEM FOR QUALITY ANTENATAL CARE IN TANZANIA



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ABSTRACT

Maternal mortality remains a global problem, with approximately 830 women dying every day as a result of childbirth and pregnancy complications. The maternal mortality ratio is as high as 524 deaths per 100,000 live births in Tanzania.

Studies show that providing women with maternal health information can help achieve the goal of reducing global maternal mortality to less than 70 maternal deaths per 100,000 live births by 2030. Expert systems have shown promising results providing medical diagnostics, including for pregnancy complications.

The developed system *MamaApp* is capable of diagnosing pregnancy complications with confidence ranging from 79% to 100%.

OBJECTIVES

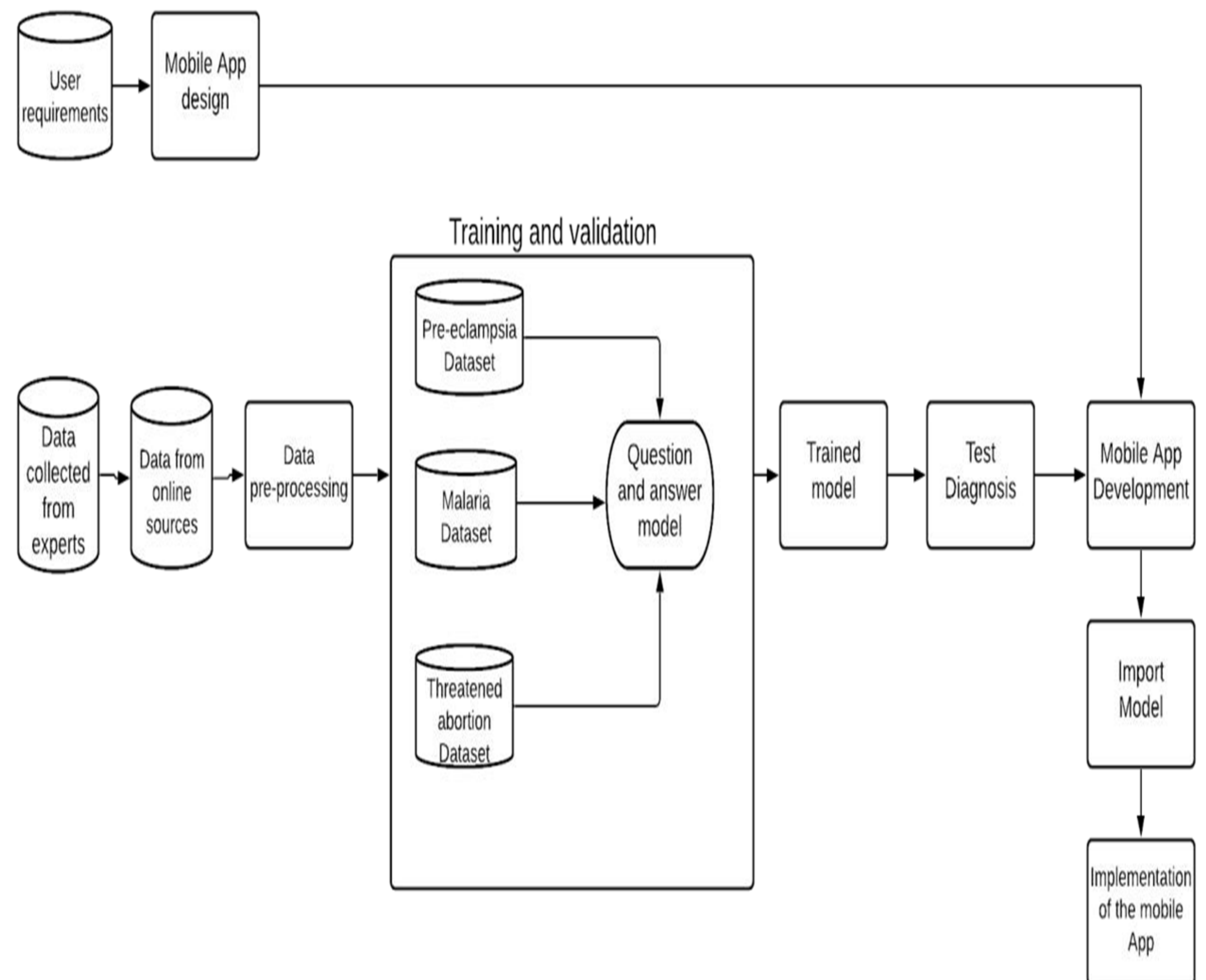
THE MAIN OBJECTIVE

To develop a smartphone-based expert system for the early detection of the key causes of maternal mortality in Tanzania, as well as for the effective provision of general information on obstetric treatment and dangerous symptoms at various stages of pregnancy.

SPECIFIC OBJECTIVE

- To identify system requirements and knowledge seeking behavior of pregnant women in Tanzania.
- To develop an expert system for smartphone devices, which will diagnose the main causes of maternal mortality in Tanzania and provide pregnant women with general knowledge on pregnancy and antenatal care services.
- To assess the accuracy of the expert system
- To Validate the developed system with pregnant women and Medical experts.

CONCEPTUAL FRAMEWORK



RESULT: MamaApp

