PNEUMONIA KILLS. WE CAN CHANGE THAT.

An application to diagnose pulmonary disease.

THE PROBLEM
Our capstone is part of an initiative to solve lower respiratory disease issues in developing countries. The number one cause of death of children between 1 and 5 is lower respiratory infections. Detection of pneumonia is difficult, making a standardized diagnosis inaccurate and unreliable. Previous attempts at solving this issue have been disappointing; a recent application has proven to be ineffective in improving a patient’s quality of life.

OUR SOLUTION
Our solution uses the user-centered design approach to translate the WHO guidelines for diagnosing pneumonia into an algorithm implemented on Android. Our literature review and usability studies pointed us to design with target audience, usability, and expressed uncertainty in mind. We have built an application that can adapt as healthcare research advances, can be translated into any language, and is accessible worldwide through the Google Play store. This application will save lives here – and across the globe.

LITERATURE REVIEW
We evaluated current medical research to discover design requirements and take inspiration from previous medical applications.

DESIGN DECISIONS
We made educated designs with particular interest in usability and universal design, and clarity.

EVALUATION
We made iterative improvements by evaluating the application by conducting usability studies with doctors and amateur users.

DEVELOPMENT
We finished development with a modular framework for consistent updates. Our application is available for download from the Google Play store.

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