Mobile App Dec Final Project Proposal

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The main idea of this app would be to identify medical issues from an x-ray, or other medical imaging device, and determine any issues within the image. This images would be uploaded and run through the model and then added to a network database to be stored with other data corresponding to the same patient.

This type of application could be used in hospitals or other medical facilities to speed up the process of analyzing xrays, catscans, etc. Currently doctors have to review medical images such as these by hand which can take a long time when they could instead be treating patients. An app like this could be used to quickly identify any issues before a doctor looks at it, saving their time, and the cost of paying them during this time.

Challenges with this project would be setting up a database to hold image data. Also finding a pre-built model to integrate into the app. Actually training a model like this would be outside the scope of this project. Also, I would need to get the correct permissions from the user to access the camera and photo library for uploading photos.

I am planning on using realm db for the database in this app. Therefore, when an image is uploaded to the database, it is available on any other device with access to the same database. I would also use the tensorflow library to run the model. I would also like to use firebase to monitor app crashes, analytics, etc. However, I'm not exactly sure what kind of data I would be able to get using firebase because I wouldn't actually be publishing the app.