**Title:** Skin Lesion Classification using Neural Network Model

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**Objective:** The goal of this project is to develop a web service which accepts an image of a skin lesion and returns a prediction as to whether the lesion is malignant or benign.

**Approach:** Our approach entails a frontend web service which can be accessed through the browser. Users interested in classifying a skin lesion can upload an image of the lesion through our web service. The image is then processed and posted to a server running a Docker container that contains a TensorFlow image and can call methods from the TensorFlow library. A neural network model trained on thousands of labeled skin lesion images can then be used to determine the likelihood that the image contains a malignant or benign lesion. The server then stores the results of the classification in a SQL database and returns a prediction to the user.

*Frontend Web Service:* The frontend web service was built using React, a Javascript library.

*Backend Server:*

*Image database (SQL):*

**Results:**

**Future directions:**