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| Define CS fit, intro CL | <div>CUSTOMER SEGMENT(S)<div>CS</div></div> <p>Patient come under the category of individual users.</p> <p>A group of medical professionals come under the category of business users</p> | <div>CUSTOMER LIMITATIONS<div>CL</div></div> <p>Patients and the ophthalmologist can use the application using their smartphones, laptops, and iPads as well, because our application is a web application that can be used on any device. The application must be device-friendly.</p> | <div>AVAILABLE SOLUTIONS<div>AS</div></div> <p>In this project, we intend to build a Deep Learning Fundus Image Analysis For Early Detection Of Diabetic Retinopathy using a convolutional neural network (CNN).We plan on creating a web application where the user interacts with the UI (User Interface) to choose the image. The chosen image is analysed by the model which is integrated with flask application. The Xception Model analyses the image, then the prediction is showcased on the Flask UI.</p> |
| | <div>PROBLEMS/PAINS<div>PR</div></div> <p>A patient needs a way to detect Diabetic Retinopathy as early as possible because the treatment can reduce the risk of vision loss. An ophthalmologist needs a way to automate the diagnosis process because the time, effort and cost is significantly reduced.</p> <p>A hospital management needs a way to have a count on the number of patients having Diabetic Retinopathy because they consider them for further evaluations.</p> | <div>PROBLEM ROOT/CAUSE<div></div></div> <p>Users are reluctant to do the tedious and trivial calculations Diabetic Retinopathy (DR) is a common complication of diabetes mellitus, which causes lesions on the retina that affect vision. Unfortunately, DR is not a reversible process, and treatment only sustains vision. The manual diagnosis process of DR retina fundus images by ophthalmologists is time, effort and cost-consuming and prone to misdiagnosis unlike computer-aided diagnosis systems.</p> | <div>BEHAVIOR<div>BE</div></div> <p>Users have the option of uploading photographs from their local computer or their drive. The outcome will be presented using the Xception learning model along with a graphical depiction of the diagnostic. Thus the user can determine the severity of the illness.</p> |
| Identify strong TR & EM | <div>TRIGGERS TO ACT<div>TR</div></div> <p>This programme allows users to obtain findings when they have symptoms that are connected to a particular illness.</p> | <div>YOUR SOLUTION<div>S</div></div> <p>In this project, we are building a web application that allows users to upload photographs. The image is analysed by the Xception Model, and the prediction is subsequently shown on the display.</p> | <div>CHANNELS of BEHAVIOR<div>CH</div></div> <p>Offline</p> <p>This application is not available in offline mode.</p> |
| | <div>EMOTIONS<div>EM</div></div> <p>Before: User is not aware of that the diagnosis may lead to blindness. The early stage of identification is very important to cure the blindness.</p> <p>After: The user can get an idea of the severity of the symptoms of the disease and take precautions at an early stage to avoid blindness.</p> | | <p>Online</p> <p>The application will be marketed through the usage of various social media platforms. As users begin to use the application, ratings in Google, resulting in a huge influx of customers.</p> |