
PREETI MAAN

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Required Skills:

No preference

Preferred Team Communications:

Conference Call, to be discussed

Data Sources:

FHIR, to Be discussed.

Other Items:

Project has time zone flexibility.
Mentors and students will determine a good time for virtual meeting

Team Info:

Needs a Developer, Analyst and QA. Allows one team of 4-6 members.

VITAMIN D DEFICIENCY RECOMMENDER

In human body vitamin D is important for skeletal development, bone health maintenance, and neuromuscular functioning and thus its deficiency or insufficiency in human body can lead to numerous health problems. It affects people of all ages, but the signs of the deficiency are mostly nonspecific it often goes unrecognized and untreated. The treatment goal is to normalize vitamin D levels to prevent adverse health outcomes. Preventive measures include recommending supplements and diet. The goal is to create an application that identifies people that are at a higher risk of vitamin D deficiency to provide recommendations for vitamin D deficiency test and based on that suggest medication or dietary supplements and sun exposure.

PROJECT OBJECTIVES

Objective is to input parameters like patient age, exposure to sunlight, work and living conditions, use of medication that alter vitamin D metabolism, Obesity, renal failure, osteoporosis as a diagnosis, etc to calculate risk of vitamin D deficiency and suggest vitamin D screening and if they are deficient recommend vitamin supplement dose and dietary supplements.

SUCCESSFUL PROJECT

The application is able to predict the risk of a person being Vitamin D deficient and suggest screening for vitamin D if the risk is high.

Intellectual Property: None