Product/Idea

Q. What is the problem you are trying to solve?

Our project aims for the betterment of the healthcare sector in India. We are working on timely detection of diseases on the basis of commonly used medical reports. In India, most of the population underestimates the symptoms of a particular disease and do not consult a doctor in time, which results in pernicious disease eventually.

Q. How does your idea address the problem?

We are working on a wide range of diseases and detecting them using advanced AI techniques. We aim at providing a free and fast alternative for detecting a disease based on some medical data.

Q. Who are the target customers?

Anyone. All the user has to do is go on to our website or download the ios or android app.

Q. What makes your idea unique?

Our idea is unique as it uses AI and machine learning techniques to detect disease and also tell how prone a person is towards that disease by predicting the probability. Also, there is no such app currently, in the market that covers such a large number of diseases and with highly accurate results. The UI is very friendly as all you need to do is click a photo(of the skin or your x-ray result(radiology)) and upload or enter your medical data.

Q. Do you have a revenue generation model?

No. Currently, we focus on providing these services for free to the audience. As detecting a particular disease is time and cost expensive hence we provide a free and fast alternative for detecting disease.

Q. What are the geographies, do you think the idea would be suitable for?

Our project is available for anyone belonging to any nation. But the main training of most of our AI models is done on Indian data.

Q. What are the risks associated with your idea and how can you mitigate it?

Our algorithms are not perfect, there is a room for 10-15 percent error.

Q. Who are the stakeholders involved in order to bring this idea/product/service to the market?

Hospitals, Government, Pharmacies

Intellectual Property Assessment

Q. Is your idea patentable or patented? Patentable.

Q. Is your idea built on existing work? If so, how is it different?

MYCIN was an early backward chaining expert system that used artificial intelligence to identify bacteria causing severe infections to recommend antibiotics. Over the past few years, the inefficiency and failure of expert systems have been proved, as:

- 1. Expert systems require a huge amount of data. This limits their use for multiple areas, which require huge volumes of data. Also, the time consumption and complexity of the model increases as the size of data is increased.
- 2. Expert systems do not provide common sense-rich results.
- 3. The responses are not creative.
- 4. Not capable of explaining the logic and reasoning behind a decision.
- 5. There is no flexibility and ability to adapt to changing environments.

The above limitations make the expert systems less flexible and limit their use. Also, MYCIN covered only Bacterial infections. We try to overcome this limitation by using advanced AI and machine learning techniques and also predicting for a wide range of diseases.

Prototype/ Proof of Concept

Q. What is the nature of the prototype/ proof of concept, you would be able to submit?

The prototype we are submitting consists of a website, an IOS app and an android app. We have covered and deployed our project on all platforms(like IOS, android, windows etc.).

Q. Have you completed pilot tests for your prototype/POC? If so please share.

The tests have been completed and the functionality of the project is verified. A video is shared which shows the testing.

Q. What is the approximate cost of developing the prototype? Not calculated yet.

Supporting details

Q. What regulatory requirements have to be met to bring the idea to life?

Currently, all requirements are fulfilled, and the project is live.

Q. Do you have a business plan/ commercialization strategy? If so please share.

To be decided.

- **Q. What is a rough estimate of manufacturing/operational costs?** To be decided.
- Q. What is the volume of products/ amount of revenue do you expect to make in the first year?

To be decided.

Our software identifies the key factors/markers of health and fitness of an individual, based on which will recommend corrective measures and if an anomalous pattern of markers is detected. Further, the software gives a detailed report of the detected observations along with the markers recorded. The software works in two stages, Stage 1 Prevention: As soon as abnormal markers are detected, the software starts recommending corrective measures for early prevention of any condition/disease. Stage 2 Detection: The software is fully capable and equipped with 11 different machine learning models to detect any existing condition in the patient. Once the disease is detected, some immediate relief measures and home remedies are suggested, further the GPS coordinates of the user are fetched and 3 nearest hospitals are recommended. The software is also furnished with additional features like alerting the concerned authorities and sending data and GPS location to emergency contacts.