**IDEATION PHASE**

**BRAINSTORMING**

**Kavya AP:**

* Based upon the symptoms given to the machine it identities whether it is human or any other living being.
* It segregates the type of liver disease (liver cirrhosis, fatty liver disease, hepatitis) and suggests the correct medication that need to be taken.
* Based upon the symptoms the machine gives the results- how many days does it takes to recover form that particular liver disease
* According to the liver disease... the software suggests the patient intake like fruits, vegetables, and medicine.

**Madhulika:**

* Taking real-world clinical practice of CAD performed by radiologists, we can focus on the machine-predicted region of interest and can reduce human error to the small and hard-to-see lesions.
* To predict risk of liver disease for a person, based on the blood test report results of the user.
* Variables such as age, gender, total Bilirubin, direct Bilirubin, total proteins, albumin, A/G ratio, SGPT, SGOT and Alkphos could be taken.
* Data could be analyzed and integrated if they are to produce models about physiological mechanisms of pathogenesis.

**Rithika AM:**

* Patients with Liver disease have been continuously increasing because of excessive consumption of alcohol, inhale of harmful gases, intake of contaminated food, pickles and drugs. This dataset was used to evaluate prediction algorithms in an effort to reduce burden on doctors.
* Naive Bayes classifiers are a family of simple probabilistic classifiers based on applying Bayes’ theorem with strong (naive) independence assumptions between the features. They are among the simplest Bayesian network models, but coupled with kernel density estimation, they can achieve higher accuracy levels.
* To do the prediction, we can apply the values received as input by the node and define activation function along the incoming arcs, adjusted by the weights of the arcs. An ANN is trained based on backpropagation algorithm.

**KIRTHIGA:**

* To evaluate **prediction** algorithms in an effort to reduce burden on doctors.
* It is a binary classification problem, where given the above set of features, we need to predict if a given patient has liver disease or not. ROC-AUC is typically used for binary classification.
* KNN captures the idea of similarity (sometimes called distance, proximity, or closeness) with some mathematics we might have learned in our childhood calculating the distance between points on a graph.
* It segregates the type of liver disease (liver cirrhosis, fatty liver disease, hepatitis) and suggests the proper medication that need to be taken.