**Project Based Learning 2**

**Team Members:**

* Sumit Patil (SC58)
* Yashowardhan Shinde (SC69)
* Aryan Kenchappagol (SC14)
* Yash Panchwatkar (SC68)

**Problem Statement:**

Heart Failure Prediction using Machine Learning model during the follow up period of a patient when he/she has been diagnosed with a Heart Condition.

**Motivation:**

* The motivation to do this problem comes from World Health Organization estimation. According to the World Health Organization estimation till 2030, very nearly 23.6 million individuals will pass on because of Heart Attacks.
* In India, the number of deaths due to heart attack are increasing day by day, the most prominent reason for this is the unhealthy lifestyle the Indians are following, eating junk food, not exercising daily are some of the reasons an individual is prone to get a heart condition.
* In such situation when a person has high risk of heart failure it is important for him to monitor his condition which is not very easy and feasible.
* The most troublesome and complex assignment in medicinal services area is finding of right ailment. This colossal entirety huge of rough data is the rule resource that can be capably pre-taken care of and inspected for key information extraction that direct or by suggestion influences the remedial society for cost sufficiency and reinforce decision making.
* Authentic determination of coronary sickness can't be possible by using simply human understanding.

**Aim:**

We intend to develop a robust hybrid prediction model for detecting a heart failure in a patient during the follow up period of the patient so that the they can be more aware of their heart conditions and can take the necessary actions according to their heart condition.

**References:**

<https://www.healthline.com/health/heart-attack>

<https://bmcmedinformdecismak.biomedcentral.com/articles/10.1186/s12911-020-1023-5>

<https://www.kaggle.com/faressayah/predicting-heart-disease-using-machine-learning>

<https://www.kaggle.com/andrewmvd/heart-failure-clinical-data>

<https://www.webmd.com/heart-disease/guide/heart-disease-heart-attacks>

<https://www.who.int/health-topics/cardiovascular-diseases>

<https://www.medicalnewstoday.com/articles/151444>

<https://link.springer.com/article/10.1007/s42979-020-00365-y>

<https://www.hindawi.com/journals/misy/2018/3860146/>

<https://www.nature.com/articles/s41598-020-72685-1>