Date: 17th Feb 2024

**CSE 523: Machine Learning**

**Weekly Report 3**

**Project 7: Athlete Statistics Visualization and Prediction**

**Team: Byte Busters**

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| **Enrollment No** | **Name** |
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For the third week, we understood the topics at hand and decided on the approach and also studied the data

We split into teams of two, one group decided to work on the data and the second as to how will we approach the problem

**Data Team:** We got the data from Sacred Heart University basketball players however, we found that data was extremely inconsistent i.e.. there were a lot of NA values, in order to fill those empty spaces and ensure that we get accurate answers, we decided to do data imputation. We started through and understood various techniques of data imputation like KNN, Mean, Median, Random Sample, Dropping the data, etc and began to look into what technique would suit our data the best

**Approach Team:** We went through various articles that would help us understand the how to reduce the number of dimensions (factor analysis, principal component analysis, independent component analysis) and also how to estimate the score