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*University of Westminster, Coat of Arms*

# Heart-PRED

**A Heart Disease prediction system**

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## ABSTRACT

Heart disease is the major cause of death and morbidity in the globe. Early detection and prevention of this condition can considerably lessen its impact. Machine learning and predictive modelling techniques have showed significant promise in forecasting the risk of heart disease. The accuracy of these models, however, is dependent on the quality and quantity of data used. Furthermore, ethical concerns about data privacy and bias must be addressed in the creation and implementation of such models.

This study presents a system for predicting the risk of heart disease using algorithmic machine learning models based on medical attribute data. By anonymizing user data and assuring fairness in model predictions, the system also considers the constraints of accessible data and tackles ethical concerns. The system's effectiveness is assessed using a variety of indicators, with the results indicating great accuracy and the possibility for early identification and prevention of heart disease.

**Keywords:** prediction of heart disease, machine learning, algorithmic models, data privacy, ethical considerations.