**Chapter 1**

**INTRODUCTION**

The Logistic regression is the most famous machine learning algorithm used for classification tasks. It uses a linear equation with independent predictors to predict a value. The predicted value can be anywhere between negative infinity to positive infinity. The output of the algorithm need to be class variable, i.e. 0-no, 1-yes. Therefore, one can squash the output of the linear equation into a range of [0,1]. In [regression analysis,](https://en.wikipedia.org/wiki/Regression_analysis) logistic regression or logit regression is [estimating](https://en.wikipedia.org/wiki/Estimation_theory) the parameters of a logistic model. More formally, a logistic model is one where the [log-odds](https://en.wikipedia.org/wiki/Log-odds) of the probability of an event is a [linear combination](https://en.wikipedia.org/wiki/Linear_function_(calculus)) of independent or predictor variables. The two possible dependent variable values are often labelled as "0" and "1", which represent outcomes such as pass/fail, win/lose, alive/dead or healthy/sick.

**1.1 About the Company**

TechieAid is an IT Services Company registered with Govt. of India, Ministry of Micro, Small and Medium Enterprises (MSME). Techie Aid is started by industry veterans with over 20+ years of experience. TechieAid provides training services, software development, testing services and staffing solutions to IT companies. TechieAid also offers customized training programs, workshops and internship programs across engineering colleges in India. TechieAid Mission is to empower the students with necessary knowledge and industry skills for them to succeed in their future endeavors. Their value added services are professionally conducted and managed.

TechieAid is a custom application development service provider on cutting edge technology solutions to solve complex problems, drive key business outcomes for small, mid-size and large enterprise clients. They provides services for web, mobile, cloud applications across wide range of platforms. They also provide solutions in digital transformation technologies such as Big Data, Data Analytics, IoT, Business Intelligence and Cloud computing. They have a unique mix of onsite, offsite/onshore and offshore application development services on time, cost effective and with high quality. They start from initial concept to requirement gathering, design, development, testing and deployment ensuring high level of customer satisfaction at each and every step. TechieAid permanent staffing solution will provide access to fully screened and qualified candidates.

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