# 0 Introduction

The purpose of this assignment is to engage students in collaborative problem-solving within the realm of data science. Working in pairs, students will navigate through a structured process, starting from data collection and moving through exploratory data analysis, model building, and model evaluation. By following these steps, students will gain practical experience in applying data science techniques to address real-world challenges.

The problem addressed in this case study revolves around the difficulty consumer finance providers, such as Home Credit, face in accurately assessing the creditworthiness of individuals with limited or no credit history. Traditional evaluation methods often result in rejection for these individuals, hindering their access to financial services. To overcome this barrier, the case study seeks to leverage data science approaches to predict which clients are more likely to default on loans. By identifying potential default risks, finance providers can make informed decisions, accepting more loan applications from underserved populations while mitigating the risk of default. This approach aims to promote financial inclusion by offering loans to individuals with no credit histories who can still repay, thereby improving their financial opportunities.