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**Assessment Cover Page**

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| *Module Title* | Strategic Thinking |
| *Assessment Title* | CA 1 – Capstone Project Proposal |
| *Assessment Due Date* | 27/10/2024 |
| *Date of Submission* |  |

**Declaration**

By submitting this assessment, I confirm that I have read the CCT policy on academic misconduct and understand the implications of submitting work that is not my own or does not appropriately reference material taken from a third party or other source.

I declare it to be my own work and that all material from third parties has been appropriately referenced.

I further confirm that this work has not previously been submitted for assessment by myself or someone else in CCT College Dublin or any other higher education institution.

**Assessment Task: Capstone Project Proposal**

**Title:** *Predicting Housing Prices Using Machine Learning*

Introduction

The housing market plays an essential role in economic stability and development. Housing prices directly influence household wealth, investment decisions, and urban planning. Fluctuations in housing prices affect not only individual homeowners but also investors and governments, making the prediction of housing prices a critical task for many sectors. Predicting housing prices with accuracy can help stakeholders make informed decisions about investments, development, and economic policies. Traditional statistical methods have long been used to forecast housing prices, but these techniques often fall short when it comes to capturing the complex and dynamic nature of the housing market. However, advances in machine learning offer new opportunities to improve the accuracy and reliability of prediction models by analyzing large datasets and identifying patterns in housing prices more efficiently than traditional methods (Case and Quigley, 1991).

The increased availability of housing data allows machine learning techniques to provide a reliable solution for forecasting housing prices based on various features such as property size, location, nearby amenities, and infrastructure. This project aims to develop a machine learning model capable of accurately predicting housing prices by analyzing data from European Union sources, focusing on the factors that drive price fluctuations. The outcomes will have practical applications for real estate companies, investors, urban planners, and policymakers who need data-driven insights for decision-making in the ever-changing housing market.