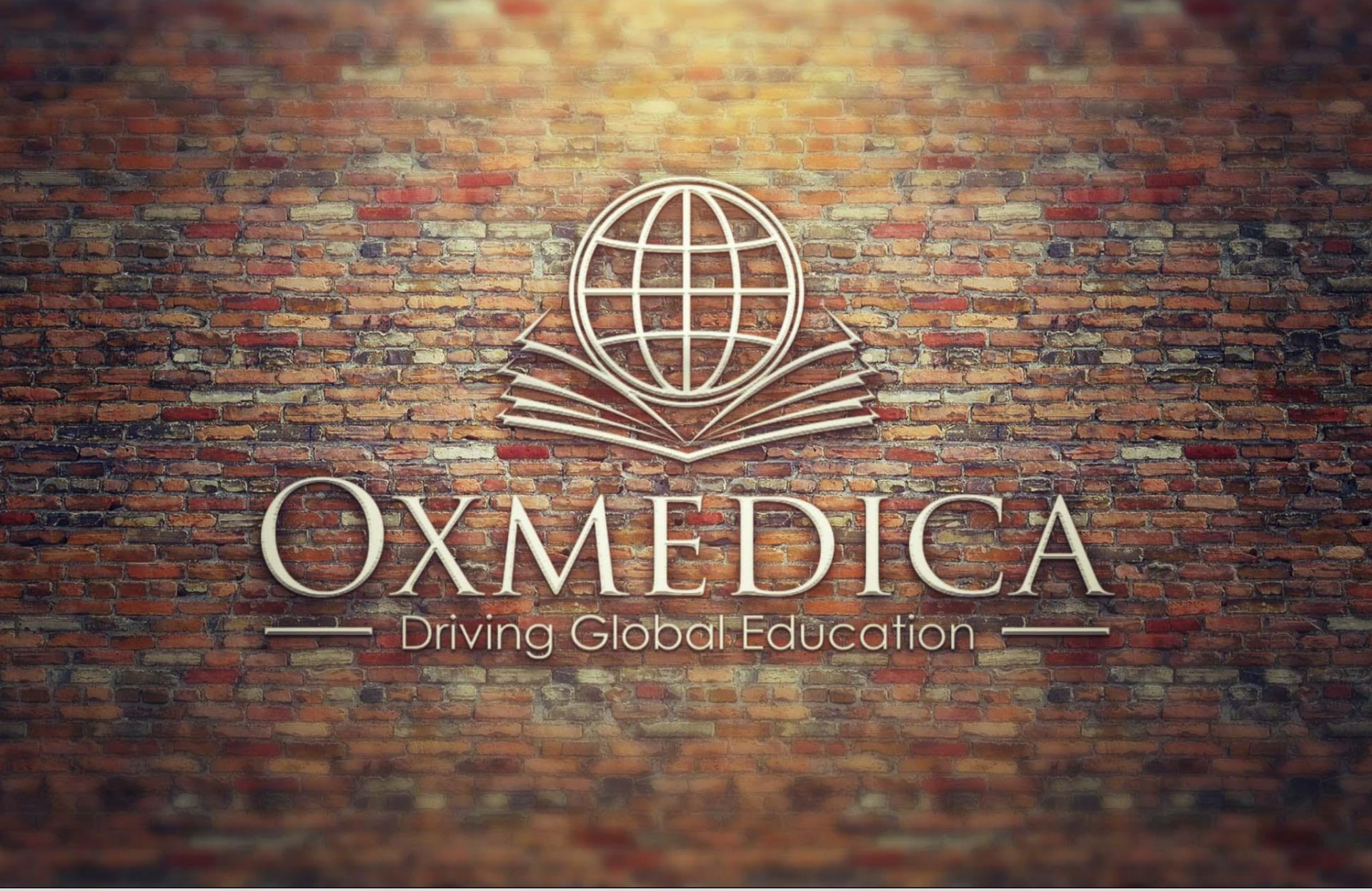

Day 7

Overview

1. Assessment
2. Classification trees recap and exercise
3. Guest lecture

Assessment

5 min break

Classification Trees Recap

Recap questions from last lesson

1. What is the difference between regression and classification problems?
2. What are tree-based models?
3. Explain how a classification tree works.
4. What makes the recursive binary splitting algorithm **greedy**?
5. How do we decide the predictions at each leaf in a classification tree?
6. What is a random forest model?
7. How do we extend these models to regression problems?

Task in pairs: Research

- You have **15 minutes** to find a paper which uses a tree-based model (classification-tree, regression tree or random forest) in this field.

Sport	Biology
Music	Film
Construction	Transport
Law	Sociology
Physics	Economics

- In your paper, identify the following:
  - What is the prediction task and why is it important?
  - What is the specific model used?
  - What are the features?
  - Does that paper discuss any limitation of the model in this context?

Guest Lecture