

# Video games sales regression

Poojitha Annabathula Assyl Salah Zuzanna Kowalczyk Viktor Sas

### TABLE OF CONTENTS

#### Introduction

Why We Chose This Topic

#### Methodology

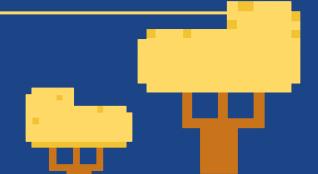
Tools and Libraries

#### Problem Overview

Our Approach

#### Team Responsibilities

Work split











# ► Why We Chose This Topic 🚽



#### Real-World Impact

Predicting game sales can support strategic decisions in marketing and development



# Open & Reproducible Dataset

Data from Kaggle includes clear structure and all preprocessing steps, supporting reproducibility



#### Popular & Growing Industry

The video game industry is one of the largest and fastest-growing entertainment sectors



#### Rich Features for Analysis

Variables like critic scores, user reviews, genre, and platform allow deep exploration





Problem Overview





# Our Approach



#### Environment Setup

Requirements text file Set Random Seed Virtual Environment Include README.md

#### Handling Missing data

Dropping all NAs

#### Feature Engineering

Filtering data
Removing outliers
Creation of new variables

# Data Visualization

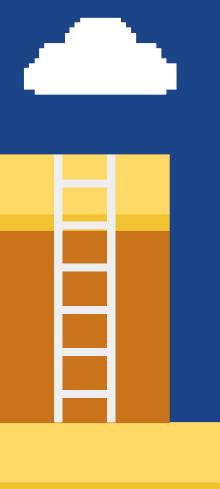
Visualize trends and distributions (e.g., global sales histograms) to explore data patterns

#### Regression Models

Linear Regression Ridge Lasso

#### Model Evaluation

RMSE R<sup>2</sup> Score











# Tools and Libraries

Tool / Libraries	Description
Pandas & NumPy	For data loading, cleaning and manipulation
Matplotlib & Seaborn	Used for creating histograms, scatter plots, and other insightful visualization
Scikit-learn	Tool for model building, data splitting, and performance evaluation
Jupyter Notebook	Interactive environment for step-by-step development and reproducibility
GitHub	For version control, collaboration, and sharing a reproducible research pipeline



# Responsibilities •

