FARM AI

PREDICTIVE FARMING – OPTIMIZE YOUR CROP YIELD

ML Game Prototype

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Data-driven prototypes

MEET CARLOS!

A young farmer from Spain, inheriting his family's struggling farm.

Carlos is determined to revitalize the land using modern technology and predictive analytics.

GAME CONCEPT
ACTS

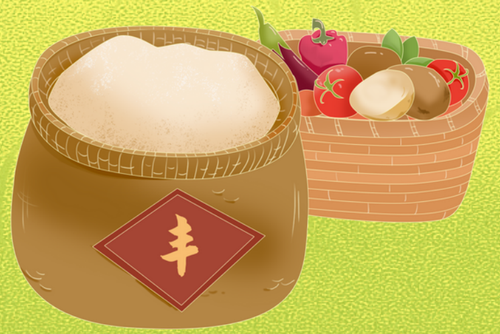
ACT 1: With a limited budget, Carlos makes strategic decisions — investing in moisture sensors or weather forecasts, each impacting costs and predictions.

ACT 2: Through trial and error, Carlos learns valuable lessons. Choosing a regression model proves a lesson in data types and model suitability.

ACT 3: Undeterred, Carlos refines his approach, interpreting results and visualizing data to uncover factors that boost crop yield.

ACT 4: As the season progresses, Carlos reaps the rewards — achieving a record yield.

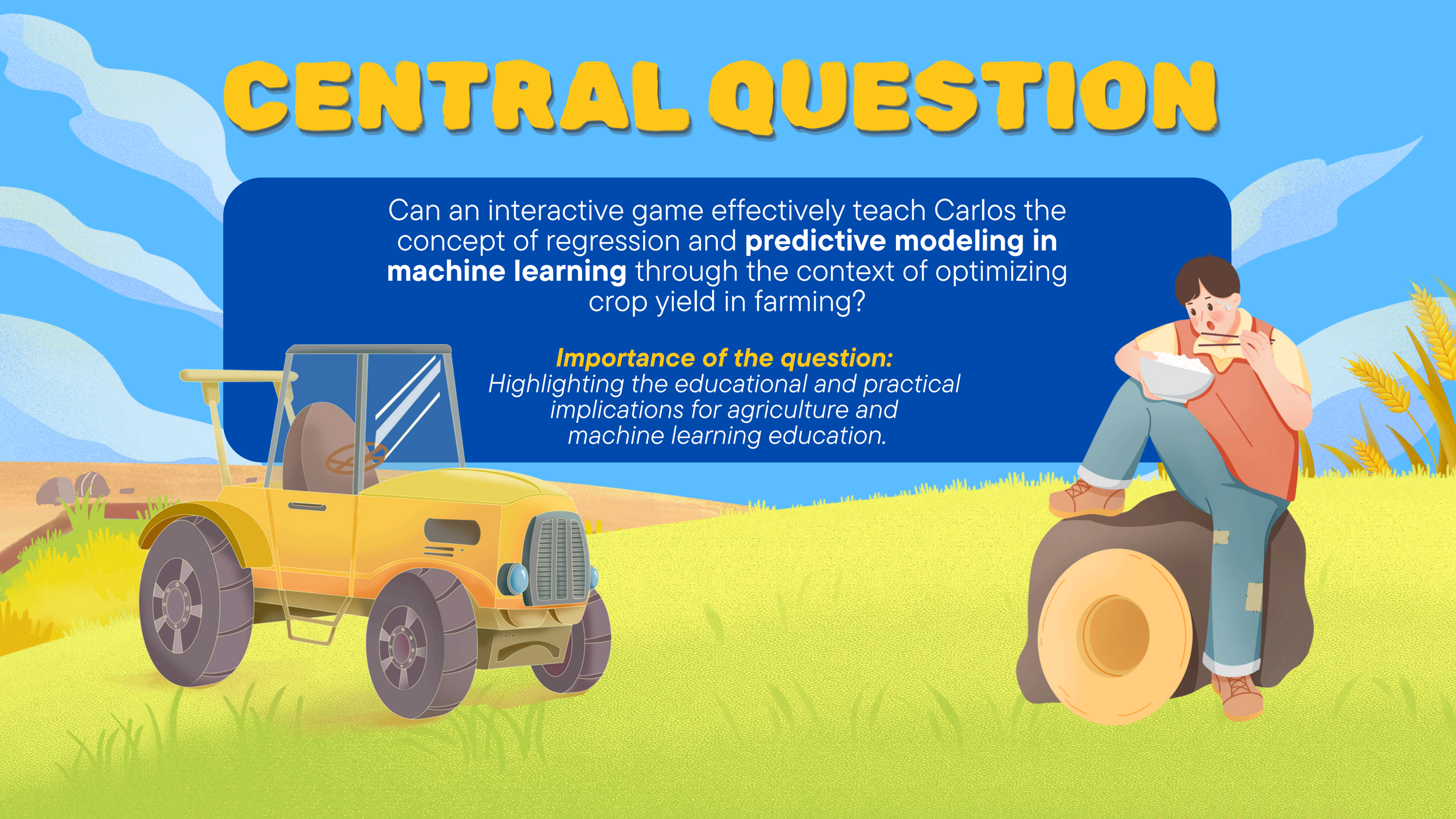
ACT 5: With newfound knowledge, Carlos becomes a pioneer in predictive farming, inspiring others in Barcelona.



CENTRAL QUESTION

Can an interactive game effectively teach Carlos the concept of regression and **predictive modeling in machine learning** through the context of optimizing crop yield in farming?

Importance of the question:
Highlighting the educational and practical implications for agriculture and machine learning education.



GOALS

Educational Goal
Develop an engaging game that effectively teaches the importance of regression and predictive modeling concepts.

Practical Goal
Optimize crop yield simulation using AI tools and user decisions.

Technical Goal
Implement interactive features using Streamlit to ensure a user-friendly and immersive experience.

ASSUMPTIONS

Users possess a foundational interest in ML and agriculture, facilitating their engagement with the game

Users are motivated to learn through interactive gameplay that integrates agricultural challenges with machine learning concepts

PROCESS

1. Identifed the Primary Question
2. Developed draft version and Received Feedback
3. Explored through Trial and Error
4. Added Tension and Finalized the Concept

LEARNINGS

- Importance of Storyline and Intuitive Interface
- Balancing Clarity and Complexity
- Technical Challenges


LET'S PLAY