

Platzi Data Scientist Technical Assessment

This assessment evaluates your problem-solving, technical, and business acumen for the Data Scientist position at Platzi.

Challenge

Imagine you're a Data Scientist at a startup offering a monthly subscription for online courses, workshops, and professional content. Users enjoy a continuously expanding library of courses, interactive tools, and personalized support. **Your task is to leverage data science to provide insights and build models that encourage user retention.**

Scenario & Data

We provide a simulated scenario and datasets (documented below) replicating a real-world situation.

Datasets ([provided in this link](#)):

- **users.csv:** User demographics (user_id, first_name, email, age)
- **payments.csv:** Payment history (email, subscription_id, amount, payment_date, payment_gateway_id)
- **payment_gateways.csv:** Payment gateway details (payment_gateway_id, payment_gateway_name)
- **engagement.csv:** User engagement data (user_id, subscription_id, active_days, courses_seen, materials_seen, favorite_category)

Stakeholder Questions (Required)

- **Ad-hoc:**
 - What was the Q1 2024 retention rate?
 - Determine the number of subscribers in April 2024.
- **Analysis:**
 - Develop strategies to improve user retention.
 - Perform a cohort analysis to assess churn risk for users renewing in May 2024.

Deliverables (choose your preferred tool)

Answer stakeholder questions using tools like Jupyter Notebooks, spreadsheets, reports, dashboards, etc.

Bonus Points (optional one or many): Demonstrate proficiency in cloud, SQL, Python, or data modeling by:

- Uploading data to a cloud warehouse (e.g., BigQuery).
- Creating a denormalized data model for analysis (e.g., SQL query or dbt).

- Building a dashboard (e.g., Looker Studio) with effective data visualizations.
- Developing a machine learning model (e.g., Python) to address a specific requirement.

Timeline:

One week to complete the assessment.