% ASSIGNMENT

### **Scenario:**

A mobile gaming company has noticed that a large number of new players stop playing their game within the first 24 hours of downloading it. They want actionable insights to reduce early player churn and improve retention.

### **1. Define the Problem**

**Core Question:** Why are a large number of new players quitting the game within the first 24 hours, and what changes can the company implement to increase player retention during this critical early stage?

**Objective:** Identify the primary reasons behind early player churn and recommend strategies to improve first-day engagement and retention.

### **2. Introduce the Characters**

**Main Characters / Actors:**

* **New Players:** Users who download and play the game for the first time.
* **Game Design Team:** Responsible for level difficulty, tutorials, and progression.
* **Product & Monetization Team:** Focused on in-app purchases, ad placements, and pricing strategies.
* **Data Science Team:** Analyzes gameplay data, identifies behavioral patterns, and builds predictive models for churn.

These actors together drive the story — with new players experiencing the game, the product team shaping their experience, and the data team uncovering insights to inform decisions.

### **3. Show the Conflict**

**Hypothetical Data Insight (Conflict):** Analysis of player behavior within the first 24 hours reveals that **68% of players drop off after reaching Level 3**. Further breakdown shows:

* Average time to complete Level 3 is **2.5x longer** than Levels 1 or 2.
* The **enemy difficulty and ad frequency** both spike sharply at Level 3.
* Only **12% of players who drop off had completed the in-game tutorial**, suggesting poor onboarding.

**Conflict Summary:** “Level 3 serves as an unexpected choke point where difficulty and frustration peak, leading to a sharp decline in player retention within the first day.”

### **4. Propose a Resolution**

**Recommended Solution:**

* **Predictive Modeling:** Build a **churn prediction model** using early gameplay data (session time, level completion rate, in-app purchase attempts, ad interactions). The model can identify high-risk players within their first session.
* **Product Recommendations:**
  + Reduce Level 3 difficulty and rebalance enemy strength.
  + Limit ad frequency during the first 30 minutes of gameplay.
  + Introduce a short **interactive tutorial** that teaches basic mechanics before Level 3.
  + Trigger **in-game notifications or rewards** for players struggling at early levels.

These interventions directly address the conflict revealed by the data.

### **5. Actionable Takeaway**

**Single Clear Action:** “Redesign Level 3 and improve the onboarding experience by simplifying early difficulty and delaying ads, while using churn prediction models to proactively engage at-risk players.”

This targeted action transforms the insight into a measurable improvement opportunity — enhancing player satisfaction and boosting first-day retention rates.