Test for Junior Data Analyst position in Rovio

Background for the exercise:

This test is designed to assess your ability to interpret a request, SQL querying capability, and ability to visualize and make data actionable.

Prerequisites

In the provided folder you will find a SQLite database which you can access with R (i.e. RSQLite package), Python, [SQLite Browser](#) or other suitable tool of your choice.

Also in the folder you have a data directory which explains the fields in each table.

You may use any program to analyze the data.

Please provide a zipped folder with all code made to answer the questions as well as a PDF for your answers.

Some hints.

1. SQLite does not have a date type, you will most likely need the function "julianday"
2. Hard Currency is the currency you get when you purchase actual money in a game, in Angry Birds 2 it is the pink gems
3. ARPDAU stands for Average Revenue Per Daily Active User

Task 1. DNA

Please read the following article

https://www.gamesindustry.biz/articles/2018-09-19-how-do-you-evaluate-a-mobile-games-profit-potential

1. Recreate the DNA Chart from the article with the data provided
    a. What conclusions would you make from the games based on the article?
    b. What would you like to look at further, outside the data provided?
    c. What are some flaws in this logic?

2. Improve the DNA methodology with a better way to look at it
    a. Explain your changes and why

3. Please create a short report or presentation and be prepared to present it

Task 2. Interpretation
1. Study charts on the next page
    a. What conclusions would you draw from them?
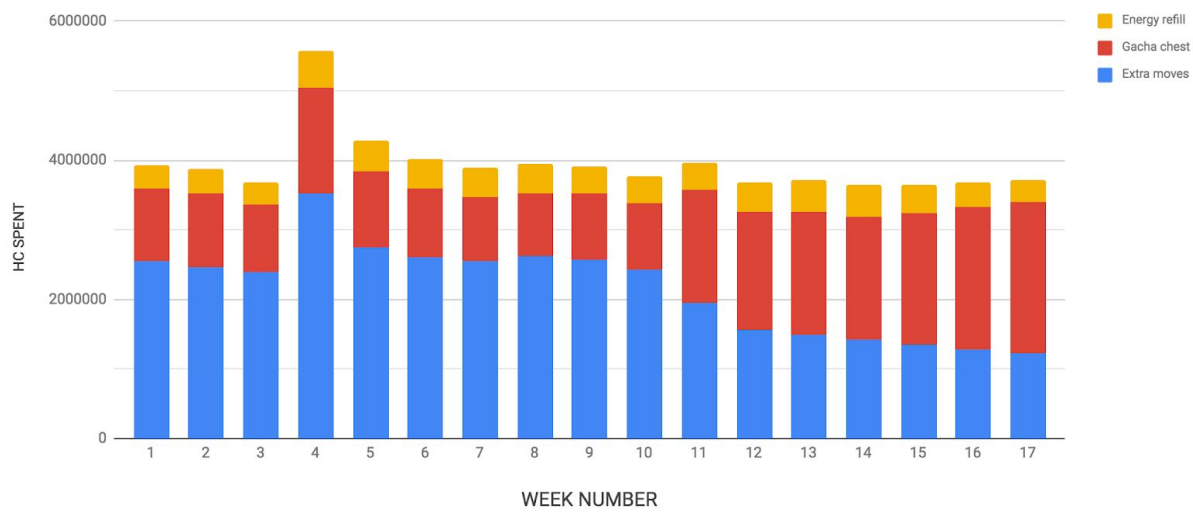   b. What would you look at next?

Task 3. Questionnaire
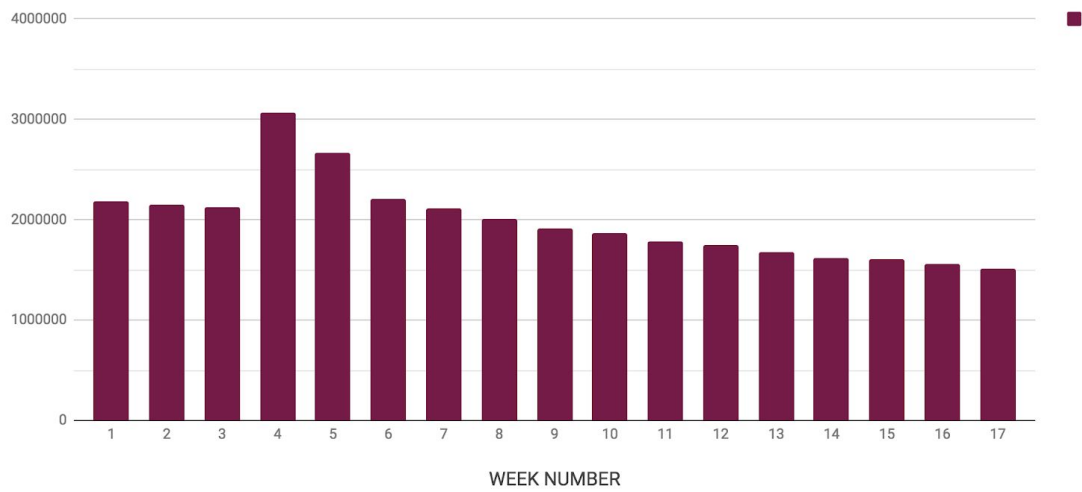
1. What are your favorite games and why?

You have 10 points to divide between the following three categories
    a. data science
    b. knowledge of games and game mechanics
    c. influencing business

2. What's the distribution of your current strengths?

3. Divide the points again thinking about what excites you and where would you want your career to move in a few years time

HARD CURRENCY SPENT BY CATEGORY

Legend:
- Energy refill
- Gacha chest
- Extra moves

Y-axis: HC SPENT (0 to 6000000)
X-axis: WEEK NUMBER (1–17)

WEEKLY ACTIVE USERS

Y-axis: 0 to 4000000
X-axis: WEEK NUMBER (1–17)

ARPDAU
WEEKLY AVERAGE

Y-axis: US DOLLAR (0.000 to 0.300)
X-axis: WEEK NUMBER (1–17)