Data Exploration

Data Set Overview

The table below lists each of the files available for analysis with a short description of what is found in each one.

File Name	Description	Fields
ad-clicks.csv ERD table: AdClicks	A line is added to this file when a player clicks on an advertisement in the Flamingo app.	timestamp, txID, userSessionid, teamid, userid, adID, adCategory **timestamp**: when the click occurred. **txID**: a unique id (within ad-clicks.log) for the click **userSessionid**: the id of the user session for the user who made the click **teamid**: the current team id of the user who made the click **userid**: the user id of the user who made the click **adID**: the id of the ad clicked on **adCategory**: the category/type of ad clicked on
buy-clicks.csv ERD table: InAppPurchases	A line is added to this file when a player makes an in-app purchase in the Flamingo app.	timestamp, txID, userSessionid, team, userid, buyid, price timestamp: when the purchase was made. txID: a unique id (within buy-clicks.log) for the purchase userSessionid: the id of the user session for the user who made the purchase team: the current team id of the user who made the purchase userid: the user id of the user who made

		the purchase buyID: the id of the item purchased price: the price of the item purchased
users.csv ERD table: User	This file contains a line for each user playing the game.	timestamp, id, nick, twitter, dob, country timestamp: when user first played the game. id: the user id assigned to the user. nick: the nickname chosen by the user. twitter: the twitter handle of the user. dob: the date of birth of the user. country: the two-letter country code where the user lives.
team.csv **ERD table: Team**	This file contains a line for each team terminated in the game.	teamid, name, teamCreationTime, teamEndTime, strength, currentLevel teamid: the id of the team name: the name of the team teamCreationTime: the timestamp when the team was created teamEndTime: the timestamp when the last member left the team strength: a measure of team strength, roughly corresponding to the success of a team currentLevel: the current level of the team

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team-assignments.csv **ERD table:** **TeamAssignment**	A line is added to this file each time a user joins a team. A user can be in at most a single team at a time.	time, team, userid, assignmentid time: when the user joined the team. team: the id of the team userid: the id of the user assignmentid: a unique id for this assignment
level-events.csv **ERD table:** **LevelEvent**	A line is added to this file each time a team starts or finishes a level in the game	time, eventid, teamid, level, eventType time: when the event occurred. eventid: a unique id for the event teamid: the id of the team level: the level started or completed eventType: the type of event, either start or end
user-session.csv **ERD table:** **User_Sessions**	Each line in this file describes a user session, which denotes when a user starts and stops playing the game. Additionally, when a team goes to the next level in the game, the session is ended for each user in the team and a new one started.	timestamp,userSessionId,userId,teamId,assignmentId,sessionType,teamLevel,platformType timeStamp: a timestamp denoting when the event occurred. userSessionId: a unique id for the session. userId: the current user's ID. teamId: the current user's team. assignmentId: the team assignment id for the user to the team.

		sessionType: whether the event is the start or end of a session. teamLevel: the level of the team during this session. platformType: the type of platform of the user during this session.
game-clicks.csv ERD table: GameClicks	A line is added to this file each time a user performs a click in the game.	time, clickid, userid, usersessionid, isHit, teamId, teamLevel time: when the click occurred. clickid: a unique id for the click. userid: the id of the user performing the click. usersessionid: the id of the session of the user when the click is performed. isHit: denotes if the click was on a flamingo (value is 1) or missed the flamingo (value is 0) teamId: the id of the team of the user teamLevel: the current level of the team of the user

Aggregation

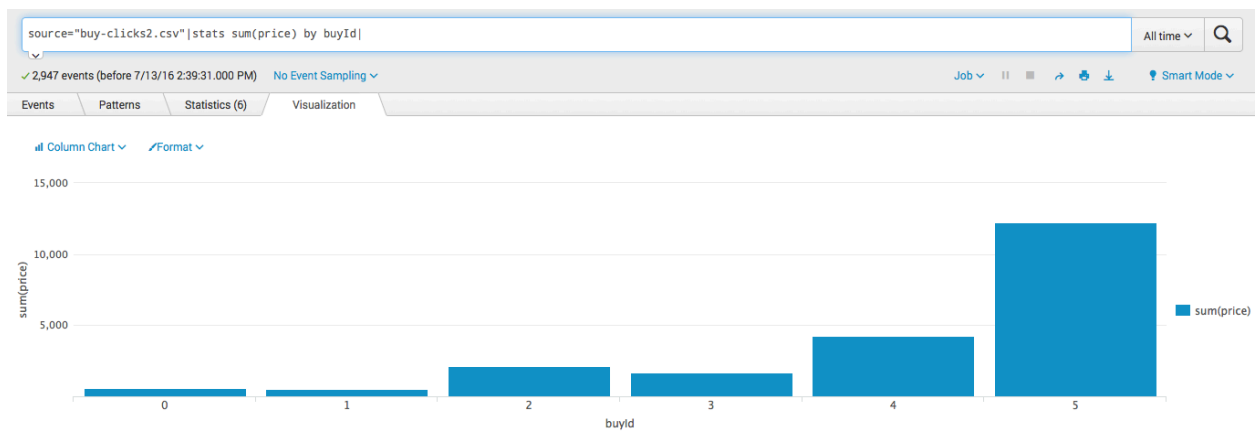| Amount spent buying items	21407.0
# Unique items available to be purchased	6

A histogram showing how many times each item is purchased:

(source="buy-clicks.csv"| stats count by buyId |)
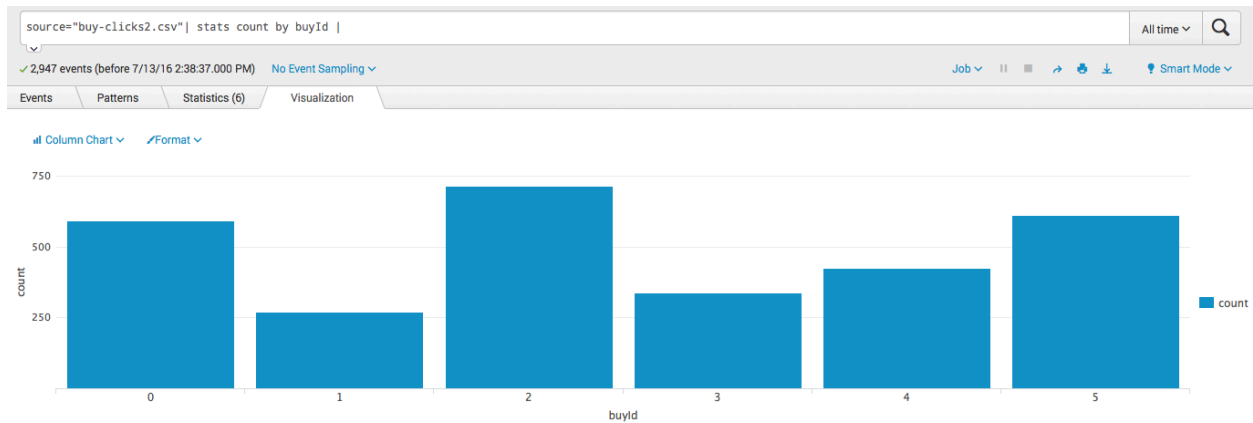
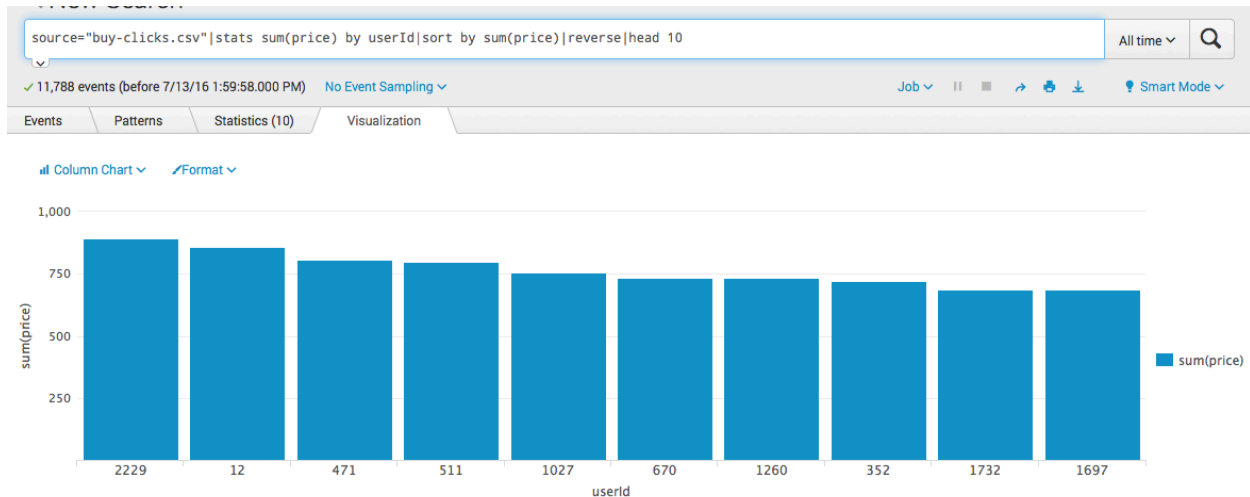A histogram showing how much money was made from each item:

(source="buy-clicks.csv"|stats sum(price) by buyId|)

Filtering

A histogram showing total amount of money spent by the top ten users (ranked by how much money they spent).

(source="buy-clicks.csv"|stats sum(price) by userId|sort by sum(price)|reverse|head 10)

The following table shows the user id, platform, and hit-ratio percentage for the top three buying users:

(source="user-session.csv" userId=2229|stats count by platformType
source="user-session.csv" userId=12|stats count by platformType
source="user-session.csv" userId=471|stats count by platformType
source="game-clicks.csv" userId=2229|stats avg(isHit)|
source="game-clicks.csv" userId=12|stats avg(isHit)|
source="game-clicks.csv" userId=471|stats avg(isHit)|)

Rank	User Id	Platform	Hit-Ratio (%)
1	2229	iphone	11.5
2	12	iphone	13.0
3	471	iphone	14.5