

# 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	A line is added to this file when a player clicks on an advertisement in the Flamingo app.	timestamp: when the click occurred. txId: a unique id (within ad-clicks.log) for the click clickuserSessionid: 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	A line is added to this file when a player makes an inapp purchase in the Flamingo app.	timestamp: when the purchase was made.txId: a unique id (within buyclicks.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	file contains a line for each user playing the game	timestamp: when user first played the game.userId: 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 twoletter country code where the user lives
team.csv	file contains a line for each team terminated in the game	teamId: the id of the team name: the name of the

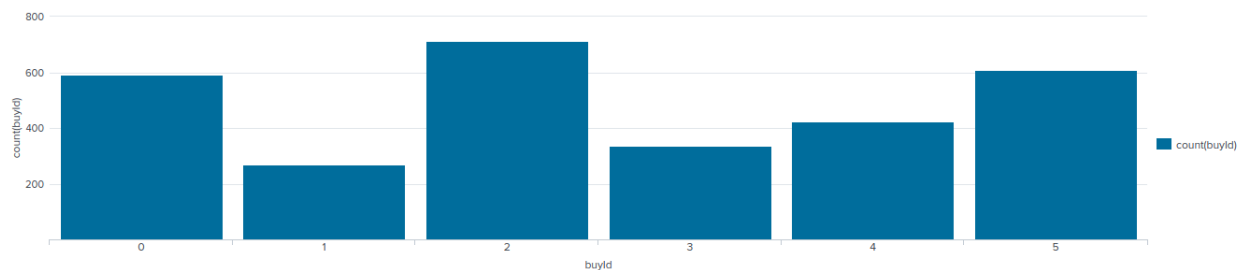
		<p>teamCreationTime: the timestamp when the team was created</p> <p>teamEndTime: the timestamp when the last member left the team</p> <p>strength: a measure of team strength, roughly corresponding to the success of a team</p> <p>currentLevel: the current level of the team</p>
Team-assignments.csv	line 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.	<p>timestamp: when the user joined the team.</p> <p>team: the id of the team</p> <p>userId: the id of the user</p> <p>assignmentId: a unique id for this assignment</p>
Level-events.csv	A line is added to this file each time a team starts or finishes a level in the game	<p>timestamp: when the event occurred.</p> <p>eventId: a unique id for the event</p> <p>teamId: the id of the team</p> <p>teamLevel: the level started or completed</p> <p>eventType: the type of event, either start or end</p>
User-session.csv	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.	<p>timestamp: a timestamp denoting when the event occurred.</p> <p>sessionId: a unique id for the session.</p> <p>userId: the current user's ID.</p> <p>teamId: the current user's team.</p> <p>assignmentId: the team assignment id for the user to the team.</p> <p>sessionType: whether the event is the start or end of a session.</p> <p>teamLevel: the level of the team during this session.</p> <p>platformType: the type of platform of the user during this session.</p>
Game-clicks.csv	A line is added to this file each time a user performs a click in the game	<p>timestamp: when the click occurred.</p> <p>clickId: a unique id for the click.</p> <p>userId: the id of the user performing the click.</p> <p>sessionId: the id of the session of the user when the click</p>

		<p>is performed.</p> <p>isHit: denotes if the click was on a flamingo (value is 1) or missed the flamingo (value is 0)</p> <p>teamId: the id of the team of the user</p> <p>teamLevel: the current level of the team of the user</p>
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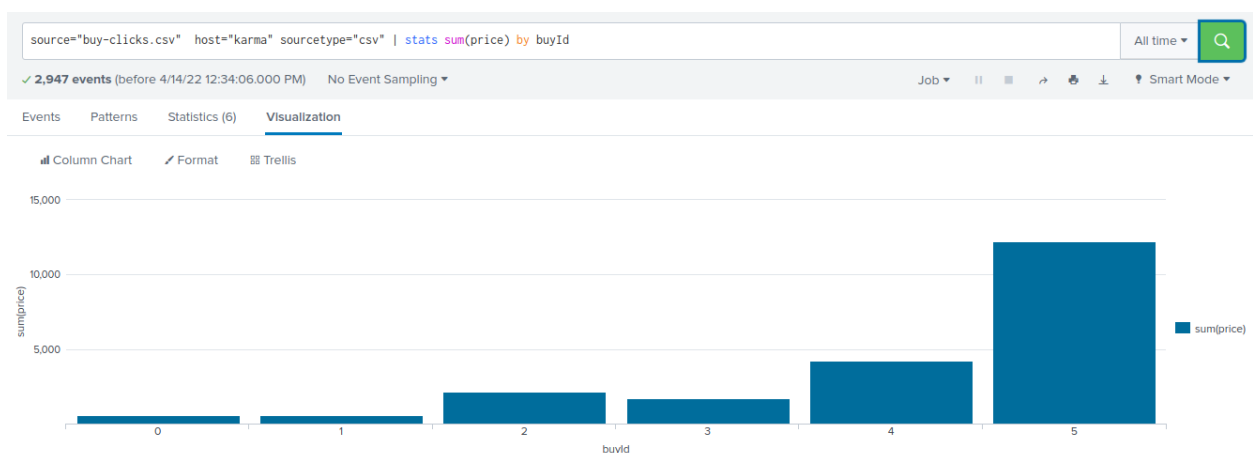
## Aggregation

Amount spent buying items source="buy-clicks.csv"   stats sum(price)	21407
Number of unique items available to be purchased	6

A histogram showing how many times each item is purchased:

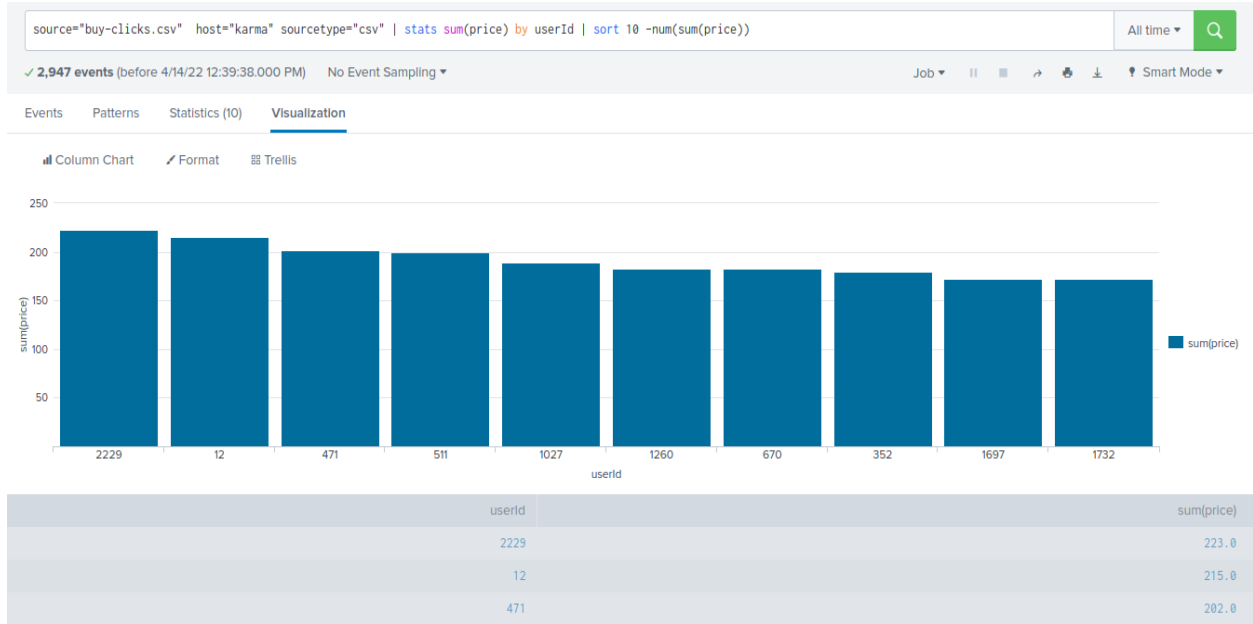


A histogram showing how much money was made from each item:



## Filtering

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



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

Rank	User Id	Platform	Hit-Ratio (%)
1	2229	iphone	61/465=13%
2	12	iphone	92/612=15%
3	471	iphone	76/448=17%