

# 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 detailed description of players' clicks on advertisements	<b>timestamp</b> : when the click occurred. <b>txId</b> : a unique id assigned to the click <b>userSessionId</b> : the session id of the session in which the user made the click <b>teamid</b> : the current team id of the user who made the click <b>userid</b> : the id of the user who made the click <b>adId</b> : the id of the ad clicked on <b>adCategory</b> : the category of the ad clicked on
buy-clicks.csv	A detailed record of players' in-app purchases	<b>timestamp</b> : when the purchase was made. <b>txId</b> : a unique id assigned to the purchase <b>userSessionId</b> : the session id of the session in which the user made the purchase <b>team</b> : the current team id of the user who made the purchase <b>userId</b> : the id of the user who made the purchase <b>buyId</b> : the id of the item purchased <b>price</b> : the price of the item purchased
users.csv	This file contains information about the game's players.	<b>timestamp</b> : when user first played the game.

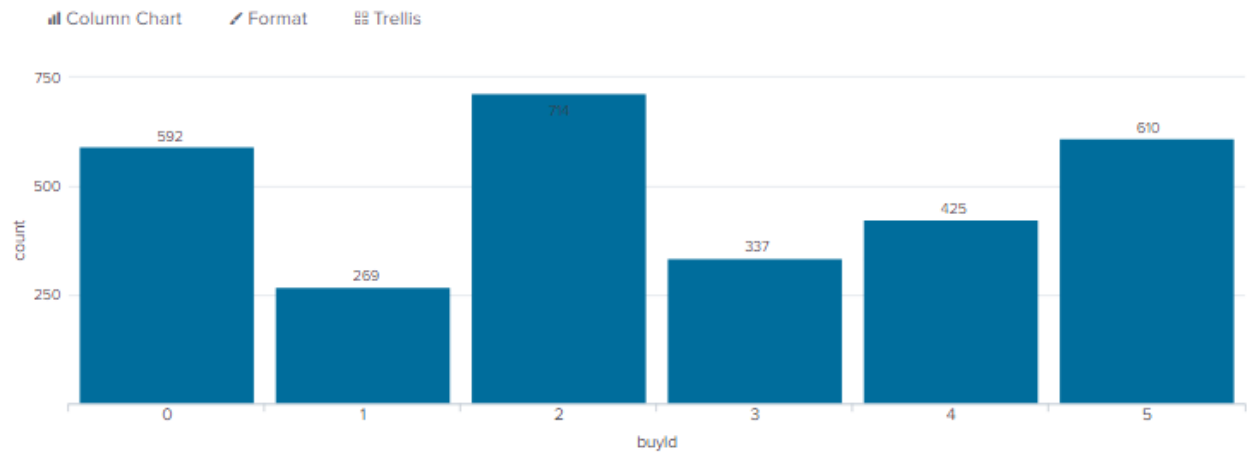
		<p><b>userId</b>: a unique id assigned to the user.</p> <p><b>nick</b>: the nickname chosen by the user.</p> <p><b>twitter</b>: the twitter handle of the user.</p> <p><b>dob</b>: the date of birth of the user.</p> <p><b>country</b>: the two-letter country code where the user lives.</p>
<b>team.csv</b>	A detailed record of terminated teams	<p><b>teamId</b>: the id of the terminated team</p> <p><b>name</b>: the name of the terminated team</p> <p><b>teamCreationTime</b>: when the team was created</p> <p><b>teamEndTime</b>: when the last member left the team</p> <p><b>strength</b>: a measure of team strength at point of termination</p> <p><b>currentLevel</b>: the level of the team at point of termination</p>
<b>team-assignments.csv</b>	A record of players' team-joining events	<p><b>timestamp</b>: when the user joined the team.</p> <p><b>team</b>: the id of the team that the user joined</p> <p><b>userId</b>: the id of the user</p> <p><b>assignmentId</b>: a unique id assigned to this joining event</p>
<b>level-events.csv</b>	A detailed record of every time a team engages with levels	<p><b>timestamp</b>: when the engagement occurred.</p> <p><b>eventId</b>: a unique id assigned to the engagement</p> <p><b>teamId</b>: the id of the team</p> <p><b>teamLevel</b>: the level engaged by the team</p> <p><b>eventType</b>: the type of event, either 'start' or 'end'</p>

<b>user-session.csv</b>	A detailed record of every time a user starts/ends a playing session	<p><b>timestamp</b>: when the event occurred.</p> <p><b>userSessionId</b>: a unique id assigned to the session.</p> <p><b>userId</b>: the current user's ID.</p> <p><b>teamId</b>: the id of the user's current team.</p> <p><b>assignmentId</b>: the team assignment id assigned when the user joined the current team</p> <p><b>sessionType</b>: whether the event type is 'start' or 'end'</p> <p><b>teamLevel</b>: the level of the team during this session.</p> <p><b>platformType</b>: the platform type the user used during the session.</p>
<b>game-clicks.csv</b>	A detailed description of all clicks performed by the user during playing	<p><b>timestamp</b>: when the click occurred.</p> <p><b>clickId</b>: a unique id assigned to the click.</p> <p><b>userId</b>: the id of the user performing the click.</p> <p><b>userSessionId</b>: the id of the session the user was in when the click occurred.</p> <p><b>isHit</b>: Boolean value denotes if the click hit the flamingo (value is 1) or missed the flamingo (value is 0)</p> <p><b>teamId</b>: the id of the user's current team</p> <p><b>teamLevel</b>: the current level of the user's current team</p>

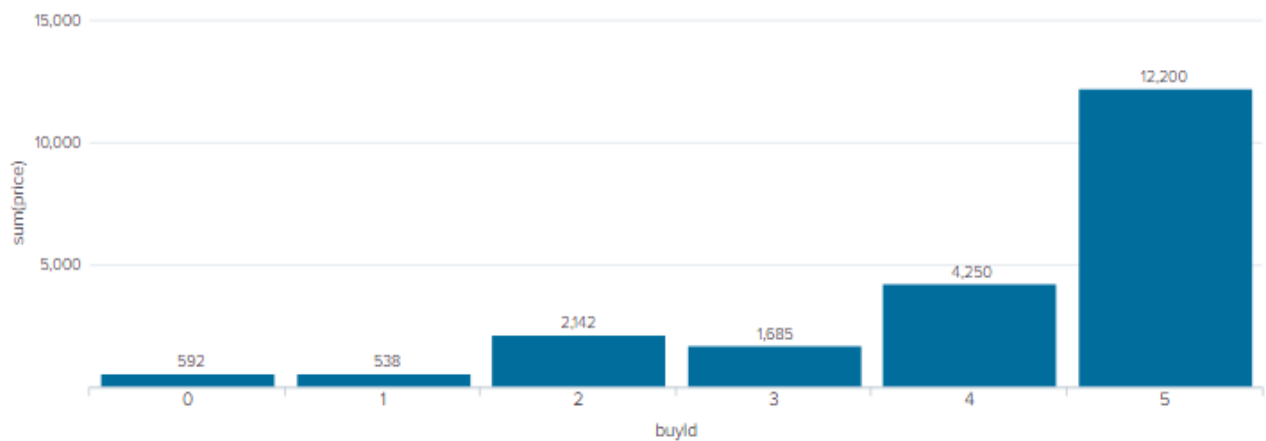
## Aggregation

Amount spent buying items	21407.0
Number of unique items available to be purchased	6

A histogram showing how many times each item is purchased:

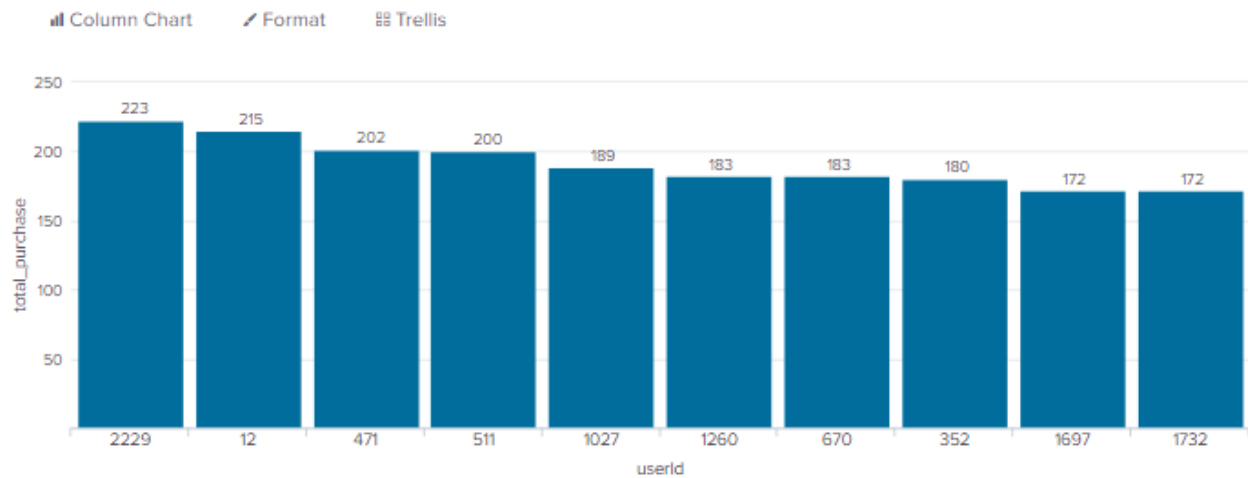


A histogram showing how much money was made from each item:



## 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	11.60
2	12	iPhone	13.07
3	471	iPhone	14.50